# THE ART & SCIENCE OF GENERAL PRACTICE

18th WONCA EUROPE CONFERENCE

**AUSTRIA CENTER VIENNA | JULY 4-7, 2012** 

## ABSTRACTS



ÖGAM



### **ABSTRACTS**

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#### **ANNOTATION**

In the following we are publishing the abstracts as submitted by the authors.

#### Keys and abbreviations:

WA Workshop Art
WS Workshop Science
SY Symposium

SC Science Oral Presentation
AR Art Oral Presentation

CR Country Report Oral presentation
OS Open Space Oral Presentation

WOC World Café

The Posters of topic "P.10 - Poster One Slide/5 minutes" are also presented orally in a Session. Missing presentation numbers represent abstracts that have been withdrawn as per day of printing.

#### The Editors

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#### **WORKSHOPS ART**

## WA.01 - Using the Arts in Medical Education. How, Why, and does it work? EGPRN Workshop

#### WAN1

Using the Arts in Medical Education. How, Why, and does it work? EGPRN Workshop

#### E. Powley;

Retired GP and Medical Educator, York, United Kingdom.

Using the Arts as a tool and resource in learning and teaching can promote an enhanced capacity for communication and reflective practice, encourage a holistic approach alongside science, leading to intuitive and creative responses in patient care. This will be an interactive workshop exploring through exercises which use Art, Literature and Poetry, some of the methods to achieve this. Participant's responses to these exercises will be facilitated and discussed. Working as a group in this way can produce an anticipated benefit of exchange of ideas, understanding of varied responses, and enjoyment of sharing insights. The Workshop will consider what happens, what are the results of this method of learning, attempt to document key points, and devise possible ways of evaluating it.

## WA.02 - Learning coaching skills for family doctors: a new perspective

#### WA02

Learning coaching skills for family doctors: a new perspective

G. Puig Ponsico<sup>1,2</sup>, C. Gallardo Sánchez<sup>1</sup>, M. Torremorell Núñez<sup>1</sup>, E. Díaz Salcedo<sup>1</sup>, D. Altafaja Albert<sup>1</sup>, C. Corchero Calvo<sup>1</sup>, P. Contamina<sup>1</sup>, M. Mateo Gambarte<sup>1</sup>, C. Ferrando López<sup>1</sup>, M. Alfonso Boguña<sup>1</sup>;

<sup>1</sup>ABS Cubelles-Cunit, Cunit, Spain, <sup>2</sup>Institut Català de la Salut, Barcelona, Spain.

Introduction: This workshop aims to make a first contact on the methodology of Coaching for yourself, for your team and for your patients. A taste of "Coaching" where you will live new experiences and learn a new methodology to help you how to lead yourself and how to empower patients to search selfmanagement in healthcare. Coaching is awareness and responsibility, but more importantly discover your inner treasure and take ACTION by doing your best version.

Justification: The current situation of systemic crisis brings discouragement, disappointment, decrease in resources, especially in social and health care services. We are facing the opportunity to take awareness of the existence of one of the greatest resources we have: HUMAN RESOURCES. Each of us has a talent to promote internal discovering. Develop Coaching skills will help us lead our lives.

Objectives: Introducing Coaching skills in the Primary Health Care Teams (PHCT).

Promote and strengthen relationships in the (PHCT) through Coaching.

Talk about concept, philosophy, coaching methodology and sources

Learn how to promote changes in the healthcare system users through Healthcoaching method.

Methodology: The performance of group dynamics where members of the PHCT can experience a power of consciousness towards the inside of themselves. The Case Studies work to help understand the theoretical concepts exposed and how we can apply in our day to day.

Results: Open awareness to yourself, set a positive goal in mind and in the future, build a plan of action towards the desired changes as you learn to reinvent yourself with your own resources.

#### WA.03 - Using Cinema and Opera to integrate Science and Art and fostering Reflective Practice: a faculty development workshop

#### **WA03**

Using Cinema and Opera to integrate Science and Art and fostering Reflective Practice: a faculty development workshop

P. G. Blasco<sup>1</sup>, G. Moreto<sup>2,1</sup>, M. Janaudis<sup>3,1</sup>;

<sup>1</sup>SOBRAMFA- Brazilian Society of Family Medicine, São Paulo, Brazil, <sup>2</sup>Universidade Nove de Julho School of Medicine, São Paulo, Brazil, <sup>3</sup>Jundiaí Medical School, São Paulo, Brazil.

Aims and Background: To integrate Science and Art in medicine is the basis for excellence in doctoring. While the technical knowledge helps in solving disease-based problems, the patient affected by these diseases remains a real challenge for the practicing doctor. To care implies having an understanding of the human being and the human condition and for this endeavor humanities and arts help in building a humanistic perspective of doctoring. Through this workshop the audience will understand why using movies and opera clips in the teaching set provides a reflective environment among medical students, residents and physicians. While technical knowledge and skills can be acquired through training, reflection is required to refine attitudes and values. Reflective practice is the real bridge to integrate science and art.

Methodology: This workshop aims to share our experience with the opera and movie clips methodology we use for more than a decade to foster reflection in the audience. After introducing the project, the presenters will demonstrate the methodology and open for a broad discussion in which the participants will be able to give feedback, and generate new themes for discussion.

Results: We expect an interactive discussion with the audience, high feedback from the participants, and a pleasant scenario to better understand how opera and movies help in building a humanistic perspective of doctoring. Conclusion: The opera movie clip teaching scenario provides Family Medicine educators with an innovative resource to broad the range of experiences for better understanding the human being, therefore blending technology with humanism in real practice.

### WA.04 - Making clinical medicine meaningful to the public through art-science collaborations

#### WA04

Making clinical medicine meaningful to the public through artscience collaborations

#### C. Wellbery;

Georgetown University, Washington, DC, United States.

A question that frequently arises for those who have interest in using the arts to enhance medical education and practice is: how can the arts make themselves more applicable to real world clinical medicine? This workshop will discuss the role of art-science collaborations in advancing a compassionate and socially responsible medical practice. Using multiple examples and interactive discussion, the presentation will outline three ways in

which arts can contribute to the clinical enterprise. New roles for the arts working with and through clinical science include: public accountability; communication of scientific concepts; and public engagement.

First, the arts provide a forum for public accountability. This is often lacking in scientific work. What are the implications of prostate cancer screening recommendations for individuals? What do risks and prognoses of a disease mean to those who might be affected? These questions require answers different from those that science is capable of providing. Perhaps one of the most powerful instances of this role for the arts is choreographer Liz Lerman's "Genome: Ferocious Beauty." http://danceexchange.org/projects/ferocious-beauty-genome. In this project, scientists and dancers interact to reflect on the work and impact of molecular biology. The work asks how science can relieve the personal agony of illness or satisfy the need for compassion.

Second, art communicates clinical complexity, thus providing a unique complementarity to clinical models. In one project, "Heartworks," photographs represent cardiovascular concepts rendering them understandable to a lay viewer; at the same time they show the 'added value' of art as a medium whose aesthetic and emotional impact promotes healing.

Third, art engages subjectivity and therefore incorporates the patient's illness experience, with the potential for social transformation. Specifically, it professes a "moral purpose of social engagement" in which theoretical and transformational potentials are combined. R. Guidotti's "Positive exposure" both documents children with genetic abnormalities while seeking to change and broaden the community's normative concepts of beauty. http://www.positiveexposure.org/about.html.

These examples identify a role for the arts as means of bridging the gap between clinical science and public understanding. Participants will be invited to share their ideas for integrating the arts meaningfully into their teaching, research and practice.

# WA.05 - Using arts and narrative as a tool to improve reflective competence of educators in family medicine

#### WA05

Using arts and narrative as a tool to improve reflective competence of educators in family medicine

K. Karkabi<sup>1</sup>. O. Cohen Castel<sup>2</sup>:

<sup>1</sup>Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, HAIFA, Israel, <sup>2</sup>Department of Family Medicine, HAIFA, Israel.

#### Rationale of the workshop

A number of medical authorities around the world are increasingly focusing on the role of reflection in enabling doctors to mature as practitioners. In addition reflection has been recognized as an important competency in medical education, for constructing effective educator-learner communication and relationship. Although different ways are implemented for teaching reflection, it remains a challenge for every medical educator. Arts and narrative is one of the tools that can be applied to enhance reflective competence in medical students and residents education (reference).

#### Target audience

Teachers and educators in family medicine.

#### Goal

Enhance reflective competence of educators in family medicine. **Objectives** 

By the end of the workshop participants will be able to:

- · Identify challenges in educator-learner relationships.
- Describe emotions and feelings emerging during an educational interaction with a learner.
- ^ Use narrative writing as one of the coping strategies to tackle challenges in educator -learner relations.

#### Workshop description

In the first part of the workshop, paintings are used as sensitizers to elicit participants' descriptions of emotions and thoughts regarding challenges in constructing effective relations with

learners. Further, each participant is asked to write a personal narrative describing a meaningful or a challenging situation with a student or a resident, and to share narratives in groups of three. In the last part, participants will discuss the use of narrative writing as a tool to improve reflective competence of educators in family medicine.

Reference:

Khaled Karkabi, Orit Cohen Castel. Teaching reflective competence in medical education paintings. Medical Humanities 2011;37:58-59.

### WA.06 - How can sacredness be relevant for medical practice?

#### WANG

How can sacredness be relevant for medical practice?

E. Meland. J. Nessa:

Dept of Publ H and Prim H Care, Bergen, Norway.

The point of departure for this workshop will be to question if secular humanism is sustainable in modern welfare states. We will discuss if modern technology and its use in patients and populations with negligible pretest probabilities for disease gain health for individual patients and the population in general? Will we gain confidence or lose it? Are modern welfare states able to survive increasing demands of technological reassurance? Can these dilemmas be met and handled within the frames of secular humanism? What are the shortcomings and blind spots for this thought system? We will try to understand the development in modern medicine as a consequence of a long lasting deviation from a complementary position in the science of philosophy where human life were perceived as situated in a tension between knowledge and sacredness. In this discussion we will refer to philosophers and theologians who can help us gaining insight into the topic.

The second part of the workshop will examine how "sacredness" and "universal religiosity" pave their way back into modern societies and also into medical practice. We will exemplify these trends within medicine by therapeutic interventions aimed at promoting belonging and confidence in life and promoting sensitivity for spontaneous growth and learning. We will also pay attention to "new" developments within philosophy of science and theology that underpins these trends in medicine and in the society in general.

Lastly the audience is invited to discuss the relevance for "sacred practice" in medicine, and how we might promote a more complementary self-understanding within our profession. Is it relevant and if, how can we promote practice that is sensitive for the sacred dimension of our lives? The workshop will be interactive with room for discussions throughout the entire program.

## WA.07 - Empathic listening as a therapeutic approach to suffering of patients

#### WA07

Empathic listening as a therapeutic approach to suffering of patients

S. Rausch, N. Haas, P. Tabouring, H. Farghadani, C. Minguet; Société scientifique de médecine générale, Luxembourg, Luxembourg.

GP's face suffering in different settings.

We concentrate our approach to the patient with psychological problems, chronic illness and dangerous behaviors .

Empathy is known to have a therapeutic potential in itself, without any specific psychotherapeutic complement. Even more, all psychotherapeutic approaches have therpeutic success only together with a substantial amount of empathy. We would like to define the ingredients of an empathic listening and communication. We will work on specific skills and capacities which are known to be especially helpful in understanding patients suffering and in communicating this understanding to patients. We define a empathic attitude as an volontary decision to listen carefully without judgement, to make a conscious effort in understanding patients constellation of suffering and emotional disturbance, and to learn the necessary skills in reflecting to patients our understanding. We believe that this approach constitutes an important advance in our everyday communication with patients. We believe that this approach is in itself therapeutic, at least partially.

The workshop is designed to discuss the different issues of empathic communication an listening, and to make a useful frame of further refining and studies. Finally, we will define specific roadblocks to an efficient communication.

### WA.08 - The art of coming in contact

**WA08** 

The art of coming in contact

E. Eicher

Family Medicine, Minihof-Liebau, Austria.

In our all day work we permanently get and loose contact to our patients with changing intensity.

This is a reflective process - we touch an we get touched, we open channels to get and to send information, emotions, relations and much more. This is a miracle, but we do have a lot of knowledge about this process.

The workshop is a kind of play about this theme. You are invited to reflect about yourself, to move and to come in contact with others. Knowledge of biopsychosocial medicine, psychotherapy, contact improvisation, dance and the Talmi method of getting awareness are the basis for this workshop.

### WA.09 - Workshop Brainstorm & Innovation

**WA09** 

Workshop Brainstorm & Innovation

C. I. Steylaerts;

WONCA Europe, Diest, Belgium.

Aim

To introduce a method that, when regularly performed, introduces innovation in any organisation.

Method

The "GPS-method" is a fully tried brainstorm method, and consists of the following procedures:

- · introduction of a few themes 20-30 min
- o stem cell therapy in 2037
- o total recall of every memory in 2037
- the actual brainstorming around scenarios proposed (5 + 1 free theme) 60 min
- o what if ···
- o with a facilitator: can you express that thought in a word, a sentence?
- $\cdot$  clustering of ideas, scoring, getting a priority list 15-20  $\mbox{min}$

· SWOT analysis - 30 min

Proposal

The usual time frame for a GPS-brainstorm is about 3 hours. We can run a 90 min session.

Conclusion

After the workshop, the attendees will:

- be able to run a session themselves in their own organisation
- take home a few good ideas about stem cell therapy and memory
   have the possibility to set up an Innovation Special Intrest Group

# WA.10 - Challenges in education and how humanities can provide a successful learning environment: a peer reflective workshop

#### WA10

Challenges in education and how humanities can provide a successful learning environment: a peer reflective workshop

**P. G. Blasco**<sup>1</sup>, A. F. T. Roncoletta<sup>2</sup>, G. Moreto<sup>3</sup>, M. R. Levites<sup>4</sup>, M. Janaudis<sup>5</sup>;

<sup>1</sup>SOBRAMFA- Brazilian Society of Family Medicine, São Paulo, Brazil, <sup>2</sup>IICS- International Institute for Social Sciences, São Paulo, Brazil, <sup>3</sup>Universidade Nove de Julho School of Medicine, São Paulo, Brazil, <sup>4</sup>Universidade Anhembi Morumbi Medical School, São Paulo, Brazil, <sup>5</sup>Jundiaí Medical School, São Paulo, Brazil.

#### Aims and Background.

Faculty face challenges when they teach and have few opportunities to share them and reflect with their peers. They belong to this class of professional who work with the "doors closed". Nobody is able to see them; nobody, but the students, and probably these would not give them useful feedback on their teaching skills. On the other hand, when teacher discuss educational issues with their colleagues, they often spend most of this time talking about problematic students, problems with learning environment, and problems with the university. As teachers we need to state new paradigms in education, learn how to share our weakness and frustrations, and find resources for keep up the flame and energy for a better teaching performance.

In here we present a successful experience in faculty development: a nine-week course about new teaching resources for humanistic education of doctors. This course is set at the University of São Paulo Medical School, happens twice each year for the last three years, and the participants are post graduated doctors involved in teaching at different specialties. The course on humanities offers the opportunity for a broad reflection and for sharing among peers their challenges in education.

In this workshop we aim to share how we can use regular peer contact to help each other for improving teaching and how humanities can facilitate this faculty development scenario.

Methodology:

This workshop is proposed to those who are involved education. Presenters will ask the audience to introduce themselves, and then list the main challenges they face in their teaching set. Their experience will be the basic issue for starting the discussion, enriched with exchanging experiences, and with the outcomes of the successful experiences at the Humanities Course for faculty development.

Results

We expect an interactive discussion with the audience, high feedback from the participants, and an opportunity to start a peer feedback scenario on teaching.

Conclusion:

Humanities facilitate peer discussion among faculty, and could be an excellent resource to support family medicine teachers' motivation and enrich their teaching skills.

#### WA.11 - The Balancing Act in General Practice - Balancing our Personal and Professional Responsibilities

#### **WA11**

The Balancing Act in General Practice - Balancing our Personal and Professional Responsibilities

#### A. M. Rochfort<sup>1,2</sup>;

<sup>1</sup>Irish College of General Practitioners, Dublin 2, Ireland, <sup>2</sup>ICGP Health in Practice programme, Dublin, Ireland.

This session begins with a brief presentation on "Balancing expectations, responsibilities and resources in general practice in 2012"

Following this will be small group work and an open floor discussion on the issues these concepts raise for us in our daily practice, towards reaching consensus on how we can best overcome the challenges that face us using the skills of the science and art of general practice. These issues and concepts may include

- 1) Expectations: Decision-making, Patients perceptions, fulfilling demands; Taking time to listen, pressure to act, to prescribe, to investigate, to refer. Expectations of patients, relatives, our profession, medical colleagues, other health professionals, medico-legal expectations. Expectations from within to survive, to perform, to be the perfect doctor?
- 2) Responsibilities, Patient Safety & Quality of Care; Decision-making: every consultation; every laboratory result; every telephone call; every item of correspondence. Time management is also a quality of care issue
- 3) Resources in General Practice: the reality of 2012. How can we meet the demands of our job with these resources? How do you see the future of general practice? What can help us or who can help us as a group?

We will overview of our professional and personal responsibilities as General Practitioners / Family Doctors and as individuals in times of diminishing resources. Using case scenarios and small group work we will attempt to identify threats and opportunities.

We will explore how the busy GP can best survive and hopefully thrive using national and local systems of information and support. other health professionals apart from family medicine: whether the role of medical generalists is being developed in other settings in their country: and what in their experience assists or disrupts their ability to act as an expert generalist on behalf of their patients. This is just one of the fascinating areas this commission has developed. The outline of the workshop will be - (1) preconference availability of the report to potential attendees; (2) presentations of the evidence for the definitions, dimensions, and benefits of generalism; (3) key findings for family medicine, and questions for discussion: (4) shared experiences as generalists; (5) specific consensus building exercise to gauge relevance and priorities for further development: (6) summary and close. Post - conference feedback can go to participants, and this may form the basis of a special interest network across Wonca if there is sufficient interest.

### WA.13 - How to optimize individual psychotherapeutic care in GP?

#### **WA13**

How to optimize individual psychotherapeutic care in GP?

#### P. Tabouring;

Université du Luxembourg, Luxembourg, Luxembourg.

Psychotherapy is a privileged creative individual care field in GP. The interactiv workshop at WONCA Warsaw could determine a model of psychotherapy practice paricular of GP.

The aim of the workshop in Vienna is to caraterize the specifities of this care, so that the method can be used in the most appropriate way by the GP.

Working method during the workshop will consist of constituting small groups and of presenting each group a clinical example in relationship to the most commonly described situations at demands of psychotherapy in GP: depression, motivation, burn-out and anxiety.

Going out from the elaborated concepts of each group, we will try to elucidate the typical qualities of a psychotherapeutic method in GP and to put together the elaborated criteria in a synthetic and structured way, so that the GP could refer back to them in case of need.

The workshop will intend to determine the modalilties of psychotherapy in GP, hoping to constitute a valid method, which will be adaptable to each individual patient in a creative way.

### WA.12 - Medical generalism - does it matter?

#### **WA12**

Medical generalism - does it matter?

**A. C. Howe**, Maureen Baker, Clare Gerada, Martin Marshall; Royal College of GPs, London, United Kingdom.

Family medicine is a speciality in its own right, but has suffered from misunderstanding of the value of its generalist approach to patient care. As costs of hospital referral and care increase, and more doctors become highly specialised, the role of generalists in all health care settings has become a key issue. The RCGP therefore hosted a 'Commission on Generalism', whose findings will be published before Wonca Vienna. We propose to use the workshop to present the findings of this work to participants, and to develop thinking on the key question raised by the Commission.

One example of a key finding to date that we would think ideal to explore in a workshop (or present as an oral) is that 'Patient-centredness is a key dimension of the true generalist'. This is expressed as a primary focus on the person, combined with the clinical ability to care for them across a number of different clinical and personal problems regardless of the body 'system' in which these problems occur. It also denotes responsibility for the person beyond individual episodes of care, and a scope of care which is wider than other specialists. We would seek a debate as to whether participants recognise this dimension in the work of any

## WA.14 - Complexity sciences – an emerging way of solving problems in medicine - Complexity-SIG

#### WA14

Complexity sciences - an emerging way of solving problems in medicine - Complexity-SIG

#### J. P. Sturmbera:

General Pratice, Wamberal, Australia.

Complexity sciences offer a different way of approaching the problems facing medicine and general practice/family medicine. Complex adaptive systems theory offers a framework through which to understand the interactions between system agents and the outcomes they achieve.

This workshop will be in four parts - in the first part it will give a brief introduction into the nature of complexity theory and sciences; the second part will introduce some of tools of complexity sciences; the final part will present complexity based studies across the field of the health sciences, before opening up to a discussion with all participants.

Expected outcomes

- Participants will have a working understanding of complex adaptive systems
- Participants will be able to distinguish complex problems from complicated ones
- Participants will be able to appreciate the additional insights gained from applying complex adaptive system sciences to health related problems

#### WA.15 - Benefits of Integrating Mobile and Web Technology into the Patient-Centered Family Medicine Care Team

#### **WA15**

Benefits of Integrating Mobile and Web Technology into the Patient-Centered Family Medicine Care Team

**S. L. Argenio**, F. B. Willis, J. A. Sperrazza, S. Simmons; Mayo Clinic Florida, Jacksonville, FL, United States.

This presentation describes the benefits of integrating mobile and web technology into a patient-centered family medicine team. Technologies can improve patient access, patient education, promote group visits and lifestyle changes. Patient registries can track chronic disease management. These technologies are being utilized in our clinic to maximize utilization of nurses, assemble teams for the patient centered medical home and allow for recognition of time spent caring for our patients beyond our face to face contact time. Attendees will be introduced to present and evolving technologies and ways to incorporate these in the new evolving art and science of medicine. The workshop will review the principles of the patient centered medical home and demonstrate how on-line portals and in office mobile technology can enhance office efficiency, patient education and chronic disease management. Actual on- line demonstrations will show how web access can enhance patient contact with the medical home for appointments, information, lab results and E-visits. Integrating mobile and web-based technology into the patient- centered team can improve efficiency, increase revenue and ultimately improve the care and satisfaction of our patients.

### WA.16 - Mindfulness - the proof and the practice

#### **WA16**

Mindfulness - the proof and the practice

N. P. Harris

Monash University, Notting Hill, Australia.

Aim This is a workshop addressing both the scientific basis of the practice of mindfulness, through a discussion around available literature and a case study, and also a practical exercise in mindfulness with audience participation and feedback. The greater aim of the workshop is to introduce an unfamiliar approach to management of common problems addressed within the general practice setting.

#### **Workshop Organisation**

An introduction to mindfulness - what is mindfulness, what is the history surrounding this technique, how is Buddhism linked with mindfulness, and what are contemporary adaptations which are presently being successfully used, for example by Jon Kabat-Zinn

Presentation of common presentations where mindfulness can be utilised, published literature relating to mindfulness which includes support for its adaptation

- •Audience discussion focusing on have you ever used mindfulness? When? Who? Outcome? And also feedback from the audience; what more do they want, is there clarity around the topic
- •Case discussion patient with depression
- Participation in a mindfulness exercise
- -Discussion regarding the experience of mindfulness, time for Q & A and closing remarks

**Learning Objectives\_**Through involvement in this workshop, it is intended that participants will be able to reach the following goals;

- •Increase knowledge based in relation to mindfulness, both historically and contemporarily
- •Appreciate relevant clinical applications for mindfulness and understand that there is an increasing amount of published literature available to support its use
- ·Learn from experiences of other participants
- Actively participate in a case based discussion
- Experience mindfulness

**Impact** Following delivery of the workshop it is anticipated that participants will be able to facilitate the use of mindfulness, in the appropriate clinical setting, to benefit their patients, increase their knowledge base, and become motivated to look for alternative tools to manage many common general practice presentations.

#### **WORKSHOPS SCIENCE**

WS.01 - Workshop from the IPCRG, SIG of Wonca Europe: Investigation and treatment of common allergic respiratory conditions that should be managed in general practice.

#### WS01

Workshop from the IPCRG, SIG of Wonca Europe: Investigation and treatment of common allergic respiratory conditions that should be managed in general practice

**M. Roman Rodriguez**, Svein Høegh Henrichsen, Jaime C de Sousa, Ioanna Tsiligianni;

International Primary Care Respiratory Group, Palma de Mallorca, Spain.

Allergic rhinitis is a very common disease with over 600 million people worldwide suffering from it. The majority of patients who seek medical advice are seen in primary care. Although these conditions are often not to be considered to be severe diseases by physicians, they cause considerable morbidity, their prevalence is on the rise and they represent huge costs in terms of indirect resources as days out of work or school. Accurate diagnosis is not frequently done in primary care and sometimes the availability of diagnosis tests such as skin prick tests or specific IgE is not very common in primary care. The big variation in local circumstances and population characteristics, including the healthcare system regulations under which primary care has to operate make the diagnosis and treatment of allergic diseases a big challenge for primary care. The evidence of the link between uncontrolled asthma and under-treatment of other allergic respiratory conditions is getting stronger and although there is a selection of guidelines focused on the management of these conditions, there is a paucity of guidance on how best to identify patients who would most benefit from treatment including allergen avoidance strategies and specific immunotherapy.

The IPCRG presents an interactive workshop; after a short presentation, open discussion among participants will be led by a team of practising family physicians with experience of different

health care systems and with a special interest in respiratory disease. The main issues to be covered at the workshop will be:

- The importance of accurate diagnosis of allergic respiratory conditions in primary care. Should we perform allergy tests?
- Management of allergic respiratory conditions in primary care. From guidelines to practice
- Is it a place for specific immunotherapy in day to day primary care practices?

### WS.02 - Electronic guidelines at the desktop: quick versus comprehensive

#### WS02

Electronic guidelines at the desktop: quick versus comprehensive

H. Alenius<sup>1</sup>, M. Teikari<sup>2</sup>, J. Jousimaa<sup>3</sup>;

<sup>1</sup>Lempäälä Health Center and Duodecim Medical Publications, Lempäälä, Finland, <sup>2</sup>Duodecim Medical Publications, Kirkkonummi, Finland, <sup>3</sup>Duodecim Medical Publications, Helsinki, Finland.

During an ordinary busy working day, a general practitioner faces numerous situations where quick access to guidelines helps in improving the quality of clinical decisions and patient safety. When used in the patient's presence during a consultation, the format of the guidelines becomes crucial. While a comprehensive full-text guideline provides the most thorough information, it is hardly practicable in this context. Thus, simple check lists and quick decision support tools are needed. These should be in concise format and yet sufficiently covering and reliable to be useful in the clinical decision making. The aim of the workshop is to introduce different formats for electronic guidelines and decision support tools and to discuss what is achieved and what is lost when the contents of full guidelines are condensed into shorter formats. The impact of using electronic desktop reference in the patient's presence is also discussed.

The main objective of the workshop is to find the most useful formulations for electronic clinical guidelines to be used at the point of care during patient consultation and to discuss the pros and cons of highly condensed guidelines.

ORGANISATION OF WORKSHOP: The workshop is made up of the following elements:

- -Case examples: Physician's knowledge needs during a consultation
- -Electronic guidelines in different formats: the Finnish experience
- -Stripping down a guideline: practical exercise with the audience
- -Use of knowledge sources in the patient's presence: impact on interaction Group discussions
- -EPR-integrated electronic decision support: a panacea? Discussion

## WS.03 - How to communicate benefits and harms in cancer screening - EUROPREV Workshop

#### WS03

How to communicate benefits and harms in cancer screening - EUROPREV workshop

C. Martins<sup>1</sup>, J. Brodersen<sup>2</sup>, M. Bulc<sup>3</sup>, C. Brotons<sup>4</sup>, D. Sghedoni<sup>5</sup>, E. Jurgova<sup>6</sup>;

<sup>1</sup>General Practice Department, Faculty of Medicine, University of Porto, Porto, Portugal, <sup>2</sup>The Research Unit and Section for General Practice, Department of Public Health, Faculty of Health Sciences, University of Copenhagen, Copenhagen, Denmark, <sup>3</sup>Department of Family Medicine, Ljubljana University School of Medicine, Ljubljana, Slovenia, <sup>4</sup>Research Unit, EAP Sardenya-IIB Sant Pau, Barcelona, Spain, <sup>5</sup>CSeRMEG – Center for Study and Research in General Practice, ASL Milano, Milano, Italy, <sup>6</sup>General Practice Department, Education Centre for Health, Piestany, Slovakia.

#### Introduction

Cancer screenings are popular among the general population and among some doctors. A high proportion of patients attending primary care are interested in "screening" and do not perceive the harm it might cause. Patients over-estimate their need to be screened for cardiovascular risk factors and for cancer.

Either asked by the individual or proposed by doctors, there is a growing concern related with the way decisions are taken in this field. There is enough evidence showing that at the same time some screening participants may have benefits from cancer screening, other screening participants may experience harm.

The workshop-participants will share and discuss different strategies of shared-decision making in cancer screening. Design & Methods

Different breast cancer screening informative leaflets will be analysed in small groups of workshop participants.

Health 2.0 strategies and their role in cancer screening shared-decision making will also be discussed.

Participants will be invited to share their experiences from different countries and cultures.

Participants will be defied to propose best practice recommendations for shared-decision making in cancer screening. Schedule

- 1. Introduction to the topic
- 2. Discussion in small groups related to breast cancer screening leaflets, SWOT analysis, reporting.
- 3. Plenary discussion on the topics:
- How should the ideal leaflet look like?
- How should be a Health 2.0 tool related to shared-decision making in cancer screening?
- Local experiences from participants' practices (brain storming).
   Conclusions

In the workshop general practitioners/family physicians from different countries will analyse the possibilities and limitations and try to identify the good and the bad screening approaches.

Conclusions of discussion will be taken down and proposed to EUROPREV meeting.

### WS.04 - Explore your visions with psychodrama

#### WS04

Explore your visions with psychodrama

#### A. F. Begg;

RNZCGP, Lyttelton, New Zealand.

This workshop is an opportunity to explore visions for your work with a small group of colleagues. What inspires you and what gets in the way? I will begin with a brief presentation of psychodrama which is a method developed by Austrian trained psychiatrist

Jacob Moreno that aims to increase the creativity of individuals. We will use this method to work with your visions and the inevitable barriers to realising them. Psychodrama emerged from Moreno's observations of children at play, here in the streets of Vienna. We will learn about each other's aspirations through group interaction, and then work with the material presented. I will assist you to create sculptures and small enactments, or 'dramas' using people and objects in the room. You can become artists in your own lives. You may see things differently and develop fresh ways of responding to obstacles in your path in this expanded form of role play. Spontaneity can be awakened and creativity activated which increase your ability to realise your dreams. After dramas we spend time sharing our responses helping us to connect with each other and to integrate this work into our lives. Taking time to focus on ourselves and our visions in this way has the potential to be cathartic and inspiring, and also very enjoyable.

Moreno is noted for saying this to Sigmund Freud when they met in 1912: "... You analyse their dreams; I give them the courage to dream again."

Moreno, J L, Z & J D (1964) *The First Psychodramatic Family*, New York: Beacon House.

No prior knowledge or experience with psychodrama needed. You may wish to increase your consciousness of your own vision(s) or to be inspired by the work of others. The presenter is an experienced GP and medical educator for the Royal New Zealand College of General Practitioners. She is a qualified psychodramatist and group leader who has run many groups including an ongoing GP supervision group using psychodrama. She has a special interest in teaching communication skills using role play and actors simulating patients.

### WS.05 - Training in quality improvement in continuous medical education

#### WS05

Training in quality improvement in continuous medical education

**Z. Klemenc-Ketis**<sup>1</sup>, M. Petek-Ster<sup>2</sup>, T. Eriksson<sup>3</sup>, T. Tomasik<sup>4</sup>, K. Winnel<sup>5</sup>, J. Kersnik<sup>6</sup>, EQuiP; 
<sup>1</sup>EQuiP, Velenje, Slovenia, <sup>2</sup>Institute for Development of Family

<sup>1</sup>EQuiP, Velenje, Slovenia, <sup>2</sup>Institute for Development of Family Medicine, Slovenia, Ljubljana, Slovenia, <sup>3</sup>EQuiP, Copenhagen, Denmark, <sup>4</sup>EQuiP, Krakow, Poland, <sup>5</sup>EQuiP, Helsinki, Finland, <sup>6</sup>Institute for Development of Family Medicine, Slovenia, Kranjska Gora, Slovenia.

Background: Continuous quality improvement (QI) is a corner stone of modern health care. People demand quality and safety in care. General practice/family practice bases more and more on evidence based medicine and continuous QI. In many countries, QI has nowadays become an indispensable part of everyday family doctors' work. Therefore, QI methods and skills should be taught at different levels of medical education. This includes also continuous medical education (CME), where specific methods of teaching and assessment should be used.

Methods: Workshop will last for 1.5 hours. It will consist of plenary presentations, buzz groups, working in small groups and discussion. In the first part of the workshop, we will introduce the aims of the workshop and explain why teaching QI is important. In the second part, we will introduce main teaching and assessment methods used in adults learning and the principles of QI teaching in CME. In the third part, the participants will reflect on teaching QI in CME and provide feedback.

#### Results

We expect that after the workshop, participants should know and understand necessity for measuring and improving quality in health care, they should get familiar with teaching and assessment methods of QI and they should value teaching QI in CME.

Teaching continuous QI is an important topic for teaching at all levels of medical education and training. During specialist training and CME, family doctors should gain knowledge and skills to audit and assess their own patient care practices, integrate scientific evidence and be able to improve their practices.

### WS.06 - Dispensing doctors workshop

#### WS06

Dispensing doctors workshop

U. Busch:

Med. Univ. of Vienna, Lengenfeld, Austria.

#### **Dispensing Doctors Workshop**

Aim(s) & Backgrounds

In Austria, mostly single handed general practitioner offices run a rather unique dispensing service system called: "Hausapotheke". In this workshop we would like to discuss the advantages / obstacles or dangers and the possible future of these offices providing a one stop shop supply of patients needs in remote areas. We want to start with a two slide 3 min presentation of other European countries experiences with a dispensing doctor system. Then in a second step we would like to discuss in small groups these european experiences, advantages disadvantages and the ethical issues concerning such a dual system in one family doctors hand. Third we would like to talk in a plenary session if such a system could be a chance for european health systems to bring family doctors to remote areas.

#### Design(s) and Methods

Literature research and a presentation of a European wide Survey. Live Country Reports of dispensing doctor systems will be followed by buzz groups and a group discussion and presentation in the plenary:

Is there a future for dispensing doctor systems?

Aims

A What are the advantages /obstacles of a dispensing doctor system from:

1 an ethical point of view

how to withstand the call of the "syrenes"

(odysseus vs. orpheus approach)

2 laws of engagement: how could we set boundaries

B. is this dispensing doctor system a model ready for the future: 1 how to bring excellent care and medications to remote areas with the implementation of new "Hausapotheke"

Conclusion

"Hausapotheken" in Austria have a long tradition, gp's running such dispensing services prescribe less drugs than those without. Are more aware of the total costs of prescribed drugs (higher generic rate), provide a one stop shop medicine in remote areas. Is this system a future role model for European health systems? We would like to meet your experience and discussions on this interesting topic and often second pillar for a gp's office in remote areas!

#### WS.07 - "Do you understand how your health system works? From Beveridge to Bismarck; a whistlestop tour of European health systems"

#### WS07

Do you understand how your health system works? From Beveridge to Bismarck; a whistle-stop tour of European health systems

**S. Kumpunen**<sup>1</sup>, L. Pettigrew<sup>2</sup>, S. Wieringa<sup>3</sup>, G. Irving<sup>4</sup>; 
<sup>1</sup>London School of Economics and Political Science, London, United Kingdom, <sup>2</sup>Royal College of General Practitioners, London, United Kingdom, <sup>3</sup>Generation Next, Utrecht, Netherlands, <sup>4</sup>Vasco da Gama Movement, Liverpool, United Kingdom.

#### Background

Teaching on how health systems function is missing from most undergraduate and postgraduate medical curricula. Therefore although often well prepared to provide clinical care for patients, trainee and new family doctors lack understanding of the system in which they work. Without understanding the advantages and

disadvantages of different methods of collecting, pooling and redistributing funds it can be argued that family doctors are unprepared to influence policymakers. The EU's directive on the mutual recognition of professional qualifications has resulted in the increased the migration of doctors. Moreover in light of the recent ratification of the EU Directive on Patients' Rights to Cross-border Healthcare, family doctors may have an increase in patients from abroad. For this reason it is also important for family doctors to be aware of the system-level differences across Europe that may shape patients' and health professionals' experiences and expectations.

Aims

The aims of this workshop are to:

- 1) encourage discussion on system level differences among family doctors:
- 2) explore different models of collecting and pooling funds and of paying family doctors; and
- 3) highlight a number of key health policy publications that can assist family doctors in further researching system-level differences.

Procedure: In the first half of the workshop attendees will discuss key questions from their own country perspectives related to the various forms of collection of funds, including: user-charges, taxes, and social health insurance. Following presentations from discussion groups, facilitators will outline the main differences of the Beveridge and Bismarck systems. The second half will focus on the payment of family doctors, following a similar format to the first half of the workshop, highlighting the monetary incentives linked to methods of payment, such as salary, capitation, fee-forservice and payment for performance. All information presented will draw on seminal and innovative peer-reviewed publications.

### WS.08 - Palliative care in rural areas - role of general practitioners

#### WS08

Palliative care in rural areas - role of general practitioners

T. Pekez-Pavlisko;

EURIPA, Zagreb, Croatia.

#### BACKGROUND:

The role of general practitioner (GP) is central to community palliative care. This role is important in rural areas, where there isn't enough clinic coverage. Palliative care is currently organized in differing levels of quality in European countries.

To analyze the role of general practitioners in palliative care organization in rural areas across different parts of Europe.

To consider pre and postgraduate education in the area of palliative care for GP's. Special attention will be given to communication and cooperation with other health care staff and support of national and local health authorities regarding organizing palliative care in rural areas.

#### WÖRKSHÖP PLAN:

After the introductory lecture on the current status of rural palliative care in Europe (received through surveys), participants will group themselves in 3 - 4 teams in which subjects mentioned in the aims will be discussed. At the end of discussions, team leaders will present their conclusions.

#### . CONCLUSION:

Based on the introductory lecture and group work in workshops, we will share valuable experiences but also awareness of problems in organizing palliative care in rural areas. Measures that might assist practitioners in rural areas organize palliative care (education, communication with other health care staff, cooperation with local community, international cooperation, research) will be presented.

### WS.09 - The challenge of teaching expert teachers in family medicine

#### **NS09**

The challenge of teaching expert teachers in family medicine

I. Švab¹, J. Allen², A. Windak³, A. Symeonidis⁴, L. Gomes⁵, D. Guldal⁶, R. Maagaard⁷, E. Price², O. Basak˚; ¹Medical faculty, Ljubljana, Slovenia, ²EURACT, Leicester, United Kingdom, ³College of family physicians, Krakow, Poland, ⁴ELEGEIA, Thessaloniki, Greece, ⁵Portuguese association of general practitioners, Lisbon, Portugal, ⁶Dokuz Eylul University medical school, Izmir, Turkey, ⁷Danish College of General Practitioners, Aarhus, Denmark, ⁶Turkish association of family physicians, Izmir, Turkey.

As part of an international project under the Leonardo da Vinci programme, a series of courses aimed at family medicine teachers at different levels was developed.

The "level 3" course was aimed at expert teachersT. It was the largest undertaking in the project, with pre-course work, a study day followed by personal study and preparation for a final 2-day meeting. The course was pitched at the level of a Masters/Doctorate module. Participants were expected to produce a written assignment, to deliver their proposed education package, and seek publication. They were be invited to develop new modules for future Level 2 courses and to act as Faculty for the delivery of their materials.

The aim of this workshop is to share our experiences in the development and implementation of the course, aimed at expert teachers. The participants of the workshop will learn about the process of the course's development, its implementation and the plans for the future. They will have a possibility to exchange their own experience in developing teaching expertise in teaching family medicine.

# WS.10 - Interactive Reflective Writing of Medical Students - Two Frameworks for Fostering and Evaluating Reflective Capacity

#### WS10

Interactive Reflective Writing of Medical Students - Two Frameworks for Fostering and Evaluating Reflective Capacity

**S. P. Reis**<sup>1</sup>, J. S. Taylor<sup>2</sup>, D. Anthony<sup>2</sup>, J. M. Borkan<sup>2</sup>, H. S. Wald<sup>2</sup>; <sup>1</sup>Bar Ilan University, Safed, Israel, <sup>2</sup>Alpert Medical School of Brown University, Providence, RI, United States.

#### Objectives:

By the end of the workshop

1. Participants will be familiar with the constructs of reflection, interactive reflective writing, and reflective practice. 2. Participants will have experienced the use of the Brown Educational Guide to Analysis of Narrative (BEGAN) and an associated evaluation rubric, *Reflection Evaluation for* 

(REFLECT).3. I earners' Enhanced Competencies Tool Participants and faculty will consider the merits, limitations, and possible utility of presented curricula and evaluative tools for their own programs.Intended audience: Undergraduate and graduate teachers and program directors, all experience levels welcome, no prerequisites, interest in reflective writing and evaluation helpful. Reflection is considered an essential competency for clinical reasoning, patient-physician communication, and professionalism. The use of reflective writing to augment reflective practice instruction is well documented; however, issues of effectiveness and valid assessment prevail. At the Alpert Medical School of Brown University ( Providence, RI, USA), a curriculum of students' reflective writing with guided individualized feedback was implemented in 2006. Frameworks for enhancing the educational value of feedback (BEGAN) andevaluating students' reflective level (REFLECT) were developed. The BEGAN and REFLECT tools were incorporated into student and faculty guides in the Doctoring course and the Family Medicine Clerkship. Recently, a new medical school in Safed, Israel (Bar Ilan University)has implemented a similar curriculum, employing adaptations of the BEGAN and REFLECT.

Annual faculty development sessions to enhance educational impact of students' reflective writing have been successfully implemented at Alpert Med for 10-20 course faculty per session, and in Bar llan for 50-60 faculty. Based on this paradigm, workshop participants will be offered a sample reflective narrative to practice both providing written structured feedback and formative evaluation. This will followed by a brief discussion. Subsequently, the program and BEGAN will be introduced. Participants will re-craft feedback based on the BEGAN and discuss the exercise. Finally the REFLECT will be applied to the essay. A general discussion, including an invitation for participants to consider potential applications of some or all components of the program and evaluative tools in their own teaching and learning settings, will precede a wrap-up and session evaluation.

### WS.11 - Integrating mindfulness skills into clinical practice

#### WS11

Integrating mindfulness skills into clinical practice

P. Weber<sup>1</sup>, **C. Klonk**<sup>2</sup>;

<sup>1</sup>Philip Weber, Boulder, CO, United States, <sup>2</sup>Christoph Klonk, Marburg, Germany.

A major challenge in clinical training and practice is to integrate communication skills such as empathy with the ability to communicate the medical facts. The inability to observe the emotional level of relationship with the patient might lead to poor compliance, the threat of law suit and personal work dissatisfaction.

Mindfulness-based skills have enabled patients to better cope with their illness (Mindfulness-based Stress Reduction) and inspired new approaches in psychiatric treatments. Research shows that applying a training in mindful communication and empathy to the medical practitioner him- or herself stimulates efficiency, achieving patient satisfaction and fulfilment in one's work including burn-out prevention.

To be effective, however, these techniques have to be integrated into one's daily content-driven medical practices.

We describe a workshop that focuses on mindfulness-based communication skills:

- 1. momentarily re-balancing one self in the rush of daily medical work,  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($
- 2. being appropriately open and deeply receptive to the patients needs.
- 3. allowing one's professional focus not to get into the way of communicating to the patient.

During the workshop we will present and explore the general scientific evidence and its personal relevance. An adaptation of traditional methods of mindfulness will be introduced and practiced together. Both emotional awareness and body mindfulness will be trained by guided exercises in small group interaction, role-play and dyads. The results will be discussed and evaluated.

All presented methods are designed and chosen for ready use in medical practice.

#### WS.12 - The Hippokrates Exchange Programme: A Vasco da Gama Workshop

#### WS12

The Hippokrates Exchange Programme: A Vasco da Gama Workshop

**S. Rigon**<sup>1,2</sup>, R. Ramsey<sup>3,4</sup>, S. Geeranavar<sup>5,3</sup>, C. Lygidakis<sup>2</sup>, R. Zoitanu<sup>6,7</sup>, Z. Akbayin<sup>8</sup>, M. Ginns<sup>3</sup>, S. Begg<sup>9</sup>, L. Pettigrew<sup>5</sup>, R. Gomez-Bravo<sup>10</sup>, P. Kallsetrup<sup>11</sup>;

<sup>1</sup>Medicina Generale Emilia Romagna, Bologna, Italy, <sup>2</sup>Vasco da Gama Movement, Bologna, Italy, <sup>3</sup>RCGP Junior International Committee, London, United Kingdom, <sup>4</sup>Elgin Community Surgery, Elgin, United Kingdom, <sup>5</sup>Vasco da Gama Movement, London, United Kingdom, <sup>6</sup>Bucharest Emergency Hospital, Bucharest, Romania, <sup>7</sup>Romanian Society of Family Medicine, Bucharest, Austria, <sup>8</sup>Hurriyet Aile Sagligi Merkezi, Istanbul, Turkey, <sup>9</sup>St John's Hill Surgery - Begg Practice, London, United Kingdom, <sup>10</sup>Vasco da Gama Movement, Madrid, Spain, <sup>11</sup>Center for Global Health at Aarhus University, Aarhus, Denmark.

Aim: The main objective of this workshop is to inform trainees and junior GPs about the possibilities of participating in the Hippokrates Exchange programme and to explore the issues related with the process of application. Moreover, we will raise awareness of the opportunity to apply for the Leonardo da Vinci funding and we will present other types of Exchanges that are available through the Vasco da Gama network, such as the small Exchanges in the UK, Netherlands and Spain, as well as potential future programmes beyond Europe.

**Méthods**: Firstly, there will be a short introduction on the programme and the learning objectives that the participants should reach by the end. Experiences of past participants will be presented, with a particular focus on the impact that the exchange has had on their own personal and professional development. Furthermore, group work and discussion will take place with the objective to provide information on the application process, resolve problems and answer questions on the programme.

In addition, representatives from those nations involved in the initial setup and development of the project will introduce the Leonardo da Vinci funding programme, which is part of the European Commission's Lifelong Learning programme. They will also outline its important role in strengthening the Hippokrates Exchange and reflect on their experience from the perspective of organizer.

Finally, we will present the prizes that the Vasco da Gama Movement has established for the completion of the programme. **Expected results**: As the Hippokrates Exchange has become one of the major pillars of the Vasco da Gama Movement's initiatives, the workshop will provide a valuable insight into the experience that a trainee or junior GP can obtain from the programme.

### WS.13 - Gate keeping the gastrointestinal tract

#### WS13

Gate keeping the gastrointestinal tract

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General Practitioners (GPs) have the difficult task of differentiating complex and heterogeneous symptoms in order to identify potentially serious disease which may require investigation and intervention. This is a particular problem in gastroenterology where

symptoms are frequently non specific, such as abdominal pain, and frequently overlapping, such as from GI or gynecological problems. Treatment outcomes have improved and there is presently an emphasis within the health field on the earlier detection of serious problems, especially cancer. GPs have a difficult task in differentiating serious disease from common, less worrying problems. This is against the backdrop of a large workload and in a situation where the GP is normally the first clinician to be consulted. Furthermore, GPs have to do this within a climate of health services which demands increasing efficiency in the use of resources.

This workshop will cover several examples of serious GI problems, including cancer, colo-rectal screening, inflammatory bowel disease and complex diarrhea. It will focus on the role of GPs in detecting serious problems and will explore, with state of the art data, the predictive value of patient history and symptoms. It will also re-visit the traditionally cited role of the GP as a "gatekeeper", exploring whether this actually might work against the patients' interests in delaying important diagnoses and whether a more radical approach is needed now.

The role of the GP is evolving worldwide and gastroenterology presents an area through which some of the new challenges can be explored. The workshop faculty, which is international, will bring perspectives from different settings to discuss pragmatic solutions to the need for more efficient, earlier diagnoses and management.

### WS.14 - Neurological examination in primary care

#### WS14

Neurological examination in primary care

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#### Introduction

Neurology includes a wide spectrum of knowledge that is important for a family physician, being aware of the high incidence of vascular brain disease and its repercussion in the patient's life quality, as well as the increasing incidence of vascular risk factors, associated with this disease. In primary care, neurological symptoms are also a common complaint, as such as headache, dizziness, memory loss, reaching up to 10 to 15% of the family physician workload.

The neurological examination is an essential tool that aids family physicians in making accurate diagnosis.

Objective:

Enable the participants to develop a unique set of skills and techniques that will help them to evaluate and differentiate neurological symptoms and signs.

Methodology:

A 90 minute session, will address the following items:

- Neurological examination (cranial nerves, mental status examination, sensory, pyramidal, extrapyramidal, peripheral nerve and cerebellum system, evaluation of speech and language)
- Training neurological examination in pairs
- Watching videos related to different neurologic diseases Results:

With this session, the authors intend to do a revision of the techniques of the neurological examination.

Conclusion:

There are neurological diseases that need to be promptly diagnosed and referral to further investigation and avoid progression of the disease. At the end of this session, the participants will be able to do a thorough neurologic examination, identifying symptoms and signs of severity.

#### WS.15 - European Forum for Primary Care Position Papers on: Interprofessional Education for Primary Care Professionals Impact of continuity on quality of care within Primary Care

#### WS15

European Forum for Primary Care Position Papers on: Interprofessional Education for Primary Care Professionals Impact of continuity on quality of care within Primary Care

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#### Aims / purpose

How can the quality of Primary Care be improved by interprofessional education and strengthening the continuity in the different countries in Europe? The aim of these European Forum for Primary Care Position Papers is to learn about the reasons for the variation in care and to identify possible solutions in order to improve primary care for the topics mentioned.

Methods

The method behind the EFPC Position Papers is to provide health care professionals, educators as well as policymakers with evidence and a wide array of experiences that allow them to develop and support optimal approaches in Primary Care. In addition, the EFPC Position Papers recommend policy measures on national and European level and identify areas for further research. Under leadership of one coordinating institute, each EFPC Position Paper is developed by a group of experts from a number of European countries. Focusing on the two topics mentioned above, the content but also the production process, dissemination and impact of the EFPC Position Papers will be discussed

#### Results .

In view of the need for better collaboration between the different professional groups within Primary Care it is an important strategy to offer interprofessional education in all stages of the professional training.

Primary Care includes comprehensive community based services which encompass promotion, prevention, care and treatment. Amongst others, this requires the strengthening of the continuity of care, knowing different professionals and disciplines will be involved. Participants of the workshops will be informed and challenged to form their views and discuss their opinions with experts in the field of interprofessional education and continuity of care.

### WS.16 - Low back pain: What can we do in our surgery?

#### WS16

Low back pain: What can we do in our surgery?

J. Bueno-Ortiz, J. Basora Gallisa, D. Orozco-Beltran; Sociedad Español de Medicina Familiar y Comunitaria (SEMFYC), Barcelona, Spain.

#### INTRODUCTION:

Low back pain (LBP) is, after respiratory infections, the most frequent cause of consultation in primary health care. Multidisciplinary and multinational evidence-based Guidelines for the prevention and treatment of acute and chronic LBP were issued by a European project launched by the European Commission ("COST B13 Action"). In Spain and other countries, multidisciplinary national Working Groups adapted COST B13 guidelines to their own setting. As recommended by those COST B13 guidelines, the prevention and treatment of chronic LBP

should be multidisciplinary and include exercise and health education focusing on active management.

Since 1995 we have run more than 60 Back-School Workshops in National and Regional Spanish Conferences. We will show you our results

#### GOALS:

- Family doctors (FD) should acquaint with COST B13 LBP guidelines
- FD should learn the possibilities of prescribing therapeutical exercises (TE) and postural hygiene (PH) to their patients with LBP.
- FD should acquaint with the abilities to help the patient to learn and carry out TE and PH as part of his treatment
- Change the attitudes of FD about the possibilities of TE and PH prescription in their daily work
- FD should learn a series of easy exercises (for their own benefit) to be carried out during their surgery and at home

#### METHODOLOGY:

Interactive. Each FM will have a facilitator. Role-play followed by group discussion of LBP tackling in daily consultation. All TE and PH recommended for the patient will performed by FD supervised by their facilitator. FD are recommended to wear sport clothes.

KEY MESSAGE: Stay active

# WS.17 - Workshop: "Migrant Care in General Practice" of WONCA SIG on Migrant Care, International Health and Travel Medicine

#### WS17

Workshop: "Migrant Care in General Practice " of WONCA SIG on Migrant Care, International Health and Travel Medicine

**M. E. Van Den Muijsenbergh**<sup>1,2</sup>, C. Lionis<sup>3</sup>, D. Gelzer<sup>4</sup>, W. Spiegel<sup>5</sup>, WONCA Special Interest Group on migrant care, international health and travel medicine;

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Aims and purposes: In this era of globalization doctors all around the world are confronted with growing numbers of patients of different ethnic and cultural backgrounds. These patients - those who are staying for a longer period as well as travellers - have special needs and often need special care. Immigrants as well as members of indigenous ethnic or cultural minorities, have different illness patterns, often poverty related health problems, different cultural health beliefs and expectations. This poses a professional challenge to general practitioners. The current financial crisis combined with the growing political hostility towards migrants in Western Europe has a negative impact on the health of migrants as well as on their access to good health care, especially for the most vulnerable groups of asylum seekers and undocumented migrants. For instance, The Netherlands and Denmark have restricted possibilities for free interpretation services. While, in Greece the current financial crisis leaves them without essential medical and health care aids. Previous workshops on this theme during the Wonca Europe since 2008 revealed that general practitioners from different countries experience to a large extent the same problems and appreciate exchanging solutions.

**Design and methods:** The workshop will be organized by the Wonca Special Interest Group (SIG) on migrant care, international health and travel medicine: an international group of general practitioners experienced in caring for these patients and engaged in scientific research and (post graduate) medical education. After introductory presentations on the impact of stress, discrimination and poverty on the health of migrants, on the effect of the financial

crisis on migrant care and the role of General Practice and on an example of a primary care provision for undocumented migrants, the participants will discuss local solutions to improve (access to) primary care for vulnerable migrant groups and to overcome language barriers.

**Results/learning objectives:** Participants will acquire knowledge about the impact of the financial crisis on the health and welfare and access to healthcare of migrants and of good practices in primary care for vulnerable migrants. Recommendations for health care policy would be formed and issued by the participants.

**Conclusion:** The acquired knowledge can help GP's to improve their care for migrants and to develop local initiatives.

#### WS17.01

'Who knows better does better' - Attention for migrant care in (continuing) medical education for GPs

**E. H. Oosterberg**<sup>1</sup>, M. van den Muijsenbergh<sup>2</sup>;

<sup>1</sup>Dutch College of General Practitioners, Utrecht, Netherlands,

<sup>2</sup>Pharos, Utrecht, Netherlands.

#### Aims and purposes:

With the growing migration in Europe, GPs are confronted with growing numbers of patients of different ethnic and cultural backgrounds. Besides different illness patterns, migrants often have other cultural health beliefs and expectations. Language barriers and low health literacy can add up to the challenges GPs face in providing good care for migrants.

Also in the Netherlands the population is increasingly diverse: 20% of the population has a foreign background. However, many GPs did never receive any education on this subject during vocational training.

We have developed several successful educational programs to prepare GPs for this challenge. In this workshop we like to share these experiences and exchange ideas with regard to GP education on migrant care.

Design and methods:

Three Dutch initiatives will be shortly presented:

- 1. the Masterclass for GPs working in low income areas
- 2. the exchange on migrant care education between seven Dutch universities
- 3. the use of case descriptions in the continuing medical education program of the Dutch college of GPs.

Next, other approaches and teaching methods will be discussed using the experiences of the workshop participants. The workshop will end with the 'migrant care education game', an interactive game to illustrate the steps that can be taken to develop a successful training.

#### Results:

Participants will be informed on three approaches on postgraduate education and vocational training on migrant care for GPs and an evaluation of their effectiveness. Examples of teaching methods to raise awareness on intercultural aspects are exchanged.

Conclusion:

This workshop will raise awareness on the importance of education on migrant care. Different ways to address this issue are presented and exchanged.

#### WS.18 - The Science and Daily **Practice of Homeopathy**

The Science of Homeopathy

#### F. Dellmour:

Austrian Association for Homeopathic Medicine, Vienna, Austria.

Aim: This contribution aims to demonstrate the scientific principles of homeopathic medicine established in research and applied in general practice and the actual state of the art of evidence-based homeopathy.

Method: Review of the scientific key data with regard to the history of homeopathic medicine (discovery of the homeopathic similia principle; thinking model of homeopathy), the history of homeopathic pharmacy (development of homeopathic potentisation until the modern European pharmacopoeia), basic research (physical and biological experimental studies), clinical research (HTA report 2006; meta-analyses; systematic reviews; clinical studies; homeopathic drug provings) and general practice (scientific aspects of homeopathic practice).

Homeopathy meets the criteria of medicine, complementary medicine and holistic medicine. Several fields of homeopathic research as well as of homeopathic practice meet the criteria of science. As an overall result of the HTA report in 2006, sufficient evidence is available about the preclinical (experimental) effects and clinical efficacy of homeopathy and that homeopathy is a safe and economic intervention compared with conventional therapies

Conclusions: Homeopathy is a medicine with independent scientific principles in theory and practice. Both the scientific and medical principles of homeopathy are not comparable with the principles of conventional medicine. Many contributions of experimental and clinical research meet the criteria of evidencebased medicine. Homeopathy offers an effective, safe and holistic approach for the treatment of acute and chronic conditions in human and veterinary medicine.

#### WS18.01

#### **Homeopathic Therapy in Daily Practice**

Austrian Association for Homeopathic Medicine, Vienna, Austria.

This contribution aims to demonstrate the use of homeopathic therapy either as concomitant complementary therapy or as single therapy in selected examples of a general practitioner using mainly this method for treatment.

5 cases documented by video show the effectiveness of homeopathic treatment in different diagnoses: serotympanon, recurrent abscesses, postraumatic stress disorder, menopausal syndrome and colitis ulcerosa.

#### Results:

The cases demonstrate that homeopathy offers curative effects in a wide range of clinical diagnoses and may solve medical problems, which could not be cured by conventional therapy before

#### Conclusion:

Homeopathic therapy should be used more often for the benefit of patients, suffering from diseases, which cannot be treated effectively and safely by conventional medicine.

#### WS.19 - EURIPA Workshop - Outof-hours and emergency care in rural European locations

EURIPA Workshop - Out-of-hours and emergency care in rural **European locations** 

#### O. V. Kravtchenko;

EURIPA, Oernes, Norway.

OBJECTIVE: Evaluation and country-to-country comparison of the role of out-of-hours and emergency care in different European rural locations as part of the educational strategy and workforce retention.

AIMS: The workshop is a follow-up to the previous workshop during the WONCA Europe conference in Warsaw, Sept. 2011. It was agreed upon then that there was a need to collect more data on a different approaches to out-of-hours/on-calls and emergency care practices in rural locations across Europe.

We have planned a quantitative observational study in a range of rural locations across Europe (Norway, Switzerland, the Netherlands, Romania, the U.K., Poland, Hungary, Portugal, Spain and Slovenia). There's been prepared a questionnaire, which has been later on translated into different relevant European languages and distributed among rural GPs in the above mentioned countries.

We expect to be able to present the initial outcome of the study during the EURIPA workshop in Wien and get some feedback from the audience during the interactive part of the workshop.

MATERIALS AND METHODS: The moderator will present the theoretical background and the preliminary results of the study. The participants then will be divided into 2-3 different groups to discuss the above mentioned data, to share their personal experiences and understanding of the topic and to develop the mutual European strategy for the state-of-the-art performance during out-of-hours and emergency care in rural European locations.

RESULTS: Both experience and literature surveys intend to recognize the out-of-hours and emergency care as a critical point in everyday medical practice of GPs and in hospitals. It also seems to be one of the most vulnerable areas both for a medical practitioner and his/her patients.

CONCLUSIONS: The sharing of the expertise from different rural parts of Europe would be essential to create a mutual program which could be later utilized in any postgraduate educational system across Europe. The creating of rural proved standards in out-of-hours and emergency care also could play an important role in recruiting and retaining of the workforce.

#### WS.20 - Developing Cutting-Edge **Practice Models for Young and Old Family Doctors**

#### WS20

**Developing Cutting-Edge Practice Models for Young and Old Family Doctors** 

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Background: Family doctors in Austria, Germany and Switzerland are self-employed and usually work in practices consisting of one or two doctors. In addition to the substantial medical and personal engagement this set-up also requires enterpreneurial tasks and high-risk financial investments. As a result doctors are tied down locally for a long period of time. Any innovations must be financed by the practice owner. The income of general practitioners shrinks radically due to state austerity measures.

Young doctors are hesitating to start a career as a general practitioner due to well-known professional aspects. Furthermore, they desire a well-structured work place allowing for a good worklife balance. Many doctors prefer to be employed in a team with minimal administrative efforts, fixed working hours, the possibility of part-time employment and a steady income. Most young doctors do not wish to take over an existing GP practice in the countryside or a city. Thus, it becomes difficult for current GPs nearing retirement to find successors. Communities fear for the security of their primary health care.

Nowadays innovative practice models are being developed in Austria, Germany and Switzerland. These new business models may have the potential to cater for both the requirements of young doctors and of the patients. They are supposed to meet the requirements of the modern primary health care system and to help secure the future of area-wide basic medical services in the country side and in the city.

Targets: Participants will be given an overview of the characteristics and organisational structures of innovative practice systems. They will have the opportunity to exchange experiences with colleagues working in modern practices. They will be encouraged to start up their own practice projects at home.

Method: Short discussions in small groups will allow reflection about questions, such as: Where am I? What is my goal? What do I need to achieve my goal? Short presentations about different cutting-edge practice models will be given. Participant's questions will be answered by experts. Learning from each other. Networking to develop own startup ideas. Feedback.

#### WS.21 - The new approach to preventive activities in EUROPREV countries

The new approach to preventive activities in EUROPREV countries

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Aim: to inform the audience about the news and experiences of the implementation of different preventive and health promotion programmes in EUROPREV countries.

Design & Methods: New Ministry of Health program in Slovenia, the Dutch prevention programmes, the European Commission Platform on Diet and Physical Activity Programme will be presented.

Results: Slovenia started referential family practices in April 2011. The goal of the programme is to enable family medicine team (with a new member- nurse-health educator- to screen and detect individuals at high risk, perform the interventions in unhealthy lifestyle habits, diagnose the early stages of prevalent chronic diseases, treat them and perform the follow up, assessing the (not) achieved treatment plans and goals.

Since 1995 Dutch GPs are carrying out comprehensive evidencebased prevention programmes on influenza vaccination, cervical cancer screening and screening on familial hypercholesterolemia. Last year the Dutch College introduced the Preventive Consultation, a preventive health check on cardiometabolic disease. In 2012 this check will be expanded with modules on COPD, mental disease and cancer. The content of the health check and the experiences with the implementation in daily practice will be presented.

The Platform is one of the key tools to contribute to the overall goal of curving overweight and obesity rates in the EU. The five fields of action outlined in the original Charter establishing the Platform are:Consumer information, including labelling, Education, including lifestyle modification, Physical activity promotion, Marketing and advertising, Composition of foods (reformulation), availability of healthy food options, portion sizes.

Conclusion: The workshop will provide some new approaches to preventive work in family medicine, enabling the audience to discuss their experiences and views.

#### WS.22 - Neural Therapy in primary pain care as an efficient technique to prevent chronification

Neural Therapy in primary pain care as an efficient technique to prevent chronification

**J. Osztovics**<sup>1,2</sup>, W. Spiegel<sup>1,3</sup>;

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Neural Therapy (NT) is a holistic method of diagnosis and therapy based on the knowledge of orthodox medicine. Our tools are particular ways of anamnesis, of palpation and infiltration with local anaesthetics. The concept of disturbance fields, asymptomatic per se, as being related in a causative way to a pain syndrome is the NT specific contribution to pain management.

As all complementary medical methods NT is now highly accepted for the treatment of chronic and "lost" cases after allopathy has failed. But in order to avoid the development of chronic pain syndromes, malfunction of the locomotor system and pain are to be treated as soon and as efficiently as possible. Especially in our specific general practice setting an appropriate technique should be easy to apply, harmless, cheap and require little equipment. NT satisfies all these claims.

In this workshop our concern is to demonstrate how from the very beginning the principles of NT can be combined with the treatment we usually offer our patients in acute pain. This will be illustrated by a case- oriented approach.

Participants will be introduced to the principles of regulatory medicine. They will learn how to identify dysfunctional structures by palpation and they will be shown how to decide on additional infiltration spots apart from locus dolendi therapy.

We are looking forward to the interactive part of the workshop: There will be a Panel Discussion (Focus group interviews) on which occasion the participants will explore the regulatory aspect in his/her pain treatment and share his/her experiences.

#### WS22.01

Neural Therapy as a heuristic procedure to diagnose complex pain syndromes. - A case report

#### K. Gold-Szklarski<sup>1,2</sup>;

<sup>1</sup>Praxis für Allgemeinmedizin, Vienna, Austria, <sup>2</sup>Österreichische Gesellschaft für Neuraltherapie und Regulationsforschung, Vienna,

Neural Therapy (NT) serves as both a diagnostic and a therapeutic method. The NT- specific anamnesis and patient examination (palpation) can detect structures or regions of the body acting as active interference fields.

By injecting local anaesthetics into these fields and observing the patients reaction we are able to diagnose the connection between the cause of the actual complaint and dysfunctional structures (such as muscles, joints) or dysfunctional systems (such as the breathing). The repeated palpation of these structures before and after treatment allows us to make decisions about the etiological significance of the tested interference field for the actual syndrome. In the case of a causal relationship we can reproduce the effects of the injection and thereby offer an efficient treatment.

The case report of a 54a woman suffering from chronic debilitating pain in the upper right abdomen demonstrates the NT diagnostic procedure that lead to a causative treatment after a long history of unsuccessful therapies.

### WS.23 - Framework for Developing Teaching Expertise

#### **WS23**

#### Framework for Developing Teaching Expertise

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It is important for the future development of a skilled general practice workforce to have GP teachers who are competent, having received skills training as teachers. In recent years EURACT, the WONCA teachers' network, has developed a series of basic teaching skills courses for new or inexperienced teachers. However there is a need to go further and promote higher levels of skill and expertise in teaching.

This workshop will explore the concept of the expert teacher based on the Dreyfus model and consider a framework for facilitating the development of GP teachers. It will describe a Leonardo Da Vinci project for the development, on a European scale, of GP teachers with such expertise. A key element of this project is the development of a Framework Document which describes in full the rationale and theoretical background for this proposal. Workshop participants will consider the Framework Document and be invited to brainstorm key descriptors for capability in teaching, and to compare these with descriptors produced by the project partners.

The teaching methods used in this workshop will be participatory and include interactive presentations, buzz groups, small group tasks and plenary feedback discussions.

#### Aims:

- 1.To promote reflection on the need for the development of GP teaching skills in Europe.
- 2.To understand the way an expertise model can be applied to skills training for GP teachers.
- 3.To develop descriptors of domains of teaching expertise and in discussion compare these produced by the project team.
- 4.To allow participants to share ideas on the evolution of European teaching expertise.

### WS.24 - Writing for publication: a joint VdGM / EGPRN / EJGP workshop

#### WS24

Writing for publication: a joint VdGM / EGPRN / EJGP workshop

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Movement, Thessaloniki, Greece.

**Introduction**: Peer reviewed medical journals are important media for the publication of articles relevant to Primary Health Care and General

Practice, such as research papers, reviews of literature, clinical lessons, and opinion papers. They are the means to disseminate original research results and educational information, discuss available evidence and share experiences.

**Aim**: This workshop aims to give participants knowledge about successfully preparing a manuscript for medical journals

**Audience:** Authors interested in research or medical writing and with little or no previous experience in publishing. More experienced authors are welcome to join this workshop to share their experiences.

**Methods:** The workshop will have the format of a highly interactive presentation. It will focus on the preparation and submission of research papers and clinical lessons. Topics presented are the value of these article types, the basic structure, language and presentation of both article types, and common errors and how to prevent them. In addition, the peer review process will be discussed. Optional topics might be choosing the appropriate journal, (dis)advantages of open access journals, authorship and potential conflicts of interest, or the organisation of your writing work

Participants are welcome to share their thoughts and ask questions on Twitter prior to the conference using the #vdgm hashtag (tweeting to @vdgmeu, @egprn or @EurJGenPract); these will be used during the workshop.

**Expected results:** Participants will have received introductory information and practical advice on how to prepare an appropriate manuscript to be published as research paper or clinical lesson in a peer-reviewed medical journal.

## WS.25 - Accreditation of general practices across Europe: What is going on?

#### WS25

Accreditation of general practices across Europe: What is going on?

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Background: Accreditation is a process that general practices undergo to demonstrate compliance with standards developed by an official agency. It implies recognition of the practice as an organization that has demonstrated the ability to meet predetermined criteria for established standards granted by a professional association or nongovernmental agency.

In Europe, several systems for accreditation of general practices are used. Back in 2001-2004, EQuiP was involved in developing the European Practice Assessment - EPA. EPA is now widely used in Germany, Austria, Switzerland and The Netherlands, and is an example of a system developed by GP professionals. However, other systems have also been developed by private agencies or national governmental institutions leading to substantial differences between the development, purpose, and composition of different accreditation systems in Europe.

Workshop aims: To learn about different accreditation systems in place across Europe, to discuss barriers and facilitators in implementing accreditation systems and their perceived added value to the quality and safety of patient care.

Methods: We will start with a brief overview of accreditation systems based on an EQuiP survey carried out in 2011 and then present three different accreditation systems from the United Kingdom, The Netherlands and Estonia in more detail. Participants will be encouraged to reflect on barriers and facilitators in their own country in small groups and present their ideas back to the wider group.

Results: Workshop results: By the end of the workshop, participants will have learnt about different accreditation systems and leave with a positive attitude to accreditation in their own practice.

## WS.26 - Educational research in undergraduate and postgraduate GP training

#### WS26

Educational research in undergraduate and postgraduate GP training

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**Aim**: Educational research involves a variety of methods in which different aspects of education will be evaluated, including student learning, teaching methods, teacher training, and classroom dynamics. In cooperation with the participants of the Workshop we will launch the agenda of European Educational Research .

**Material and methods**: The workshop starts with a brief presentation on the meaning and purpose of educational research followed by the presentation of a few projects as examples (5 minutes for each). Next the participants will be divided into small groups for discussion and suggesting possible research questions concerning education as well as valid research methods. The questions presented for discussion among the participants (small groups of 4-5 peoples) are: 1. Choose three issues for which research is urgently needed as they are considered too much on face value. 2. Pick out one of the chosen issues and formulate an original and stimulating research design.

**Results**: At the end of the workshop the results of the group work will be presented to all participants followed by discussion.

**Conclusions:** Participants will gain ideas in educational research to be implemented into everyday practice.

# WS.27 - Workshop from the IPCRG, SIG of Wonca Europe: COPD: Early detection and management of stable disease and exacerbations

#### WS27

Workshop from the IPCRG, SIG of Wonca Europe: COPD: Early detection and management of stable disease and exacerbations

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International Primary Care Respiratory Group, Palma de Mallorca, Spain.

COPD is an increasingly common condition resulting in considerable morbidity and mortality. Annual costs of COPD are high. These include direct costs, mostly from hospitalization and other healthcare interventions as well as indirect costs. New GOLD guidelines have been developed and present a new classification of COPD patients. Most patients remain undiagnosed. Diagnosis of patients usually occurs at a stage where significant lung function has already been lost. The IPCRG currently recommends that all patients over 35 years old should be evaluated for their risk of developing COPD. Proper spirometry can be performed in primary

care offices, with appropriate training and interest. Practices that have introduced spirometry into their routine have made significant changes in COPD diagnoses and treatment. We will discuss some strategies to encourage earlier diagnosis in primary care. A growing body of evidence suggests that early detection of airflow limitation and early pharmacological and non pharmacological interventions can delay lung function decline, reduce the burden of COPD symptoms, and improve patients' quality of life. Early identification allows lifestyle change such as exercise and pulmonary rehabilitation. Early provision of self-management education will also be of value. Exacerbations are the main negative prognostic factor on COPD. Every purulent COPD exacerbation decreases quality of life, longevity and lung function. Early and aggressive management of exacerbations protect the patient from COPD progression.

The IPCRG presents an interactive workshop; after a short presentation, open discussion among participants will be led by a team of practising family physicians with experience of different health care systems and with a special interest in respiratory disease. The main issues to be covered at the workshop will be:

- Early detection can help Strategies to encourage earlier diagnosis in primary care:
- Management of COPD in primary care. Pharmacological and not pharmacological treatment. The importance of rehabilitation
- Exacerbations in COPD, the main factor for progression and increased risk. How to prevent, detect and treat them in primary care

### WS.28 - Is preventive attitude of a patient related to the gender? - EUROPREV Workshop 2

#### WS28

Is preventive attitude of a patient related to the gender? - EUROPREV Workshop 2

C. Brotons<sup>1</sup>, M. Bulc<sup>2</sup>, J. Vučak<sup>3</sup>;

<sup>1</sup>EUROPREV, Barcelona, Spain, <sup>2</sup>Department of family medicine, University of Ljubljana Medical School, Ljubljana, Slovenia, <sup>3</sup>Family Health Center, Sukošan, Slovenia.

Aim:: For preventive interventions in general practice to succeed, patients' points of

view must be taken into account in addition to those of general practitioners.

We explored patients' views and beliefs about the importance of lifestyle and preventive interventions, to assess their readiness to make changes to their lifestyle and their willingness to receive support from general practitioners as well as their opinion of received preventive care.

Design & Methods: Cross-sectional survey conducted in primary care practices in 22 European countries.

Patients were consecutively selected and interviewed from September 2008 to September 2009.

Results: 7947 participants, 52.2% females. 30.5% of risky drinkers think they need to change, as well as 64% of smokers, 73.5% of patients with unhealthy eating habits and 73% with lack of physical activity. Risky drinkers reported that general practitioners initiated a discussion on alcohol consumption less often (42%) than on smoking (63%), eating habits (59%) or physical activity (55%). 75%, 66%, and 63% of patients without hypertension, diabetes, or hypercholesterolemia respectively, think blood pressure, blood sugar and serum cholesterol should be checked yearly. 80% of women think they should be screened with the cervical smear test, and 72.8% of women aged 30-49 with mammography, yearly or every two years.

Conclusions: A high proportion of patients attending primary care with unhealthy lifestyles (especially risky drinkers) do not perceive the need to change their habits, and about half the patients reported not having had any discussion on healthy lifestyles with their general practitioners. Patients over-estimate their need to be screened for cardiovascular risk factors and for cancer.

#### WS.29 - Integration of Evidence Based Medicine in the vocational training of general practice trainees

#### WS29

Integration of Evidence Based Medicine in the vocational training of general practice trainees

M. F. Kortekaas, M. E. L. Bartelink, G. J. M. G. vd Heijden, A. W. Hoes, N. J. de Wit;

Julius Center, Utrecht, Netherlands.

**Background:** For the past decade, evidence based medicine (EBM) has been the paradigm in clinical practice. However, incorporating EBM into daily general practice (GP) still meets many difficulties, as well as designing a proper educational program in GP vocational training. In Utrecht we have created an integrated way of teaching EBM.

**Aim:** In this workshop we will present our new educational program of integrated EBM, share our experience and discuss mutual problems and solutions.

**Methods:** We will outline differences between our regular and integrated educational program in an introductory lecture and discuss the most important issues of it. Next, we will discuss the difficulties, experiences and challenges we encountered in implementing this new way of EBM teaching.

**Results**: Attenders will be aware of possible solutions to their regional or national difficulties in implementing EBM in educational programs and daily practice

**Conclusion**: The workshop will help to improve use of EBM in GP vocational training and daily practice.

### **WS.30 - Interventions in Europe on Medication Errors in Primary Care**

#### WS30

Interventions in Europe on Medication Errors in Primary Care

M. N. Lainer, A. Voegele, A. Soennichsen; Department of Family and Preventive Medicine, Paracelsus Medical University, Salzburg, Austria.

#### Background:

Medication errors form a large part of patient safety issues and research aims to improve medication safety by finding strategies, formulating recommendations and developing interventions and tools often with support of information technology (IT). A recent systematic review on information technology (IT) interventions to improve medication safety in primary care in Europe has shown that only 55 % of the included studies revealed a reduction of medication errors, highlighting that pharmacist-led interventions together with inter-professional communication appear to be most effective.(Lainer M, 2012)

Within the LINNEAUS EURO-PC Patient Safety project the need to highlight European based efforts and interventions in multiple fields on medication safety in primary care was identified. A multiple-step process was conducted to identify on-going relevant medication safety initiatives and studies in ambulatory and primary care settings in European countries.

#### Methods:

A literature review of major European interventions, clinical programs and studies on medication safety was conducted in 2009; colleagues and medication safety experts from LINNEAUS were contacted on existing medication initiatives in primary care settings.

Data were organized by country, author/year, intervention category (i.e. educational, and IT intervention), initiative type (networking, patient safety,  $\cdots$ ) and level (physician-based, pharmacist-based, patient-based). These data were assembled in a document to map the type, intensity and reach of medication safety efforts being conducted in primary care. Results:

Forty-one initiatives in fourteen different countries and seven reports from the WHO, EU and multi-country studies were identified through the search. We listed up to 3 relevant documents for each country and showed the results in details per country. Additionally the interventions were regarded from the topics:

pharmacist-led, IT-supported, poly-pharmacy and elderly people, and critical incident reporting. Furthermore we collected milestones as additional interventions and tools for health care professionals. This material shall support everyone concerned about medication safety and gives a good overview of what are useful strategies, interventions and recommendations so far developed to improve medication safety in primary care.

The aim of the workshop is to discuss the options and to develop strategies for participants to improve medication safety in their own environment.

# WS.31 - Workshop from the IPCRG, SIG of Wonca Europe: Strategies towards smoking cessation. How to maximize the opportunities for smoking cessation in primary care

#### **WS31**

Workshop from the IPCRG, SIG of Wonca Europe: Strategies towards smoking cessation. How to maximize the opportunities for smoking cessation in primary care

M. Roman Rodriguez, Svein Hoegh Hoghesen, Jaime C de Sousa. Ioanna. Tsiligianni:

International Primary Care Respiratory Group, Palma de Mallorca, Spain.

Tobacco use will become the world's foremost cause of premature death and disability within 20 years unless current trends are reversed. Many opportunities to reduce this epidemic are missed in primary care. This workshop will try to summarize a new approach based on strong evidence for effective interventions. All primary care health professionals can increase smoking cessation rates among their patients, even when time and resources are limited. Medical and non-medical staff can support patients who choose to quit by providing information, referral to telephone counselling services, and behavioral counseling using motivational interviewing techniques, where resources permit. Many organizational approaches have been proposed to increase quitting interventions' success and they should be recognized and promoted by national health services In the absence of supportive government policies, implementation

of the guidance will be particularly challenging for individual primary care health professionals. Drug therapy to manage nicotine dependence can significantly improve patients' chances of quitting successfully, and is recommended for people who smoke 10 or more cigarettes per day. All interventions should be tailored to the individual's circumstances and attitudes

The IPCRG presents an interactive workshop; after a short presentation, open discussion among participants will be led by a team of practising family physicians with experience of different health care systems and with a special interest in respiratory disease. The main issues to be covered at the workshop will be:

- Helping patients quit smoking: brief interventions for healthcare professionals
- Which smoking cessation strategies are effective? Tailoring strategies to suit your practice
- Pharmacotherapy for nicotine dependence

# WS.32 - Encouraging young family doctors to work and remain in rural communities - A Joint EURIPA/Vasco da Gama Movement Workshop

#### **WS32**

Encouraging young family doctors to work and remain in rural communities

**J. Banqué - Vidiella**<sup>1</sup>, R. Gomez - Bravo<sup>2</sup>, G. Ticmane<sup>3</sup>, R. Zoitanu<sup>4</sup>, F. Farolfi<sup>5</sup>;

<sup>1</sup>semFYC - Euripa, Tortosa, Spain, <sup>2</sup>Vasco Da Gama - semFYC, Madrid, Spain, <sup>3</sup>Euripa, Latvia, Latvia, <sup>4</sup>VdGM, Rumania, Romania, <sup>5</sup>VdGM, Italy, Italy.

Joint EURIPA/Vasco da Gama Movement Workshop
Over the last Wonca Europe Conferences, EURIPA and Vasco da
Gama Movement (working groups inside this scientific
organization) have been carrying out different activities to promote
and expand the interest in rural medicine among young European
GPs. Educational workshops, poster presentations and the
creation of the Claudio Carosino Prize inside the Hippokrates
Exchange Programme are some examples of these common
actions.

With this workshop in the 18th Wonca Europe Conference, we would like to present and share with the participants the main conclusions of this collaboration, trying to gather new ideas and proposals to resolve the main aim of the activity: "how Euripa and Vasco da Gama could encourage young European family doctors to work and remain in rural communities".

After a short introduction presented by the moderators, separate working groups will be created to discuss individual ideas and suggestions. In the last part of the workshop each group will present their own conclusions ending the activity with a general discussion.

The future of rural health in Europe depends on the attitudes of young family physicians. All the actions taken to consolidate and expand their confidence and interest for working and remaining in rural areas will help rural communities to reduce their disadvantages.

December 2011

# WS.33 - What can a GP practice attachment offer to a medical student - advantages of a placement in a rural practice

#### WS33

What can a GP practice attachment offer to a medical student - advantages of a placement in a rural practice

**J. Lopez-Abuin**<sup>1,2</sup>, J. Kersnik<sup>3</sup>, J. Wynn-Jones<sup>4</sup>, C. Galvão<sup>5</sup>, Z. Klemenc-Ketis<sup>6</sup>;

<sup>1</sup>EURIPA, La Coruna, Spain, <sup>2</sup>Spanish Institute of Rural Health, La Coruna, Spain, <sup>3</sup>EURACT, Ljubljana, Slovenia, <sup>4</sup>EURIPA, Wales, United Kingdom, <sup>5</sup>EURIPA, Beja, Portugal, <sup>6</sup>EURACT, Maribor, Slovenia

BACKGROUND AND AIM: On the basis "what can a GP practice attachment offer to a medical student (and vice-versa: what can a clinical preceptor benefit from teaching)", EURACT has kindly accepted the invitation of EURIPA in order to perform a joint workshop, specifically underlining the rural stream.

It is well known that in urban practices their primary care provision is more limited because of the close proximity of a hospital. This is also influenced by the patients' expectations which come from the referral system, i.e. from information based on experiences of other citizens in urban settings who use the hospital. Rural practices in a way represent traditional primary care services thus

offering students and trainees an overview of primary care practice.

DESCRIPTION: The workshop will include a short introduction followed by two main presentations, one focused at teaching and learning at the GP attachment and followed by a group work on what can students learn and perform only in a GP practice, and another focused at the advantages and disadvantages of teaching and learning at a rural placement which will be followed by a group work on what can students learn and perform, but in this case only in a rural practice

The final time of the workshop will be to summarize the feedback and end up with the conclusions. The expected results are that at the rural area will be shown that the competencies are significantly different, and also that the rural placement gives the student the opportunity to know, show and do specific skills and procedures which are not contemplated at the urban counterpart.

# WS.34 - Irrational medication prescribing and Over-the-Counter medications in general practice: from theory to practice

#### **WS34**

Irrational medication prescribing and Over-the-Counter medications in general practice: from theory to practice.

D. Agius¹, T. Eriksson², T. Faresjo³, **C. Lionis⁴**, L. Martinez⁵, B. Merkouris⁶, G. Samoutis⁷, J. Slikkerveer⁶, V. Tsiantouゥ, Y. Uncu¹⁰; ¹Mediterranean Institute of Primary Care, Attard, Malta, ²EQuiP WONCA Europe, Copenhagen, Denmark, ³Dept of Medicine and Health/Community Medicine, Faculty of Health Sciences, Linköping University, Linkoping, Sweden, ⁴Clinic of Social and Family Medicine, Heraklion, Crete, Greece, ⁵Département d'Enseignement et de Recherche en Médecine Générale - Université Pierre et Marie Curie, Paris, France, ⁶Greek Association of General Practice, Athens, Greece, ˀAssociation of General Practice in Cyprus, Nicosia, Cyprus, ˚Leiden University, Leiden, Netherlands, ⁶National School of Public Health, Athens, Greece, ¹⁰Turkish Association of Family Physicians, Ankara, Turkey.

The prescription of medicines is a fundamental component of patient care. It is relevant to patient safety in primary care that has not yet received due attention is the use of the over-the-counter (OTC) medicines, which are drugs available without a prescription. Although abuse of OTC medicines is steadily rising and concerns about inappropriate treatment and adverse drug reactions have been raised, this subject does not appear to have received the attention it deserves, particularly in Europe. Problems relating to abuse of prescribed and OTC medicines and the subsequent impact on patient safety seem to be more severe in countries without a well- organized primary care system. Primary care physicians need to monitor the OTC medicine consumption of their patients and there is evidence that well trained GPs can reduce abuse of OTC medicines and improve patient safety within this context, the 'OTC SOCIOMED' - a European project, has been developed entitled "Assessing The Over-The-Counter Medications In Primary Care And Translating The Theory Of Planned Behaviour Into Interventions" (EU 7th framework project n° 223654-06/05/08)" and funded by the Seventh Framework Program. Its primary objective is to assess the extent of OTC drug use and misuse in Southern European countries, and to identify factors which influence GPs, pharmacists, and patients/clients intention towards irrational prescribing and use or misuse of medicines. Another aim is to design and implement a pilot intervention, which could potentially be translated into policy. This workshop aims to report the theories and methods used to explore the factors that they have an impact in regards to the use of OTC medicines in general practices and as well as to communicate with the European participants the main findings from the data collected from seven European countries (Check Republic, Cyprus, France, Greece, Malta, Sweden, and Turkey). The results gained from a feasibility study that has been implemented in five European countries will be also shared with the participants and lastly, this workshop expects to discuss both methods used, experiences gained and issued recommendations from that EC project within the wider European audience and explore ways of their further dissemination.

Vaccinees should sit in order to avoid head injury in cases of fainting or syncope.

With quality assurance in handling vaccines and correct injection techniques the safety of immunisation can be increased.

# WS.35 - Speaking about the unspeakable: what we can do for you when we cannot cure you anymore

#### **WS35**

Speaking about the unspeakable: what we can do for you when we cannot cure you anymore

**A. M. Silvius**, M. W. Ottenhoff, H. A. Thiadens, A. M. A. Pinkse, W. J. J. Assendelft;

Leyden University Medical Center, Leyden, Netherlands.

This presentation focuses on the importance of talking with your patients about their wishes, fears and hopes shortly after they have been told to suffer from an incurable disease.

The authors are from the Netherlands, where euthanasia and terminal sedation are legal under certain very strict conditions. This legislation enables patients to talk about their fears and their wishes considering quality of life.

It is the presenting authors experience that being able to talk freely about the subject settles a lot of questions in advance and diminishes the patients' anxiety. If one can resolve these issues and is able to give adequate palliative care this usually enables a patient to die quietly.

A few medical cases will be presented as illustration.

Paradoxically: talking about the option of euthanasia generally makes euthanasia not necessary.

### WS.36 - Immunisation- quality assurance and injection techniques

#### **WS36**

Immunisation- quality assurance and injection techniques

#### W. Maurer;

Centre for Public health, Vienna, Austria.

Immunizations require quality assurance in the procurement, in maintaining the cold chain, in documentation of all these steps. In addition correct injection techniques are needed for the informed patient

Due to expensive vaccines in storage physicians should use pharmaceutical refrigerators instead of household refrigerators. Temperature monitoring is necessary. The possibility to unplug the refrigerator could be avoided by direct connection to the power supply. A named person should be responsible for procurement of vaccines following the principle first in first out.

Information of the patients/vaccinee is essential. Written vaccine information statements (VIS) in the local language are necessary. For other languages this VIS can be found from various sources in the internet such as http://www.immunize.org/vis/ . Here you can find information for 27 vaccines in 40 languages. To identify a patient the first name and family name as well as birth date must be given in the certificate of vaccination.

Standardised injections techniques increase the quality of immunisation. For adults the M deltoideus is the injection site for inactivated vaccines, live vaccines should be given s.c.

Aspiration is not necessary, since it is not evidence based.

# WS.37 - Is there a need for harmonising the requirements of re-certification of general practitioners in Europe?

#### **WS37**

Is there a need for harmonising the requirements of recertification of general practitioners in Europe?

R. Kalda<sup>1</sup>, M. Vrcic-Keglevic<sup>2</sup>, P. Phylaktou<sup>3</sup>, J. Bednar<sup>4</sup>, P. Vajer<sup>5</sup>, R. Miftode<sup>6</sup>, E. Frolova<sup>7</sup>, E. Jurgova<sup>8</sup>, B. Rindlisbacher<sup>9</sup>; <sup>1</sup>Department of Family Medicine, Tartu, Estonia, <sup>2</sup>School of Public Health "Stampar", Zagreb, Croatia, <sup>3</sup>The LCAFamily Health Center, Larnaca, Cyprus, <sup>4</sup>Department of General Practice Charles University, Prague, Czech Republic, <sup>5</sup>Department of Family Medicine University Budapest, Budapest, Hungary, <sup>6</sup>Department of Family Medicine, Iasi, Romania, <sup>7</sup>St. Petersburg Medical Academy, St. Petersburg, Russian Federation, <sup>8</sup>Ass. of General Practitioners, Piestany, Slovakia, <sup>8</sup>Swiss Society of General Medicine, Steffisburg, Switzerland.

Aims: According to the survey made by CME/CPD Committee of the Euract, there is a wide variety of European countries regarding the regulation of re-certification of general practitioners . The aim of the workshop is in the light of the new initiatives of the organization of cross-borders health care (patients movements across EU) and free-movements of the doctors, to promote active discussion about the need for harmonisation of the requirements of re-certification procedures in Europe.

**Methods**: The workshop will start with a short presentation of the results of the study about re-certification of European countries. Next the participants will be divided into small groups for discussing the results as well as for sharing opinions about the need for harmonisation of the re-certification procedures in Europe.

**Results:** At the end of the workshop the results of the group work will be presented to all participants followed by discussion.

**Conclusions**: CME/CPD Committee will collect different opinions and form a statement about the issue.

## WS.38 - Social Media, Now! - What do we (k)now [A Vasco da Gama Workshop]

#### **WS38**

Social Media, Now! - What do we (k)now [A Vasco da Gama Workshop]

**S. Begg**<sup>1</sup>, C. Lygidakis<sup>2</sup>, M. Sattler<sup>3</sup>, R. Gomez Bravo<sup>4</sup>, T. Villanueva<sup>5</sup>, S. Rigon<sup>2</sup>;

<sup>1</sup>St John's Hill Surgery - Begg Practice, Battersea,, London, United Kingdom, <sup>2</sup>ASL Bologna, Bologna, Italy, <sup>3</sup>GP practice, 76, rue d'Eich,L-1460, Luxemburg, Luxembourg, <sup>4</sup>.Emergency Deparment, University Hospital La Paz,, Madrid, Spain, <sup>5</sup>Locum GP, Lisbon, Portugal.

The use of social media within the facilitation of primary care at a local and international level has become standard and its impact is increasing. In this workshop we give an overview of practical uses of social media in primary care combined with practical examples.

The experience of the VdGM Image group when using Facebook, Twitter, LinkedIn will be summarised. The key ingredients to the success of the Portugese Virtual Conferences will be reviewed. Other mainstream Web 2.0 communication technologies will be outlined including Doc2Doc.

We will go on to demonstrate how quickly such networks can be set up, maintained and the potential maximised. Within this part of the workshop there will be a focus upon those new to the use of social media or simply people who wish to receive a quick update to be to make good use of this phenomenon.

Small group discussion will then take place regarding how the information presented within the workshop can be applied at a local level. Followed by a feedback session reviewing the action points and consideration how we can increase communication forums within primary care globally.

You are welcome to follow our Twitter feed (@vdgmeu) and let us know about your experience in the workshop.

The main discussions from this workshop will be available, after the WONCA Conference, as podcasts on the VdGM website (www.vdgm.eu)

#### WS.39 - Salutogenesis and doctorpatient-communication - How we can stimulate a healthy development of our patients

#### WS39

Salutogenesis and doctor-patient-communication - How we can stimulate a healthy development of our patients

#### T. D. Petzold<sup>1,2</sup>;

<sup>1</sup>Med. Hochschule Hannover, Bad Gandersheim, Germany, <sup>2</sup>Zentrum für Salutogenese, Bad Gandersheim, Germany.

The basis of general and family medicine is the orientation towards healthy development of its patients - that means the orientation towards the salutogenetic question concerning the genesis of

If we only focus on the treatment of the disease, on the adjustment of the arterial pressure, the blood lipids, the weight, the blood sugar, the pain etc., we will inevitably prescribe more and more drugs. That may bring more harm than benefit.

A salutogenetic orientation is able to change our doctor-patientcommunication and to enable new approaches for the treatment of people suffering from chronic illnesses. A helpful basis for this communication is the model of communicative coherence regulation.

A systemic evolutionary view of human being forms the basis of the salutogenic communication.

In the salutogenic communication SalKom® we focus on the healthy development of our patients, on the attractive goals concerning their health and on the resources. We ask for their desires, ideals and needs as well as their positive experiences and the abilities to shape their life. Another part of this shaping is the ability to deal with one's symptoms. Already by asking our patients those new questions the relationship will change in the direction of acceptance and shared decision making and shared responsibility. The patient is possibly stimulated to get out of the victim role and to develope more autonomy. By that new communication the psychophysical self-regulation, the acting on one's own responsibility of the patient is stimulated. In this way they will be empowered to more ability in shaping their life. Because of that the chance to a longer healthy life will increase by up to 30%.

#### WS.40 - A work shop on publication- getting your research into print

#### WS40

A work shop on publication- getting your research into print

**D. MacAuley**<sup>1</sup>, R. Jones<sup>2</sup>;

<sup>1</sup>BMJ, Belfast, United Kingdom, <sup>2</sup>British Journal of General Practice, Belfast, United Kingdom.

In selecting papers for publication, researchers and journals have different priorities. Both aim to increase knowledge to improve health. Journals seek to communicate the best quality research to their readers; Researchers seek publication to disseminate knowledge but increasingly, for personal and institutional esteem. This workshop will explain how journals work, with short presentations on the BMJ and British Journal of General Practice. We hope to explain the editorial process, criteria that journals use to select and reject manuscripts, and how to optimise your chances of publication. There will be a number of short (fun) exercises on choosing articles for publication, what to write in your submission letter, and on concise writing. Authors are welcome to bring along their own work.

#### WS.41 - How we teach students, trainees and trainers on preventive activities in family medicine? -**EURACT / EUROPREV Workshop 3**

How we teach students, trainees and trainers on preventive activities in family medicine? - EURACT / EUROPREV Workshop 3

M. Bulc<sup>1</sup>, J. Kersnik<sup>1,2</sup>, Z. Klemenc Ketiš<sup>1,2</sup>, L. Pas<sup>3</sup>, A. Mortsiefer<sup>4</sup>,

<sup>3</sup>Department of Family Medicine, Medical School, University of Ljubljana, Ljubljana, Slovenia, <sup>2</sup>Department of Family Medicine, Medical School, University of Maribor, Maribor, Slovenia, <sup>3</sup>Domus Medica, Brussels, Belgium, <sup>4</sup>Department of General Practice, University Hospital of Düsseldorf, Düsseldorf, Germany, <sup>5</sup>Department of General Practice and Health Services Research, University Hospital of, Heidelberg, Germany.

The WONCA Europe definition of general practice/family medicine emphasizes the role of GP in prevention as one of the core competences of the family doctor. Dealing with lifestyle issues, risk factors management or counselling patients in decisions on participation in screening programs demand different cognitive and communicative skills than caring for ill patients. According the EURACT educational agenda 2005 trained GPs / FPs should not only have knowledge of preventive activities but also need communications skills for counselling and teaching patients and their families.

Aims of the workshop:

to develop together specified learning targets on prevention in primary care and discuss suitable teaching methods for different levels of medical education

Workshop plan:

In the first part of the workshop we introduce core principles about prevention including principles on communication, costs and benefits leading to specified learning targets for prevention in primary care. In the second part we will discuss didactic methods based on brief presentations of training methodology from different European countries e.g. Training of the use of decision tools in primary cardiovascular prevention. In the third part the participants will elaborate recommendations how to integrate a longitudinal learning and training program on prevention activities in primary

care into an undergraduate and graduate curriculum to start a process of continuous quality improvement.

Conclusion:

Setting learning targets and teaching methods are prerequisites to increase students' and trainees' awareness and understanding of the contribution family medicine/general practice can make in the field of prevention and health promotion.

# WS.42 - Referrals from GPs to specialist health services - attitudes, wishes and future possibilities

#### WS42

Referrals from GPs to specialist health services - attitudes, wishes and future possibilities

O. Thorsen<sup>1</sup>, A. Bærheim<sup>2</sup>, M. Hartveit<sup>2</sup>, J. Rubak<sup>3</sup>, E. Evans<sup>4</sup>; <sup>1</sup>Stavanger University Hospital, Stavanger, Norway, <sup>2</sup>Department of Public Health and Primary Health Care, University of Bergen, Bergen, Norway, <sup>3</sup>DSAM, Aarhus, Denmark, <sup>4</sup>Aneurin Bevan Health Board, Gwent, United Kingdom.

Good communication within any health care system is essential for good patient care and good outcomes. Communication from GPs to hospitals takes place mostly through letters of referral. Hospital specialists rely on these letters to determine what specialist care and treatment are necessary. Referral patterns and rates vary. There are several possible reasons for this: characteristics of the patient (age, sex, social conditions, education and occupation); pressure and expectations from patients; differences and idiosyncrasies of physicians (age, gender, years in practice, size of practice, beliefs in their own knowledge, willingness to deal with uncertainty); organizational structure of medical practices; number of consultations; a GPs patient census; access to specialists; and waiting time and varying rates of necessity and relevance. There are no official international or national standards for good referral practices. Many suggestions, instructions, and recommendations have been written about what a good referral should contain. Making consensus-based standards for referrals would make it easier to compare the referral practices between groups of physicians, and evaluate the effects of referrals on the clinical treatment and outcome in hospitals. The main objective for this workshop is to elaborate the factors necessary for meaningful and appropriate referral processes: Is referring a symmetric, mutual or an unbalanced process? What can be done to make the referral process better, smoother? What are the contents of a good referral letter? Will templates and help menus, or prompts make it easier to write good referral letters? Will such templates affect the quality of the referral letters? Is it possible to create national and international standards for referrals? The results from recent studies will be presented at the workshop.

# WS.43 - Translating competencies from residency training into practicing physician evaluation with comparison to the American College of Medical Practice Executives Body of Knowledge

#### WS43

Translating competencies from residency training into practicing physician evaluation with comparison to the

#### American College of Medical Practice Executives Body of Knowledge

#### E. J. Palmer

Department of Family & Community Medicine University of Nevada School of Medicine, Las Vegas, NV, United States.

The competencies for medical practice executives have been defined in the American College of Medical Practice Executives (ACMPE) Body of Knowledge. The Accreditation Council on Graduate Medical Education (ACGME) requires that physician residency programs of all specialties require its residents to obtain competencies in the areas of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.

This session will explore the similarities and differences in the competencies. Specific knowledge, skills, and attitudes will be discussed. It will give participants the uniform knowledge base to incorporate the competencies into the process of hiring physicians by asking questions verbally or on forms of residency directors or prior employers. The methods used will include open discussion and task driven completion of a handout to create specific questions or modifications of items already used by the participants in evaluations at their own institutions.

Concrete tools presented will allow the participant to describe and incorporate the competencies into the hiring reference check process, evaluations, job descriptions, and performance requirements. Examples of physicians and physician executive employees will be used as the models bridging the competency gap between education, training, and practice. The use of these tools will help participants gain skills to incorporate these criteria in physician and physician executive evaluations. Examples of websites with useful tools will be provided.

## WS.44 - Opportunities of diagnostic ultrasound in family practice: a workshop

#### **WS44**

Opportunities of diagnostic ultrasound in family practice: a workshop

#### P. Moeremans;

General Practitioner, Mechelen, Belgium.

We will discuss the feasibility and diagnostic failures and pitfalls in ultrasound performed by primary care physicians. We address as well to novices as to practitioners with some experience.

Ultrasound permits an inexpensive, fast, radiation-free and mobile examination. Easy and relevant bedside procedures for which ultrasound imagery is at the top are, among others, carotid artery stenosis and occlusion, aortic and iliac aneurysm, aorto-iliac occlusive disease, Baker cyst, hydronephrosis and uretheropelvic junction obstruction, splenomegaly, thickened gallbladder wall, calculous cholecystitis, hepatic cirrhosis, steatosis, acute hepatitis, breast cyst and abscesses, simple and complex renal cysts, varicocoele, epididymal masses and testicular atrophy. All pregnant mothers like ultrasound as they can "see" their baby before it is even born. Nevertheless, missing a cleft palate or a fusion defect in the lower spine is considered as malpractice.

Trauma related and emergency ultrasound enhances diagnosis of muscle injury, soft tissue infection, extremity arterial occlusive disorder, ectopic pregnancy, failed first trimester pregnancy, retained product of conception or of contraception, ascites, appendicitis, intussusceptions, groin hernia, abdominal wall hernia, prostatic hypertrophy and urinary retention, splenic -, liver -, renal - and scrotal trauma, testicular torsion and infarction. Performing the examination by yourself is more flexible and cost effective: when finding no abnormality in the hip, one should also make an ultrasound of the iliac fossa.

Diagnosis and follow-up of liver metastases and malignant glands, lymphoma and other issues will be discussed during the workshop. We will offer the opportunity during the workshop to get acquainted with the equipment, operation and manipulation of the device will be explained and attendants will have the opportunity to try out the

unit on the spot. For participants who want to purchase a device, recommendations will be provided, it can be explained what you should look for when buying (no conflict of interests).

Conclusion Ultrasound is one of the most difficult of all imaging techniques, largely because the only person who can really assess the clinical problem is the operator who is performing the study.

### WS.45 - Network for Primary Health Care (NPHC)

#### **WS45**

**Network for Pimary Health Care (NPHC)** 

#### C. van Weel;

Radboud University, Nijmwegen, Netherlands.

Background. With the growing emphasis on primary care as the leader in health care, the teaching and training of future practitioners in the community setting as part of the curriculum is ever more important. The strength of the primary care setting for teaching is, that it makes it possible to address the social context of health problems. International collaboration will further add to highlighting the importance of societal, cultural and health care structure aspects for health and health care.

Aim. To present, discuss and critically appraise the experiences of the EU Erasmus/Socrates Network Primary Health Care in exposing medical students to cultural diversity in primary care.

Methods. The EU Erasmus/Socrates Network Primary Health Care is a collaboration of University Departments of 14 countries: Austria, Belgium, Denmark, Estonia, France, Germany, Great Brittain, Greese, Italy, the Netherlands, Slovenia, Spain, Sweden and Turkey. It has developed three different approaches for student exposure to cultural diversity:

- \* international exchanges for individual clinical attachments to general practices
- \* international exchanges individual research electives to (community based) primary care
- \* an intensive international course of primary care practice and development with multinational participation of students and teachers.

The workshop will review the experiences of these programmes, look for possibilities of extending the network and explore the value of a more formal European primary care teaching programme for medical students.

### WS.46 - Patient safety in general practice

#### WS46

Patient safety in general practice

J. Wynn-Jones<sup>1</sup>, T. Eriksson<sup>2</sup>, C. Lionis<sup>3</sup>, A. Esmail<sup>4</sup>, EURIPA, EQuiP, Linnaeus Cooperation;

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Background: All doctors have a moral and professional responsibility to ensure that the healthcare that they provide is safe and that patients do not incur any adverse consequences as a result. Only in a perfect world could one avoid all errors but it is our duty to ensure that we do all we can to make our practice safe. It appears to be little in the way of research into the impact of the context of health care on patient safety and in particularly that of isolation and rurality. The proportion of Europe's population living in rural areas varies greatly across the continent but it can

estimated between at least 20-25% (Some countries in Eastern Europe have rural populations of at least 40%). The level of rural deprivation also varies across Europe and little evidence exists at present on this subject let alone the impact it may have on patient safety. Aim: EURIPA, EQuiP and the Linneaus European Patient Safety Network have formed a partnership to address the issue of patient safety in rural Europe. This ongoing collaboration has carried out a review of the literature and is planning to develop a tool to improve patient safety in rural practice. Method: This joint workshop (EQuiP, EURIPA/Linneaus) will describe the progress to date, emphasizing the learning points already gleaned during the project. Short case studies will also be presented outlining some of the examples of good practice already in place. Anticipated outcomes: will include

- Presentation and dissemination of the progress to date
- •Discussion on any amendments in light of the findings and discussion during the workshop
- •Promotion of concept and principles of patient safety
- •Presentation of standards and methods ensure patient safety in rural practice
- •Discussion of medical audit procedures in monitoring and evaluating patient safety
- •Demonstration of the relevance and generic nature of this work to all aspects of general practice including urban and inner city practice
- •Demonstration of the mportance of Wonca Europe networks working together to achieve greater goals hrough collaboration and sharing aspirations

# WS.47 - Workshop from the IPCRG, SIG of Wonca Europe: Asthma control and severity. What should the doctor do to support patients with uncontrolled and severe asthma in day to day practice

#### WS47

Workshop from the IPCRG, SIG of Wonca Europe: Asthma control and severity. What should the doctor do to support patients with uncontrolled and severe asthma in day to day practice

**M. Roman Rodriguez**, Svein Hoegh Hoghesen, Jaime C de Sousa, Ioanna, Tsiligianni,;

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Globally, asthma morbidity remains unacceptably high. If outcomes are to be improved, it is crucial that routine review consultations in primary care are performed to a high standard. Key components of a review include assessment of control using specific questions and questionnaires to elucidate the presence of symptoms, in conjunction with the frequency of use of short-acting bronchodilators and any recent history of acute attacks. Identification of poor control should only result in a step-up of treatment after consideration of the diagnosis, and an assessment of compliance, inhaler technique, smoking status, triggers and other allergic conditions as rhinitis, in accordance with evidencebased guideline recommendations. Severe asthma is not very common nowadays and it's difficult to understand the differences between lack of control and severity based also on future risks and poor response to available treatments. Once severe asthma is diagnosed, many approaches are of value in primary care, including an accurate referral to specialized settings and offering personalized care and treatment.

The IPCRG presents an interactive workshop; after a short presentation, open discussion among participants will be led by a team of practising family physicians with experience of different health care systems and with a special interest in respiratory disease. The main issues to be covered at the workshop will be:

- A definition of poorly controlled asthma: How do we differentiate between poor control and severity
- · Poorly controlled asthma: What should we do?

• Is there a place for primary care in the management of severe asthmatic patients?

# WS.48 - Joint workshop EURACT and Vasco da Gama Movement: Developing an International Core Curriculum or Global Standards in family medicine education - how and why?

#### **WS48**

Joint workshop EURACT and Vasco da Gama Movement: Developing an International Core Curriculum or Global Standards in family medicine education - how and why?

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<sup>1</sup>National Centre for Emergency Primary Health Care, Bergen, Norway, <sup>2</sup>Aarhus University, Aarhus, Denmark, <sup>3</sup>Maastricht University, Maastricht, Netherlands.

#### Background:

Vasco da Gama Movement (Vdgm) is an organization for young and future general practitioners (GPs) in Europe. They provide a network for GPs during their vocational training and up till 5 years after specialization. The European Academy of Teachers in General Practice and Family Medicine (EURACT) has an overall aim to foster and maintain high standards of care in European general practice by promoting general practice as a discipline by learning and teaching.

#### Objective of session:

The aim of this workshop is to explore and debate the possibilities of developing an international core curriculum or global standards in post-graduate family medicine education. The workshop will focus on the diversity in the different post-graduate (vocational) training schemes across Europe, and the participants will be challenged to discuss potential benefits and losses concerning diversity versus "global" standards.

#### Organization of session:

- Introduction with a short presentation of different training schemes across Europe
- Short panel debate with focus on the potential benefits and losses of an international core curriculum
- Group discussions
- Short "conclusions"-section, with all groups presenting 2-3 ideas from their discussion

# WS.49 - Coaching for health: how coaching and mentoring skills can add to the art of general practice; to improve communication and leadership skills and empower patients

#### **WS49**

Coaching for health: how coaching and mentoring skills can add to the art of general practice; to improve communication and leadership skills and empower patients

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The London Deanery Coaching and Mentoring Scheme was started in 2008. Over 440 mentors have trained many achieving postgraduate certification. Over 1000 doctors and dentists have applied to be mentored

Doctors and dentists in training or leadership positions are eligible for four 90 minute sessions. The mentees choose to be involved in the process, select a mentor and bring their own agenda for change. Mentoring maximises potential by working as an equal partnership, encouraging resourcefulness and self efficacy.

Those working as mentors notice improvements in communication with their patients. Coaching techniques can empower patients and enhance autonomy. Particularly when clinician and patient are feeling "stuck" in terms of communication e.g. chronic pain

The workshop will define coaching and mentoring. (1, 2) We will review the benefits perceived by mentors (3, ) and the evidence for mentoring (4). We will consider future applications with patients (5, 6, 7) and enable participants to try out some coaching and mentoring techniques.

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# WS.50 - Promoting science among junior general practitioners - Presenting the Vasco da Gama Movement Junior Researcher Award 2012

#### WS50

Promoting science among junior general practitioners -Presenting the Vasco da Gama Movement Junior Researcher Award 2012

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Aim of the workshop: Starting in 2011 the Vasco da Gama Movement (VdGM) promotes sciences in general practice among junior general practitioners who include research skills with patient care as a life time career. VdGM therefore provides an annual Junior Researcher Award which honours outstanding research and researchers' careers in GP-trainees or junior GPs with up to 5 years working experience after graduation.

Organization of the workshop: Every national representative of VdGM was asked to propose one national candidate for the award. The three winners selected by the international jury of the VdGM Junior Researcher Award will present both their scientific work and personal career. Every presentation will be followed by a discussion.

**Learning objectives:** The auditorium will be able to learn from junior champions in research. This workshop may offer a platform that brings together champions and interested junior researchers and/or trainees who may be inspired and supported by the experiences of outstanding examples among their peers.

Impact of the workshop: Future research in family medicine depends on successful training and support of upcoming juniors. This workshop will provide a forum for junior champions to present their work in the context of the VdGM Junior Researcher Award. This may get European GP-trainees and junior GPs enthusiastic about a future lifetime career in research and practice.

# WS.51 - Shared Decision-Making plus for general practitioners with a focus on patient suffering from non chronic low back pain: enforcing patients' own expectations in order to maximize health benefits

#### WS51

Shared Decision-Making plus for general practitioners with a focus on patient suffering from non chronic low back pain: enforcing patients' own expectations in order to maximize health benefits

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SDM enhances patient participation in medical consultations. SDM is defined as a process by which a healthcare choice is made jointly by practitioner and the patient. SDM is especially suitable in situations of clinical equipoise, i.e. when there is more than one treatment option and none of those has clear clinical preference

above the others. Using SDM, patients are most likely to opt for a treatment of which they have positive expectations, which can be reinforced by the healthcare provider. Since enhancing positive outcome expectations leads to better health-related outcomes, combining SDM and positive reinforcement is likely to lead to improve patient outcomes.

The workshop is a shortened version of training developed for a research project on SDM and PR in general practice for patients suffering from non-chronic low back pain(nc LBP). For nc LBP, besides staying active, there is no evidence based preferred treatment option and context effects contribute substantially to recovery. In this training we restrict to the complaint of nc LBP, but the skills derived can be used in other consultations where there is clinical equipoise.

The workshop method is based on the learning theory of Kolb, where pathways of concrete experience, reflective observations, abstract conceptualization and active experimentation are used. After exploring participants' ideas and experiences with regard to decisional processes, the theory of SDM and PR will be shortly discussed and a decision aid for patients suffering from non-chronic low back pain in general practice will be introduced. SDM based on steps of the OPTION-method developed by Glyn Elwin, along with positive reinforcement will be trained by role-play. Finally recapitulating the learned steps a summary of tips and tricks will be composed.

Learning objectives: development of skills in SDM and PR by cognition of one's attitude and behavior in the decisional phase, enhancement of knowledge and exercise in practical implementation for consultations with patients suffering from nc LBP, but suitable for all consultations in case of equipoise.

# WS.52 - Risk assessment for partner violence - EUROPREV & Special Interest Group on Family Violence - EUROPREV Workshop 4

#### WS52

Risk assessment for partner violence - EUROPREV & Special Interest Group on Family Violence - EUROPREV Workshop 4

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#### Background

Roughly one on ten women suffers mayor health consequences due to partner violence. Women expect and appreciate if caregivers discuss overtly this issue. The variability of presentations and sometimes vital risks and mayor consequences linked to partner violence require a thorough exploration and follow-up in case of suspicion and disclosure. Standardised instruments have been increasingly developed in a number of countries and show promising results in reducing reoccurrence and increasing safety.

Aims of the workshop:

To discuss the development of standardised risk assessment and management for partner violence applicable in general practice Workshop plan: Based on a literature review and examples form different countries a practical strategy for risk assessment for partner violence and recording of general practice observations will be proposed. The consequences for a stepped care approach and applicability in different health

service settings will be discussed. Special attention will be given to consequences and problems for sharing information and confidentiality of record data.

#### Conclusion:

Setting standards for risk assessment and adequate recording are prerequisites to increase our understanding of the contribution general practice can make to prevent escalation of violence in the family.

- demonstration of modern wound dressing materials
- 2. in two groups casuistries
- ulcus cruris: (a photo of an ulcus cruris)
- heel decubitus: (a photo of a heel decubitus)

Questions: How to assess a wound? Which wound dressing materials to use? What else? How to make a wound treating plan?

#### WS.53 - Medical Home Visits

#### WS53

**Medical Home Visits** 

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Introduction: Indications for home visits are diverse. In family medicine practice these visits are mainly to elderly patients. The aging of the population poses new challenges, not only to clinical practice, but also in terms of health resource management. Frailty and disability often accompany the later years of life, and are important areas of prevention. Aiding the recovery of older people, and maintaining their quality of life, requires a multidisciplinary approach, preferably at home, in their usual surroundings. Objectives: - Update knowledge on home visits for the elderly; Integrating providing palliative care during home visits; - Raising awareness of the impact of disease on caregivers and family members. Methods: - Pre-test - assessment of current knowledge. - Oral presentation using multimedia presentation tools: - Important aspects of evaluating the elderly at home (cognitive, functional, psychological, physical and social); - Eating habits and physical activity at home; - Symptomatic end-of-life treatment; -Assessment and care of caregivers. - Evaluation of knowledge (post-test). - Pocket home-visit guide supplied. Results: At the end of the session participants should feel better equipped to conduct a home visit to elderly patients, taking into account the objectives outlined in this workshop. Discussion: The elderly patient is complex, and requires a multidisciplinary approach. It is vital to evaluate existing support networks, to ensure optimal delivery of health care. It is therefore necessary to carry out a home visit, in order to evaluate not only the patient, but also their surroundings. This workshop will enable the family physician to integrate knowledge of geriatrics and palliative care in the context of home visits

# WS.55 - What is your preferred learning style? A workshop to identify index learning styles and improve academic achievement

#### WS55

What is your preferred learning style? A workshop to identify index learning styles and improve academic achievement

Z. Aktürk, A. Khan, Ü. Avşar;

Atatürk University Medical Faculty, Erzurum, Turkey.

Applying the correct learning style is crucial in academic achievement. In many occasions, reasons for low performance in learning are either implementation of an inappropriate learning style or the learning environment not being able to meet requirements for the preferred learning style.

There are several approaches suggested and also tools available to measure individual learning styles. Kolb's learning style inventory, Index Learning Styles (ILS), and VARK Learning Styles Questionnaire are some of the commonly used instruments to measure individual learning styles.

In this workshop, after giving some background information on the learning styles, participants' learning styles will be measured and group discussions will be held to reflect and discuss on the implementation of the findings in daily life. It is expected that participants will benefit from this workshop to improve their personal academic goals and also provide appropriate counseling for other learners including undergraduate students, family medicine trainees, colleagues, and family members.

### WS.54 - The Wound Box and Wound Care in general practice

#### **WS54**

The Wound Box and Wound Care in general practice

#### K. F. Reidina:

DOKH, Santpoort, Netherlands.

Workshop: The Wound Box and Wound Care in general practice Aim:

- to learn how to use the Wound Box- guideline
- to increase knowledge about wound healing and factors of influence
- to learn how and when to use modern wound dressing materials
- 4. to apply all which is learned in practice

#### Methods:

- 1. plenair:
- presentation of the Wound Box- concept
- presentation of the fases of wound healing and factors of influence
- the wound box- guideline and the general principles wound treatment

## WS.56 - Why Primary care is a haven for broadening care gaps. Is Family Medicine the culprit?

#### WS56

Why Primary care is a haven for broadening care gaps. Is Family Medicine the culprit?

#### A. D. D'Urzo;

University of Toronto, Department of Family and Community Medicine (DFCM), Toronto, ON, Canada.

The management of chronic and complex diseases has shifted to the community setting resulting in new challenges and expectations among patients and physicians. pharmacotherapeutic utilization patterns suggest that despite rapidly escalating drug costs, care gaps continue to broaden and may threaten the sustainabilty of heath care agencies around the world. In many parts of the world primary care givers such as family physicians play a leading role in the care of patients in the community setting but traditionally they have played a very limited role in drug research and management guideline development. It could be argued that this scenario creates a nurturing environment for care gap development.

This workshop will explore the notion that a self regulating discipline like family medicine, a major driver of drug prescriptions and health care costs, should have in place formal oversight

strategies that facilitate a direct and active role in drug and outcomes research, including a leading role in pharmaceutical sponsored clinical trials. The lack of meaningful participation in pharmaceutical sponsored drug research and guideline development will be discussed within the context of care gap development and chronic disease management. The critical need for family physicians to participate in comparative effectiveness research will also be discussed, including the need to develop practice based research networks whose focus would be to develop and conduct pharmacotherapeutic trials that target relevant primary care outcomes. The need for comprehensive systems linking prescriptions for specific conditions to relevant patient health outcomes encountered in primary care will be addressed. The role of the family physician in the development of drug information systems that are linked to evidence-based management guidelines will be discussed. Barriers which limit participation of family physicians in research will be discussed and strategies to overcome such challenges will be addressed. Touch pad technology will be utilized to promote interaction among participants.

5) Knowledge about antibiotics (Med. Uni Vienna): Primary care patients in Austria completed a survey regarding their knowledge of antibiotics.

#### Results:

- 1) Literature review: 974 studies were reviewed and 243 studies were included. Of these,164 (67%) showed a positive relationship between consumption and resistance.
- 2) Resistance patterns: A total of 32,630 nose swabs were collected: the prevalence of S. aureus ranged from 14.2 % to 29.4% (average 21.4%) and of S. pneumoniae ranged from 1.1 to 6.1% (4.2%). Resistance testing is ongoing.
- 3) Prescription patterns: Preliminary results will be presented at the Conference.
- 4) Guidelines: Primary care treatment guidelines for skin infections differ by country, and do not often present national or international antibiotic resistance data.
- 5) Knowledge about antibiotics: Patients' knowledge about antibiotics is low in Austria, confirming a EuroBarometer survey carried out in 2010

Conclusion(s): APRES will present an integrated analysis of antibiotic use in primary care across Europe: a literature review, resistance and prescription patterns, and treatment guidelines. This will facilitate the establishment of evidence-based treatment guidelines for GPs in Europe.

#### **SYMPOSIA**

# SY.01 - APRES Symposium: The appropriateness of prescribing antibiotics in primary health care in Europe

**SY01** 

APRES Symposium: The appropriateness of prescribing antibiotics in primary health care in Europe

E. M. E. van Bijnen¹, B. Bell², M. Pringle², C. D. J. den Heijer³, K. Hoffmann⁴, E. E. Stobberingh³, S. Coenen⁵, H. Goossens⁵, W. J. Paget¹, F. G. Schellevis¹.⁶, on behalf of the APRES Study Team;¹NIVEL, Utrecht, Netherlands, ²University of Nottingham, Division of Primary Care, Nottingham, United Kingdom, ³Department of Medical Microbiology, Maastricht University Medical Centre, School for Public Health and Primary Care (CAPHRI), Maastricht, Netherlands, ⁴Dep. of General Practice, Centre for Public Health, Medical University of Vienna, Vienna, Austria, ⁵Vaccine & Infectious Disease Institute (VAXINFECTIO), University of Antwerp, Wilrijk, Belgium, ⁵VU University Medical Centre, Dept. General Practice / EMGO+ Institute, Amsterdam, Netherlands.

Background: Resistance to antibiotics is increasing and forms an important public health threat. Over 90% of all antibiotics in Europe are prescribed in the outpatient setting. However, most research concerns hospital resistance data. The APRES study ('Appropriateness of prescribing antibiotics in primary health care in Europe with respect to antibiotic resistance') will fill this knowledge gap. The study assesses antibiotic resistance and antibiotic prescription patterns in primary care in 9 European countries.

Methods: 1) Literature review (Uni Nottingham): Systematic literature review concerning the relationship between antibiotic consumption and antibiotic resistance in the community.

- 2) Resistance patterns (Uni Maastricht): Nose swabs were taken of patients (N=4,000 per country) visiting a GP practice for a non-infectious disease. Staphylococcus aureus and Streptococcus pneumoniae are isolated and tested for resistance to antibiotics.
- 3) Prescription patterns (Uni Antwerp): Data on antibiotic prescriptions for the past 5 years have been extracted from the practice data systems of the participating GPs.
- 4) Guidelines (NIVEL): Primary care treatment guidelines for skin infections throughout Europe were compared on content and the inclusion of resistance data.

#### SY01.01

APRES-Symposium: Knowledge about antibiotics of patients in primary health care in Austria

K. Hoffmann, L. Heschl, D. Stelzer, M. Maier; Department of General Practice and Family Medicine, Center for Public Health, Med. University of Vienna, Vienna, Austria.

Background: The special Eurobarometer 2010 report on antimicrobial resistance included a survey assessing the knowledge about antibiotics of Europeans. Together with Bulgaria, Romania, Portugal and Hungary Austria was ranked at the end of the EU27- countries. Based on these alarming results, especially in relation to the increasing health threat of antibiotic resistances, it was the aim of this study to identify possible reasons for this bad outcome.

Method: Within the context of the European APRES study an additional 12-item questionnaire was developed with six knowledge questions about antibiotics, five demographic data questions and one question asking for the source of information. The cross sectional study lasted from November 2010 till July 2011 and took place in 20 GP offices all over Austria. Each GP tried to recruit 200 patients to complete the questionnaires. The knowledge variables were defined as dependent, the others as independent variables. For the analyses descriptive statistical methods were used as well as statistical tests for subgroup analyses and correlations.

Results: Overall, 3278 questionnaires were completed. On average, 3.2 out of the six knowledge questions were answered correctly. People with primary or lower education only answered 2.2 questions correctly; people who graduated from university had 3.8 right answers. Speaking German or German together with another language at home resulted in a significant better knowledge about antibiotics than speaking a foreign language. Being a woman was associated with significant better knowledge regardless of the level of education. GPs were the main source of information (56%) related to antibiotics.

Conclusion: The low knowledge shown in the Eurobarometer report could be confirmed. In general, being male with low education and speaking another language than German at home was significantly and negatively associated with knowledge about antibiotics. These results can support GPs to define specific target groups where more effort is needed to inform and empower patients. To improve peoples' knowledge it seems appropriate to develop a multi-level strategy that is responding to these findings.

#### SY.02 - Art and Science of Migrant Care and International Health - by the WONCA SIG on Migrant Care, International Health and Travel Medicine

#### SY02

Art and Science of Migrant Care and International Health -by "WONCA SIG on Migrant Care, International Health and Travel Medicine"

M. van den Muijsenbergh<sup>1</sup>, W. Spiegel<sup>2</sup>;

<sup>1</sup>WONCA SIG on Migrant Care, International Health and Travel Medicine in General Practice, Nijmegen, Netherlands, <sup>2</sup>Department of General Practice, Center of Public Health, Medical University of Vienna, Vienna, Austria.

Migrant care, international health and travel medicine - an introduction

Maria van den Muijsenbergh, convener of WONCA SIG on Migrant Care, International Health and Travel Medicine

Primary Care Mental Health in Sub-Saharan Africa

Gabby Ivbijaro, chair of Wonca Working Party on Mental Health Searching for a model primary care system for Sub-Saharan Africa Wolfgang Spiegel, senior lecturer, Department of General Practice, Medical University of Vienna, Austria

Gurdeep Parhar, Associate Dean Equity and Professionalism, Faculty of Medicine, University of British Columbia (Siehe Abstract)

Ecology of Caré - health seeking behaviour of migrants in Austria Otto Pichlhöfer, Department of General Practice, Medical University of Vienna, Austria

Mental health problems of undocumented migrants in the Netherlands

Erik Teunissen

(siehe Abstract)

The effect of the financial crisis on migrant care and internal migration in Greece: the role of General Practice

Christos Lionis, Professor of General Practice and Primary Health Care, University of Crete, Greece (siehe Abstract)

The new consultation centre for undocumented migrants in Basel Daniel Gelzer, GP in Basel, Switzerland (siehe Abstract)

#### SY02.03

#### Mental health problems of undocumented migrants in the Netherlands

E. Teunissen, L. van den Bosch, E. van Bavel, E. van Weel-Baumgarten, M. van den Muijsenbergh; Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands

In the Netherlands an estimated 150.000 migrants do not have a regular staying permit (van der Heyden 2005). Although most of them are living within hardship conditions, and report many mental health problems such as anxiety and depression (Schoevers 2009, Yosofi 2009), previous small-scale primary care research showed a rather low prevalence of these mental health problems, as registered by general practitioners in their medical files (Wolswinkel 2009).

It is unclear why these registered prevalence rates are low. Is this the result of a methodological flaw of this small-scale study? Don't undocumented migrants report their mental problems when they contact their GP? Are there language and cultural barriers between GPs and migrants that lead to under-recognizition of mental health problems? Or do GPs don't register mental health problems due to other reasons?

By applying quantitative and qualitative research methods we will try to clarify the following research questions:

1.What is the registered prevalence of mental problems of undocumented migrants in general practice files, compared to the

registered prevalence of mental problems of a matched control group of patients within the same practices?

2. How do GPs diagnose and register mental problems of undocumented migrants and what barriers or obstacles do they encounter in their mental health care for these patients?

We will present the results of an analysis of anonymised data of medical files of undocumented migrants and a matched control group gathered in 20 general practices with at least 15 undocumented migrants on their practice list. We will also present results of semi-structured in depth interviews with these doctors.

#### SY02.05

Searching for a model primary care system for Sub-Saharan

W. Spiegel<sup>1</sup>, G. Parhar<sup>2</sup>;

<sup>1</sup>Department of General Practice, Center of Public Health, Medical University of Vienna, Vienna, Austria, <sup>2</sup>Associate Dean Equity and Professionalism, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada.

Introduction: In it's constitution the Republic of South Sudan (RSS), which has been established as a new country on July 9, 2011, stipulates that "... All levels of government shall promote public health, establish, rehabilitate and develop basic medical and diagnostic institutions and provide free primary health care and emergency services for all citizens.". After the long-lasting, terrible civil war quite a few of the Primary Health Care (PHC)-Centres are out of function or understaffed. But if they function there is where the necessary professional care needs to be delivered when hospitals are not in reach. Austrian Doctors for Disabled explores the PHC delivery process in RSS and their interfaces to secondary care to make suggestions for upgrading them.

Methods: Based on the results of a successful fact-finding mission to South Sudan in December 2011 the researchers, in a first step, we will observe the kind and frequencies of medical problems (incidence, prevalence) and the clinical tasks which Clinical Officers (non-physician health workers) and other staff have to perform. Based on these structured observations we will hold focus groups with stakeholders of PHC using Participatory Learning and Action (PLA) which will aim at elaborating current shortcomings in service delivery and possible solutions to advance the system. In a second step, the results of the structured (indepht) observations and the results of the focus groups with stakeholders will be discussed with health-policy makers (government) and secondary care providers (hospital-based doctors) so that a consensus can be reached to make a informed suggestion for an upgraded PHC model region. Austrian Doctors for Disabled will then apply for an international grant (together with the Medical University of Vienna) to equip and staff a pilot PHC-Centre in one region of a South Sudan. Service delivery, training of staff, and equipment of the facility will be done in accordance with the results of stage one and two of the pilot project.

**Results:** First results are expected to be presentable by July 2012.

#### SY02.06

The effect of the financial crisis on migrant care and internal migration in Greece: the role of General Practice

#### C Lionis

Professor of General Practice and Primary Health Care, University of Crete, Heraklion, Greece.

In Greece between 2007 and 2010 the debt grew from 105.4% to 142.8% of gross domestic product (GDP; €239·4 billion to €328·6 billion) (Eurostat 2011) resulting in massive cuts to the health care system. This crisis has affected the daily life of the citizens of Greece in resulting in a 40% increase in the annual suicide rate

(Anon 2011). The impact on low growth and current global economic crisis on migration and on health care services is still in questioning. In general, the employment situation of migrant workers, especially of national non- EU countries have deteriorated more rapidly than that of natives during the economic crisis, as the International Organization for Migration (IOM) reported (Koehler et al 2010). The impact of this on welfare and health care of immigrants in Greece is expected more since an integrated primary care system is not established yet (Lionis et al 2009). Thus, the role of general practice and primary care has not received the proper attention. It invites the policy-makers to take part in measures and actions relevant to migrant worker mobility that should be fostered (Koehler et al 2010), and focus on health and welfare issues.

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#### SY02.07

#### The new consultation centre for undocumented migrants in Basel

#### D. Gelzer;

General Practitioner, Basel, Switzerland.

Background: In Switzerland live between 80 and 240'000 undocumented immigrants.

Mostly they work in the following fields: they run household, care for children or elderly, work in catering, construction or building trade. A growing number are rejected asylum seekers. They all need medical treatment.

Project: In 10 Swiss towns exist medical centres for undocumented immigrants. These centres have been founded by local groups of human right activists. Each has his own history, culture and way of being financed.

In Basel a centre started in autumn 2011 financed by a local foundation. A nurse stays in contact with the different communities of undocumented and does the first treatment and triage. A network of GP's and specialist was founded, there have been negotiations with pharmacies and hospitals to get an easier access

Learning point: The Swiss and particularly Basel experience might encourage other initiatives for undocumented.

#### SY.03 - TRANSFoRm symposium improving patient safety in primary care

#### SY03

TRANSFoRm symposium - improving patient safety in primary care

B. Delaney¹, **J. K. Soler²**, D. Corrigan³, T. N. Arvanitis⁴, V. Curcin⁵, R. A. Verheij⁶, S. Visscher⁶, A. Taweel⁷; ¹King's College, London, United Kingdom, ²Mediterranean Institute of Primary Care, Attard, Malta, ³Royal College of Surgeons in Ireland, Dublin, Ireland, ⁴University of Birmingham, Birmingham, United Kingdom, ⁵Imperial College London, London, United Kingdom, ⁵NIVEL, Netherlands Institute for health Services Research, Utrecht, Netherlands, <sup>7</sup>King's College London, London, United Kingdom.

<u>Background</u>: TRANSFoRm is a collaborative research project for the integration of primary health care clinical and research activities, to support patient safety and clinical research.

Methods: The first year of the project has defined three clinical research and three knowledge translation 'use cases' which will underpin the development of the software and its evaluation. An analysis of requirements of these use cases, linking to the relevant EU legal and ethical frameworks has informed the development of a confidentiality and privacy framework. This framework is reflected in plans to manage provenance (audit and tracking), security (access control) and the plans for development of the system architecture.

<u>Results</u>:1. *Use cases*: Three clinical research use cases will be presented: a phenotype-genotype study of risks of complications and response to oral medication in Type 2 diabetes mellitus, a case-control study of the risk of developing adenocarcinoma of the oesophagus relating to GERD symptoms and PPI use, and an RCT of on-demand versus continuous PPI use in GERD.

- 2. Confidentiality Framework: A functional 'zone model' has been developed where identifiable data (both clinical care and non-clinical care-related) are protected but made available for research by a combination of linkers and privacy filters. This model allows researchers to use completely anonymised data and linked-'pseudo-anonymised' data appropriately for the project and the local legal requirements.
- 3. Vocabulary service: Using the Unified Medical Language System (UMLS) meta-thesaurus, besides various classifications and terminologies, an on-line vocabulary service for coding medical concepts has been developed and is presented.
- 4. Decision support service: TRANSFoRm is working to develop a decision support system for primary care based on empirical evidence collected from the literature and from primary care sources such as the Transition Project.
- 5. Provenance framework: The Provenance framework for TRANSFoRm data is presented and explained.
- 6. <u>Data quality tool</u>: Before data can be used for research, the quality of the data needs to be assessed. To what extent is the data fit for use in a particular research project? In TRANSFoRm a data quality tool will be developed to enable researchers to do this.

# SY.04 - European translational research on the management of respiratory tract infections in primary care: implications for clinical practice and research

#### **SY04**

European translational research on the management of respiratory tract infections in primary care: implications for clinical practice and research

**S. Coenen**<sup>1,2</sup>, T. Verheij<sup>3</sup>, C. Butler<sup>4</sup>, S. de Vries-van Vugt<sup>3</sup>, L. Broekhuizen<sup>3</sup>, M. Godycki-Cwirko<sup>5</sup>, E. Hummers-Pradier<sup>6</sup>, H. Goossens<sup>2</sup>:

<sup>1</sup>Centre for General Practice, Vaccine & Infectious Disease Institute (VAXINFECTIO), University of Antwerp, Antwerp, Belgium, <sup>2</sup>Laboratory of Medical Microbiology, Vaccine & Infectious Disease Institute (VAXINFECTIO), University of Antwerp, Antwerp, Belgium, <sup>3</sup>Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Netherlands, <sup>4</sup>Institute of Primary Care & Public Health, Cardiff University, Cardiff, United Kingdom, <sup>5</sup>Medical University of Lodz, Lodz, Poland, <sup>6</sup>Institut für Allgemeinmedizin, Medizinische Hochschule Hannover, Hannover, Germany.

#### Background

Lower respiratory tract infections (LRTI)/acute cough are among the commonest acute conditions managed in primary care and a major reason for antibiotic prescribing. EGPRN (European General Practice Research Network; www.egprn.org) has been actively promoting collaborative research and developped a research agenda for primary care, including challenging research on clinical diagnosis and prognosis, mixed methods, and translational research. TRACE (Translational Research on Antimicrobial Resistance and Community-acquired infections in Europe; www.esf.org/trace) aims to consolidate the expertise within several European research programmes, and to disseminate their results, in particular GRACE (Genomics to combat Resistance against Antibiotics in Community-acquired LRTI in Europe; www.grace-Irti.org) results. GRACE focuses on the management of LRTI/acute cough.

#### Methods

In this symposium we will present GRACE results starting from a case of an adult patient presenting in primary care with acute cough. The chairs will foster discussion on the presentations, focussing on the implications for LRTI/acute cough management in primary care as well as for primary care research on this topic (see Programme table).

#### Results

The presentations will be based on the results of the largest observational studies on the presentation and management, and on the aetiology, diagnosis and prognosis of over 3000 adult patients presenting with acute cough in primary care in 12 European countries, the largest randomised placebo-controlled trial on the effect of amoxicillin 1g TID to date in over 2000 of these patients, and another randomised trial on the effect on antibiotic prescribing of either an online training on the use of a C-reactive protein point-of-care test supplemented with the provision of such a device or an online communication skills training supplemented with the provision of an interactive patient booklet endorsed by the European Antibiotic Awareness Day in over 4000 patients.

#### Conclusion

This symposium will provide great opportunity for large-scale support of primary care physicians in the management of LRTI/acute cough in primary care, particularly for the antibiotic prescribing decision, as well as for primary care research on this topic.

Programme of joint EGPRN - TRACE - GRIN symposium

European translational research on the management of respiratory tract infections in primary care: implications for clinical practice and research

Chair (Eva Hummers-Pradier) Co-chair (Maciek Godycki-Cwirko) Introduction of GRACE (Herman Goossens)

Presentations and discussions

- 1. Diagnosis in adults with acute cough (Theo Verheij)
- Diagnosing pneumonia (Saskia de Vries-van Vugt)
- Diagnosing bacterial infection (Herman Goossens)
- Diagnosing asthma and COPD (Lidewij Broekhuizen)
- 2. Assessing prognosis of acute cough in primary care (Samuel Coenen)
- 3. Antibiotics for acute cough in primary care (Chris Butler)
- 4. Strategies to reduce antibiotic use (Herman Goossens & Chris Butler)

EGPRN = European General Practice Research Network

TRACE = Translational Research on Antimicrobial Resistance and Community-acquired infections in Europe

GRIN = General Practice Respiratory Infections Network

#### SY.05 - The International Classification of Primary Care -(ICPC) and the hows and whys of classification systems in family medicine

#### SY05

The International Classification of Primary Care - (ICPC) and the hows and whys of classification systems in family medicine

**J. K. Soler**<sup>1</sup>, I. Kunnamo<sup>2</sup>, F. Petrazzuoli<sup>3</sup>, N. Buono<sup>3</sup>, M. Jamoulle<sup>4</sup>:

<sup>1</sup>Mediterranean Institute of Primary Care, Attard, Malta, <sup>2</sup>Wonca Informatics Working Party, Helsinki, Finland, <sup>3</sup>ICPC Club Italia, Caserta, Italy, <sup>4</sup>CISP Club, Charleroi, Belgium.

**Purpose:** To outline key features of the International Classification of Primary Care (ICPC), and its use in different health care systems in Europe for documentation of practice content, and for research into diagnostic associations.

**Design:** Basic principles of classifying data with ICPC will be presented, with practical examples. Seminar participants will: (1) learn how ICPC works; (2) discuss the advantages and disadvantages of different classification systems; and (3) describe the outcome of research using ICPC into the process of diagnosis.

Results: Electronic health records contain data which are best analysed when certain elements are defined and classified. This workshop will present basic information on classification and coding systems in family medicine. Detailed discussion will take place on the International Classification of Primary Care (ICPC) which broke new ground in the field of classification when Wonca first published it in 1987. For the first time health care providers could use a single classification system to classify three important elements of the health care encounter: reasons for encounter (RFE); assessment (diagnoses or problems); and the process of care (decision, action, or plans). Linkage of elements permits categorisation from the beginning of the encounter with a health problem to its conclusion, as episodes of care.

Because it reflects the essential elements of each patient/provider encounter and allows for the description of episodes of care, ICPC is fully compatible with and fully supports the use of problemoriented clinical records. It is the ideal tool to use to study the content of practice, and especially the process of diagnosis in primary care.

For regionally or nationally shared electronic health records with secondary care collaboration, and for individual patient clinical documentation, more granular classifications are helpful. Examples are shown on simultaneous utilization of ICPC and ICD-10, which has been recommended by WICC and supported by the ICPC-ICD-10 mapping published by Wonca.

**Conclusion:** This seminar is suitable for those who wish to gain a good understanding of ICPC. The seminar will also showcase good examples of implementation of ICPC use, and explore ways of encouraging the uptake of classification systems in various settings.

#### SY.06 - Promoting more timely diagnosis of cancer in primary care

Promoting more timely diagnosis of cancer in primary care

C. Campbell<sup>1</sup>, W. Hamilton<sup>2</sup>, R. D. Neal<sup>3</sup>, G. Rubin<sup>4</sup>, P. Vedsted<sup>5</sup>,

D. Weller<sup>1</sup>, Ca-PRI;

Centre for Population Health Sciences, University of Edinburgh, Edinburgh, United Kingdom, <sup>2</sup>Peninsula College of Medicine and Dentistry, Plymouth, United Kingdom, <sup>3</sup>North Wales Centre for Primary, Bangor University, Wrexham, United Kingdom, <sup>4</sup>School of Medicine and Health, Durham University, Durham, United Kingdom, <sup>5</sup>Danish Research Centre for Cancer Diagnosis in Primary Care - CaP, University of Aarhus, Aarhus, Denmark.

Cancer survival rates vary widely across Europe, with delayed diagnosis of cancer believed to be a major contributor later stage diagnosis and to the poorer survival rates observed in some countries. Promoting more timely diagnosis of symptomatic cancer is considered to be crucial in improving survival rates. Patient, GP, and healthcare system factors are known to contribute to prolonged diagnostic intervals or 'delay' in diagnosis: this session will focus on GP and healthcare system factors.

We will present recent results describing the extent and importance of diagnostic delays in cancers, and outline the current understanding of symptom prevalence in the community and the filtering process involving both patient and GP interpretation and acting on signs and symptoms that precedes a referral to a specialist and possible cancer diagnosis. The effects of the gatekeeper function and the organisation of health care systems on cancer diagnosis will be discussed, as well as what is known about changing practitioner knowledge and behaviour.

Laboratory and imaging investigations are a key element of the work-up of patients with suspected serious illness. Increasingly, these diagnostic tests are used by GPs prior to possible specialist referral, but which tests are most useful in cancer diagnostics, at what point should they be used and how reliable are they in an unselected primary care population? We will discuss the application and utility of diagnostic testing for suspected cancer, considering both well-established investigations as well as some of the more sophisticated tests becoming available to GPs.

The symposium will draw heavily on current high-quality evidence, and consider their application to clinical practice. The symposium will conclude with a very clinically-orientated talk, entitled 'The mistakes we make'. This will seek to draw together the information from the previous speakers. Earlier versions of the talks have been very well received by UK audiences, but they will be updated and adjusted to ensure relevance to the whole European primary care community.

#### SY.07 - "Challenges to our professional attitudes" from WONCA Vienna 2000 to 2012: What changed? What didn't?

"Challenges to our professional attitudes" from WONCA Vienna 2000 to 2012: What changed? What didn't?

M. Maier<sup>1</sup>, S. Reis<sup>2</sup>, P. Schwarz<sup>3</sup>, J. den Otter<sup>4</sup>; <sup>1</sup>Center for Public Health, Medical University of Vienna, Vienna, Austria, <sup>2</sup>Bar Ilan University Faculty of Medicine, Safed, Israel, <sup>3</sup>DÖW, Vienna, Austria, <sup>4</sup>Center for Public Health, ICRT, Copenhagen, Denmark.

At the WONCA Europe conference 2000 in Vienna, the programme contained a special symposium entitled "Challenges to our professional attitudes". This full day symposium covered areas and time periods from the past to the present time where the

medical profession in general or individual colleagues in particular have been or were involved in developments based on unique political situations: the Holocaust in Europe, the Apartheid in South Africa, torture of prisoners in areas of war or the death penalty in the United States

This symposium served as the starting point for a Special Interest Group on ethical issues of WONCA which became a Working Party in 2010. At the occasion of WONCA 2012 - for the second time taking place in Vienna - it is time to look back and ask ourselves: What changed since the year 2000, what didn't? Are the changes seen towards the better or towards the worse? Did the founding of the Working Party on Ethical Issues in General Practice make a difference? What could be considered its impact? The planned symposium will review the current situation using selected topics: medicine during the Third Reich - research and a new medical education agenda; physician assisted suicide in the Netherlands/Belgium; treatment and rehabilitation of torture victims; the impact of the Working Party on Ethical Issues in General Practice/Family Medicine.

These 4 presentations will be discussed with the audience and the symposium will conclude with an outlook on potential new challenges facing the medical profession.

#### SY.08 - Improving care for frail elderly patients in primary care: towards a proactive and structured care approach

SY08

Improving care for frail elderly patients in primary care: towards a proactive and structured care approach

**N. J. de Wit**<sup>1</sup>, N. Bleijenberg<sup>1</sup>, I. Drubbel<sup>1</sup>, M. E. Numans<sup>1</sup>, M. J. Schuurmans<sup>1</sup>, T. Freund<sup>2</sup>, F. Peters-Klimm<sup>3</sup>, A. Erler<sup>2</sup>, J. Gensichen<sup>2</sup>, J. Szecsenyi<sup>2</sup>;

<sup>1</sup>Julius Centre for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Netherlands, <sup>2</sup>University Hospital Heidelberg Department of General Practice and Health Services Research, Heidelberg, Germany, <sup>3</sup>University Hospital Heidelberg Department of General Practice and Health Services Research, Utrecht, Germany.

Frail older patients and chronically ill patients have an increased risk for adverse health outcomes, such as mortality, morbidity and institutionalization. As the number of these patients increase, a change in strategy is needed in primary care; from a reactive towards a proactive integrated approach.

This symposium aims to highlight ongoing developments in primary care for the elderly. An overview will be given of the demographic and epidemiological developments in the care for the elderly, and of the possible strategies to cope with these developments in primary care. This will be illustrated by preliminary results of two ongoing research projects in general practice.

In the U-PROFIT trial in the Netherlands, a three-armed cluster randomized trial among 3000 elderly from 57 general practice, two interventions are tested. The first intervention is a screening and monitoring intervention that identifies frail patients in routine health care data (U-PRIM). The second intervention is a nurse-led multidisciplinary intervention program (U-CARE). The primary outcome is the effect on activities of daily living. Secondary outcomes are quality of life, mortality, nursing home admission, emergency department and out-of-hours general practice and caregiver burden.

The second research project is a primary care-based complex care management intervention for chronically ill patients at high risk for hospitalization. The pragmatic cluster randomized PraCMan trial includes 2100 patients from 115 primary care practices in Germany. All patients share a high predicted risk of future hospitalization assessed by insurance claims-data-based risk prediction. The PraCMan intervention is a health care assistant-led care management process including structured assessment, collaborative goal setting, care planning and telephone monitoring.

The number of all-cause hospitalizations after 12 months of intervention acts as primary outcome. Quality of life, mortality, quality of care and costs are secondary outcomes.

In the final part of the symposium we will discuss potential of the interventions, the experiences in clinical practice, and define strategies for elderly care in the future.

#### SY.09 - General Practitioners / **Family Doctors Crossing Borders**, a gift or a burden?

General Practitioners / Family Doctors Crossing Borders, a gift or a burden?

**D.** Aarendonk<sup>1</sup>, N. Kopcavar Gucek<sup>2</sup>, A. Stavdal<sup>3</sup>; <sup>1</sup>EFPC, Utrecht, Netherlands, <sup>2</sup>UEMO, Budapest, Hungary, <sup>3</sup>WONCA Europe, Ljubljana, Slovenia.

Prior to the symposium the organisers will carry out the following activities:

Collecting insights from members of the three different networks (EFPC, UEMO & WONCA) on the question: "What effects do we see at Primary Care level caused by the EC Cross Border Health

February 2012: Announcements via the news-channels of the three different networks, providing the date/place of the workshop, theme, explorative question and link to the LinkedIn Primary Care Forum where insights can be posted and discussed http://www.linkedin.com/groups?about=&gid=2801587

After two months the collected input will be communicated with the key-note speakers of the workshop

Symposium; total 90 min

Starting with an introduction on the Cross Border health directive (7,5 min) based on

Health professional mobility and health systems. Evidence from 17 European countries Observatory Study Series No. 23 Edited by Matthias Wismar, Claudia B. Maier, Irene A. Glinos, Gilles Dussault and Josep Figueras ISBN 978 92 890 0247 9 http://www.euro.who.int/en/home/projects/observatory/publications /studies/health-professional-mobility-and-health-systems.-

evidence-from-17-european-countries

Followed by presentations (each 7,5 min) from the 3 networks (EFPC/UEMO/WONCA) on the question: "What effects do we see at PC level caused by the EC Cross Border Health directive" in which the "receiving versus sending" gradient should be clearly expressed:

(UEMO professional perspective); optional presentation from Portugal, Poland, Czech Republic

(EFPC health system perspective); optional presentations from HWAI (Health Workforce Advocacy Initiative) or NHS Alliance (WONCA quality perspective); optional presentations from Germany, UK or Austria

o 50 minutes discussion on the basis of the different perspectives and input with the presenters as an expert-panel (facilitator to be identified)

o 10 minutes recap with recommendations (How to react on developments caused by the Cross Border Health directive) for national members (of all three networks) and policy makers from European countries by a rapporteur (to be identified)

#### SY.10 - Women's health in primary care (uro-gynaecology and abused women)

#### **SY10**

Symposium uro-gynaecologe in primary care

Radboud university Nijmegen medical centre, Nijmegen, Netherlands.

We would like to organise à workshop About urology and gynaecology in primary care.

I submit my abstract already (treatment by à nurse practitioner in primary care improves urinary incontinence in women) The other speakers are:

À.lagro-Janssen: gender in General practice is About knowledge, skills and attitude. ( is already submitted)

P.Dielissen: how do I become à GP with special interest in urology and gynaecology? Training and accreditation in the Netherlands.

S.Swart: what my training as à PwSI gynaecology and urology has brought me. Physician with special interest, à way to provider higher quality patients care to patients and to stimulate and promote good urological and gynecological practice among other PG's.

K.Damen: primiparae and midwives perspective and attitude towards pelvic floor birth training device. À feasibility study towarts RCT in the Netherlands.

M.Buurman: The pelvic floor demage in pregnancy.

#### SY10.01

Treatment by a nurse practitioner in primary care improves urinary incontinence in wormen

D. Teunissen, M. Stegeman, H. Bor, T. Lagro-janssen; Radboud university Nijmegen medical centre, Nijmegen,

Background: Urinary incontinente (UI) is à common problem in wonen. The management of Ui in primary care is time consument and suboptimal. Shift of incontinente care from general practitioner (gp) to a nurse practitioner maybe improves the quality of care.

Objectives: The purpose of this pre/post study is to determine the effectiveness of introducing à nurse practitioner in UI care and to explore women's respons for not completing treatment...

Method: sixteen trained nurse practitioner treated female patiënte with UI. All patiënts were examined and referered by the GP to the nurse practitioner working in the same practice. At intake the severity of UI (standvik-score), the impact on quality of life (IIQ) and the impressed severity (PGIS) was measured and repeated after three months. Reasons for not completing treatment were documented by the nurse practitioner. Differences beween the intervention and drop-out group were tested by use of à General Linear Model

Result: we included 103 women, mean age 55 years (SD12.6). The severity of the UI improves significantly from 4.89 to 3.40 (P<0.001), as did the impact on daily life (2.54 points, P=0.012). Among the IIQ score the impact on daily activities increased 0.73 points (P=0.032), on social functioning 0.60 points (P=0.030) and on emotional well-being 0.63 points (P=0.031). The PGIS-score improved in 41.3% of the patients. The most important reason for not completing the therapy were lack of improvement of the UI and difficulties in performing the exercities. Women who withdraw from guidance by the nurse practitioner perceived more impact on daily life (P=0.036), in particular on the scores for social functioning (P=0.015) and emotional well-being (P=0.015).

Conclusies: treatment by a trained nurse practitioner positively affects the severity of the UI and the impact on qualitate of life. Women who did not completing therapy suffer from more impact on quality of life, experience not enough improvement and mention difficulties in performing exercises.

#### SY10.02

Urinary incontinence in general practice: the importance of sex and gender

#### T. Lagro-Janssen;

Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands

Gender in general practice is about knowledge, skills and attitudes. Differences are evident in epidemiology, presentation, risk factors, course, coping and (side) effects of treatment.

My question is: is gender an important factor in the management of Urinary Incontinence?

I will, based on several studies at my department, elaborate on sex and gender differences in anatomy (the female continence mechanism is weaker, more vulnerable), prevalence (much more prevalent in women with differences in type of UI), risk factors (differences as childbirth, constipation, prolapse, urinary tract infections), help seeking behaviour (men consult when UI is less serious), and the use of absorbents pads (minority of men use pads).

Next I will focus on the skills as described in de CANMEDS and go into gender differences in communication about UI and in performing internal pelvic examination.

I will end with gender related items of attitudes in patients and doctors.

In conclusion: gender plays a very important role in daily care for men and women with UI.

Quality of care includes a gender sensitive approach.

#### SY10.03

Implementing mentor mothers in family practice to support abused mothers: Study protocol

M. J. W. Loeffen<sup>1</sup>, S. H. Lo Fo Wong<sup>1</sup>, F. P. J. F. Wester<sup>2</sup>, M. G. H. Laurant<sup>1</sup>, A. L. M. Lagro-Janssen<sup>1</sup>;

<sup>1</sup>Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, <sup>2</sup>Radboud University Nijmegen, Nijmegen, Netherlands.

Background: Intimate partner violence is highly prevalent and mostly affects women with negative consequences for their physical and mental health. Children often witness the violence which has negative consequences for their well-being too. Care offered by family physicians is often rejected because abused women experience a too high threshold. Mentor mother support, a low threshold intervention for abused mothers in family practice, proved to be feasible and effective in Rotterdam, the Netherlands. The primary aim of this study is to investigate which factors facilitate or hinder the implementation of mentor mother support in family practice. Besides we evaluate the effect of mentor mother support in a different region.

**Methods/Design**: An observational study with pre- and posttests will be performed. Mothers with home living children or pregnant women who are victims of intimate partner violence will be offered mentor mother support by the participating family physicians. The implementation process evaluation consists of focus groups, interviews and questionnaires. In the effect evaluation intimate partner violence, the general health of the abused mother, the mother child relationship, social support, and acceptance of professional help will be measured twice (t = 0 and t = 6 months) by questionnaires, reporting forms, medical records and interviews with the abused mothers. Qualitative coding will be used to analyze the data from the reporting forms, medical records, focus groups, interviews, and questionnaires. Quantitative data will be analyzed with descriptive statistics, chi square test and t-test matched pairs.

**Discussion**: While other intervention studies only evaluate the feasibility and effectiveness of the intervention, our primary aim is to evaluate the implementation process and thereby investigate which factors facilitate or hinder implementation of mentor mother support in family practice.

#### SY10.04

Perspectives and attitudes of primipara and midwives (in The Netherlands) towards a pelvic floor birth training device - A feasibility study towards a RCT in the Netherlands

K. Damen, T. Lagro-Janssen;

Radboud University Medical Centre Nijmegen, Nijmegen, Netherlands.

Aim: The purpose of this study is to acquire information about the opinions of midwives and primipara in the Netherlands on a birth training device (EPI-No) in order to evaluate the feasibility of a Randomized Controlled Trial (RCT) on the effectiveness of the EPI-No

**Introduction:** Genital tract trauma is a frequent complication of childbirth. Perineal trauma is associated with significant short-term and long-term morbidity. Reducing perineal trauma is therefore important as it ensures a more comfortable maternity period as well as improving the long term quality of life.

The EPI-No birth trainer consists of an inflatable silicone balloon, originally created to stretch and strengthen the pelvic floor muscles by training, which should result in a decrease of perineal trauma. Indeed studies have shown a trend towards a reduction of perineal trauma for the EPI-No, but studies have been small and lacked statistical power. Therefore there is a need for a large RCT on the EPI-No.

Approximately 10 years ago the birth training device was developed, but its usage is still very infrequent. Different studies have mentioned that the prejudices of midwives and pregnant women cause trouble including women in studies, which results in incomplete follow-up. Acquiring insight into the opinions and attitudes of midwives and primipara in the Netherlands on a birth training device can help the inclusion process and prevent the dropout of participants.

**Method:** Sixteen midwives and fourteen primipara were interviewed about their experience with, opinions of and attitudes towards the birth training device. The transcribed interviews were coded and analysed.

Conclusions: In our cohort we observed that .... Midwives and pregnant women hesitate exercise when it comes to the birth trainer. There are several reasons for this: one reason is the need for evidence of effectiveness. When midwives and pregnant women can be convinced of the effectiveness and safety of the birth training device, they will probably use the birth training device more often. Secondly their knowledge of and experience with the device and pelvic floor function has to be expanded to make them more positive towards the birth trainer. There are still some other barriers to overcome, such as the embarrassment both midwife and pregnant women feel regarding the device and the ability to follow the training schedule. A trial is feasible, both midwives and primipara emphasize the need. To reach statistical power midwives need special attention during inclusion according to their prejudices.

#### SY10.05

What my training as a GPwSI Gynecology and Urology has brought me - Physician with Special Interests; providing higher quality patient care to patients and stimulating and promoting good urological and gynecological practice among other PG's

#### S. M. de Swart;

Radboud University Medical Centre Nijmegen, Nijmegen, Netherlands.

In order to become a GPwSI urology and gynecology a two year course was offered. The goal was providing higher quality patient care in general practice through stimulating and promoting good urological and gynecological practice among other PG's.

The first year the curriculum focused on gynecological and urological knowledge and competencies, for example contraception, STDs, menstrual and menopausal problems, bleeding disorders, LUTS, Urinary infections, insertion of IUDs or implants, and pessary treatment.

In the second year the emphasis was on educational, support and leadership competencies, such as GP consultancy, medical guideline development, and making educational programs and

training GP's and other health workers. Furthermore participating in local professional guidelines development with specialists working at the local hospital was recommended.

A personal development portfolio showed evidence of relevant clinical skills and knowledge.

Personally I have become a family doctor with the usual comprehensive family care for my patients plus as a bonus the practice includes the area of special interest as an integrated part of the scope of services provided. Furthermore I have participated mostly in education of GP's and other health workers and in development of local and national guidelines for GP's.

It has given me more job satisfaction than I had originally anticipated and has been a personal enrichment in knowledge and skills

#### SY10.06

GPs with special interest in the Netherlands: education and accreditation

#### P Dielissen:

Radboud University Medical Centre Nijmegen, Nijmegen, Netherlands.

#### Introduction

The growing trend toward better quality of care in general practice and the substitution of care from specialist to generalist is creating pressure for greater specialization in general practice in the Netherlands. GPs with special interest (GPwSIs) in the Netherlands involves the acquisition of knowledge and skills to support their colleagues within their work as a generalist. This requires the development of guidelines, education and accreditation.

#### Method

In the period 2003 - 2005, the rationale, core activities and core competencies of a GP with special interest in urogynecology have been written by a group of GPwSIs in urogynecology. To require these competencies, a two-year competence-based training programme was developed to train GPwSIs in urogynecology. The programme is especially designed for GPs. The training programme consist of modules that include gynaecological and urological problems that are related to and frequently seen by GPs such as urinary incontinence, lower urinary tract symptoms, sexual health and abnormal vaginal bleeding. Also, a GPwSI in urogynecology is trained to be competent at generalist skills including academic development and teaching and training health care professionals. An accreditation process has been developed and criteria of appointment are defined. Training programme evaluation occurred with closed (Likert-scale) and open questions.

#### Results

In the period 2005 - 2012, the training programme has been offered three times. Of 48 GPs, 23 GPs completed the two-year training programme urogynecology so far and 8 GPs are currently following the first year of the training programme. Twenty GPs are registered and appointed as GPwSls in urogynecology. The GPwSls in urogynecology work predominantly in three domains: (1) teaching and training, (2) guideline development and quality of care, and (3) organization of care in the special interest area. GPs evaluated the training positively.

#### Discussion

The introduction of a new cadre of GPwSI in urogynecology in the Netherlands has been successful with the development of a training programme and an accreditation process. The development of GPwSI is a method of increasing the quality of generalist care delivered in general practice. Future attention should be paid to its effectiveness and methods of payment.

#### SY10.07

Is women's perception of postpartum pelvic floor dysfunction and their help-seeking behaviour different in women with different cultural backgrounds?

#### M. Buurman;

Radboud Universitity Medical Centre, Nijmegen, Netherlands.

**Aims**: To explore if women's perception of postpartum pelvic floor dysfunction and their help-seeking behaviour differs when they have different cultural backgrounds.

**Methods**: We will interview 15-20 patients up to one year after vaginal delivery in several family and obstetrician practices in the Netherlands. The interviews will be independently encoded and analysed by three researchers according to a scoring list on determined topics. If necessary, scores and topics will be added during the research period. **Findings**: No definite findings yet. Interviews are being performed at the moment of sending in the abstract **Conclusions**: No conclusions yet. Interviews are being performed at the moment of sending in the abstract

# SY.11 - Medicine in the Third Reichthe new medical education agenda

#### SY11

Medicine in the Third Reich- the new medical education agenda

#### S. P. Reis:

Bar Ilan University, Post Misgav, Israel.

Background: The moral failures of individual physicians and the medical establishment during the Third Reich challenge medical educators in a way like few other events. Incorporating an understanding of medicine and the Holocaust into the medical curriculum can be a valuable way to encourage future physicians to learn from past events that have transformed biomedical ethics and so inform practice and research. Such learning often extend to wider reflection about compassion, cultural humility, the potential to abuse power in Medicine, acceptance of the "other", and the courage required to be a healer, especially in extreme circumstances. The symposium will showcase examples of educational modules that have been developed in the last two decades( such as lectures, seminars, web based modules, visits to museums and memorials, small group discussions, films, witness accounts and survivor interviews). Goal:

- 1. To discuss whether the topic needs to become a required element in all Health Professions curricula.
- 2. To summon participants to assess whether they have given the subject the appropriate place in their educational program.
- 3. To propose teaching methods and ways to tailor programs to institutional needs and goals Speakers (proposed, to be confirmed):
- 1.Dr Patricia Heberer ,AMA program for teaching about Deadly Medicine in collaboration with the US Holocaust Memorial Museum Washington DC: description of Program
- 2. Prof Shmuel Reis, The late T.Spenser Program

for the Study of the Holocaust & Medicine, Rappaport medical School, Technion, Haifa, Israel: The educational elements of the program.

3. Prof Volker Rolcke , Giessen University

Germany: Teaching about Medicine in the Third Reich within the program on History, Philosophy and Ethics of medicine.

4.Dr González-López E. Unidad de Medicina de Familia y Atención Primaria, Departamento de Medicina, Centro de Salud Universitario Villanueva de la Cañada, Universidad Autónoma de Madrid, Madrid, España: Nazism and Medicine. Learning from History Outcome: Participants will reflect on, and consider developing programs that will integrate these lessons in the personal and professional development of practitioners and researchers.

# SY.12 - Evidence crosses borders - how can guidelines do the same?

#### **SY12**

Evidence crosses borders - how can guidelines do the same?

**S. Rabady**<sup>1</sup>, I. Kunnamo<sup>2</sup>, J. Burgers<sup>3</sup>, R. Vander Stichele<sup>4</sup>; 
<sup>1</sup>OEGAM, Vienna, Austria, <sup>2</sup>Duodecim, Helsinki, Finland, <sup>3</sup>Dutch College of General Practitioners, Utrecht, Netherlands, <sup>4</sup>Heymans Institute of Pharmacology, Ghent, Belgium.

#### Background:

Translation and adaptation of recommendations and guidelines has become an important topic. Evidence is widely the same, whereas recommendations and protocols vary according to national and local context. With guideline development being a very resource intensive process the adaptation of existing guidelines seems to make sense, to reduce costs, and also to increase equity in treatment for patients, irrespective of their geographical location. "EbM-guidelines" compendium is an evidence-based point-of-care tool that was originally developed in Finland. It has been translated into English language as an international base version, and consecutively into several other languages. The first adaptation to a different health system has been started 10 years ago for the German speaking countries, another one into French and Dutch was started recently. Rules and procedures have been and are being developed in a permanent learning process on an international basis.

To improve and encourage the process of adaption of evidence based working tools to different contexts, thus providing valid tools supporting the decision making process in every day care on an international basis.

Intended audience: People involved in developing guidelines, point-of-care knowledge resources and health portals

Methods: Short presentations followed by group discussion.

Methods: Short presentations followed by group discussion. Results:

Existing concepts and procedures of adaptation will be briefly presented. Participants from several countries (Finland, Austria, Belgium et.al.) share their practical experiences in adaptation, translation and collaborative development of point-of-care knowledge resources and tools, with common evidence base in Cochrane reviews and EBM Guidelines. Principles and experiences from the ADAPTE collaboration and the Guidelines International Network are discussed. The special needs of general practitioners for quidance scope and contents are highlighted.

# SCIENCE

# SC.01 - Research 01

#### SC01.01

Who is Robert N Braun?

W. V. Fink<sup>1,2</sup>, G. Kamenski<sup>3,4</sup>;

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#### Introduction

The Austrian Robert N Braun was born in Vienna in 1914. He studied medicine and had intended a scientific career at the university clinic of internal medicine, when circumstances in World War II placed him into general practice. With a scientific attitude he reflected the art of practising medicine in primary care and reasoned that there must be a specific science to it, too. During half a century he established a basic knowledge of this medical profession. But his oeuvre falls short of being recognized on an international level.

# Objective/ aim / purpose

We aim to correct the picture of a "lone wolf" by tracing Braun's numerous contacts with general practitioners, researchers and universities in other countries and highlight Braun's findings.

#### Method

Writings, letters and notes, as far as accessible in his bequest (Braun died in 2007) are to be used for documentation of his contacts all over the world.

Reason and content of contacts are matched with Braun's findings and the international development of primary health care at the respective time.

#### Results

General practice morbidity studies and his monographs published 1957 and 1961 (*Die gezielte Diagnostik in der Praxis* and *Feinstruktur einer Allgemeinpraxis*) brought him in contact with representatives of the newly founded Royal College of General Practitioners and with universities overseas. Issues of medical education, raised in Braun's textbook 1970 (*Lehrbuch der ärztlichen Allgemeinpraxis*), were of interest especially in Germany and France. Primary health care, its responsibilities and relation to medical care, in general, is another aspect, which attracted colleagues in other German speaking countries and former eastern countries like Poland and Czechoslovakia. Collaborations with individual researcher in primary health care existed throughout his active live, but citations of his publications are still rare.

**Discussion** Awareness for Braun's scientific work should be raised. Many aspects of his basic knowledge are worth to be considered in today's practice and in primary care research and training. The lack of translations of most of his books, and papers published prior to the electronic area, mainly in German journal, are obstacles which should be overcome with appropriate means.

#### SC01.02

The disease of the patient has the highest impact for sick leave certification - not characteristics of the physicians

K. Starzmann, Dept of Public Health and Community Medicine; Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden.

Background: What is most important when a sick leave certificate is issued is under debate. In Sweden, work related factors as well as characteristics of physicians have been proposed as explanations for the accelerating costs for sick leave benefit. Therefore, the role of the physician was studied in a cross sectional study from a primary care area in south west of Sweden. Method: From Skaraborg primary care database, data from computerised records from all public primary health care centres (PHCC) were retrieved. As data (contacts between primary care

physicians, n=589, and patients, n= 88,780, 18-64 years during 2005) were hierarchically organised multi level analyses with logistic regression were performed. Three levels; patient (age, gender and diagnoses) physician (sex and experience), and primary health care centre (PHCC) were included. The diagnoses on the certificates were validated in a random subsample text from records. Results: Sick leave was certified in 9.0% (mainly musculoskeletal, 3% and psychiatric, 2.3% diagnoses) of all contacts and the mean duration of sick leave was 32 days. There was no difference in rate of prescribing certificates or duration of sick leave between men and women physicians (9.1% vs. 9.0% and 32.1 vs. 32.6 days, respectively). In contrast, the duration of sick leave was associated with the physician's experience (GP 37 days, GP trainees 26 days, interns 20 days and locums 19 days, p<0.001).

The multi-level analysis of the subgroup of patients (n=64,354) employed during 2005, showed that the diagnoses (psychiatric (F03-P-F99-) diagnoses, OR 16, 15-17, musculoskeletal diagnoses (M06-P - M99.0), OR 6.1, 5.8-6.5, respiratory tract diagnoses (J01-J98-P), OR 4.5, 4.3-4.8 and symptom diagnoses (R00- R99-P), OR 1.7, 1.6-1.8) accounted for 95% of the variation of sick leave certification. Only 3% was related to physicians and 1% to the PHCCs. Socioeconomic factors had low impact of sick leave prescription (OR < 2).

Conclusion: The diagnosis of the patient had the greatest impact on prescription of sick leave. The focus should be on treatment of these diseases in lowering the sick leave certification rate.

# SC01.03

# Evaluation of viewpoints of Mother-Father Candidates on Parenthood

S. Kunt<sup>1</sup>, O. Tekin<sup>2</sup>, S. Cebeci<sup>1</sup>, B. Isik<sup>1</sup>, A. Ozkara<sup>3</sup>, **R. Kahveci**<sup>3</sup>, I. Sencan<sup>3</sup>, M. Canbal<sup>1</sup>, A. Sahin<sup>1</sup>;

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Objective: Parenthood is an important period of family practice for biopsychosocial approach. Good parenthood provides an excellent family condition for healthiness. The objective of the study was to evaluate the viewpoints of mother-father candidates on parenthood and draw attention to the issue of parenting within Family Medicine biopsychosocial approach.

Materials and Methods: This was a cross-sectional study using a survey. Between August 2009-August 2010, 250 couples, were included in our study. Firstly the survey factors related to parenting were determined. The statements of the survey about each factor were formed. The answers were measured with 5 fold Likert scale. 'Reability' Analysis' of the survey was done. The statements reducing the Reability were excluded. The survey was applied Factor Analysis. The sentences were grouped under definite factors.

Results: General Reability Cronbach-alpha value was determined as high degree (0.893). In this way 48 statements were grouped under 8 factors. Consequently the final version of the survey was named as "The Survey of Parenthood Outlook". Factors were: 1.Family Environment 2.Aims and Ideals 3.Opinions About Having a Child 4.Physical Sufficiency 5.Opinions About Marriage 6.Economic Status 7.Social Adaptation 8.Self Skill. The factors, on which have been affected by the viewpoints on parenthood, have especially been identified by means of educational level and parenthood knowledge positively.

Conclusion: This issue of education and guidance should be arranged to improve the attainability and prevalence have been proposed. Our survey may be used for evaluation of parenthood outlook and preparation. Our pre-study on parenthood with more comprehensive epidemiological studies might enlighten the future studies.

#### SC01.04

#### The evidence behind pain treatment with thiocolchicoside

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#### Introduction

Pain is a very common reason for consultation in primary care. Acute pain associated with muscle contracture often requires a treatment option that includes a muscle relaxant (MR). The thiocolchicoside (TCC) is often used in association with other drugs as first line therapy. It's considered a Centrally-acting MR but its clinical usefulness is doubtful, according to the Portuguese National Formulary.

#### Objective

This review aims to clarify the evidence of TCC in the treatment of acute musculoskeletal pain (AMP) on oral and / or intramuscular (IM) therapy.

# Methodology

Research of clinical guidelines (CG), systematic reviews (SR) and original studies (OS) in the National Guideline Clearinghouse, Guidelines Finder, Canadian Medical Association Infobase, Cochrane Library, Bandolier, Database of Abstracts of Reviews of Effectiveness, Evidence Based Medicine online, Pubmed and the Portuguese General Directorate of Health, Portuguese Association of General Practitioners and the Index of Portuguese Medical Magazines. MeSH terms used: Thiocolchicoside; Pain. The search was limited to articles published between 2005-2011, in accordance with the objective and applying exclusion criteria: chronic pain, other forms of administration, post-surgical pain. American Family Physician's Strength of Recommendation Taxonomy (SORT) was used to assess the level of evidence.

Only 11 articles were obtained. We have selected one CG and 4 OS. There were no SR. The CG contemplates the treatment of acute nonspecific low back pain (NLBP) and considering the treatment with TCC, it concludes that there's insufficient evidence to make recommendation. In two of the OS, treatment with TCC is compared with another MR, with controversial results. Another OS makes a comparison between topical formulation and IM, with equal results. Only one OS compares TCC with placebo, concluding there is greater reduction of NLBP in the group with TCC (evidence level 2).

### Discussion

There were small samples in OS. There are methodological limitations when comparing main metabolites, with unclear efficacy and scarce comparative studies with placebo. Most studies only address the treatment of NLBP, without mentioning other types of AMP. There's poor evidence to make recommendations about the therapeutic usefulness of TCC in the treatment of AMP. Greater quality randomized clinical trials are needed.

# SC01.05

Determinants of specialist referrals for recurrent respiratory tract infections including otitis media in young children

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#### Background

While recurrent episodes of respiratory tract infections including otitis media (RTIs) are the most frequent reason for specialist referrals during the first years of life, it is unknown to what extent non-medical factors contribute to the decision to refer.

#### **Objectives**

(a) To establish whether medical factors, child-related factors (parent education level, both parents working outside the home, daycare attendance) and physician-related factors (GP's working experience) are independently associated with specialist referral in young children with recurrent RTI, and (b) to evaluate whether general practitioners (GPs) follow current guidelines regarding referral for RTI.

#### Methods

Electronic GP records of all children under two years of age, born 2002 through 2008, were reviewed for RTI episodes using ICPC codes. Characteristics of RTI episodes (i.e. frequency, severity, and duration) and year of graduation of the attending GP were recorded onto standardized forms. Child-related factors were extracted from the prospective "Wheezing Illnesses Study Leidsche Rijn" (WHISTLER) birth cohort study in which the majority of children had been enrolled. The independent association between variables of interest and the outcome (recurrent RTI referral) was analyzed. To evaluate GPs' guideline adherence referral data were compared to national guideline recommendations.

#### Results

GP consultations for 2532 RTI episodes in 1041 children were evaluated. Seventy-eight children were referred for recurrent RTI (3.1% of RTI episodes; 7.5% of children). Medical factors were the main determinants of specialist referral: number of previous RTI episodes (OR 1.7 [CI 1.7-1.7]); severity of previous RTI episodes (OR 2.2 [CI 1.6-2.8]); and duration of RTI episode (OR 1.7 [CI 1.7-1.8]). The non-medical factors daycare attendance (OR 1.3 [CI 1.0-1.7]), and 5-10 years working experience as a GP compared with less than 5 years (OR 0.37 [CI 0.27-0.50]) were moderately associated. Fifty-seven percent of RTI referrals were made in accordance with national guideline recommendations.

#### Conclusion

Specialist referral of young children for recurrent RTI was primarily determined by frequency, severity, and duration of RTIs; the influence of child- and physician-related factors was limited. Yet, only just over half of referrals were made in accordance with guideline recommendations.

#### SC01.06

Nonurgent emergency department visits and emergency department overcrowding: could that be the reflection of weakness in primary care?

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<sup>1</sup>Ankara Numune Training and Research Hospital, Department of Family Medicine, Ankara, Turkey, <sup>2</sup>Ankara Numune Training and Research Hospital, Department of Emergency Medicine, Ankara, Turkey, <sup>3</sup>Ankara Training and Research Hospital, Department of Emergency Medicine, Ankara, Turkey.

Objective:The objective of this study is to determine the relationship between the utilisation rate of primary care and inappropriate use of Emergency Department of Ankara Numune Training and Research Hospital, where more than 178.000 patients admit annually. The study is planned at an early phase of introduction of family medicine model in the city.

Materials and Methods: The study is a prospective study, on a population of 1050 people. We examined the attenders according to urgency of their complaints in three groups: Group I- Obvious urgent emergency causes, Group II- Unspicious emergency causes and Group III - Obvious nonurgent emergency causes. Results: Group I: 39,1 % (trauma 16,5%, syncope 6,6 %, chest pain 5,9 %, deterioration of health 3,2 %, intoxication 2,6%, convulsions 2,2 %, burn 2,1 %). Group II: 32,5% (abdominal pain 15,9 %, headache 6,4 %, dyspnea 5,6 %, hyperthermia 4,6 %). Group III: 28,5% (diarrhea 3,3%, injections, debridement and wound dressing 3 %, nonspecific upper respiratory tract infections 2,2%, other nonurgent causes 20,1 %). When the outcomes of the admissions were evaluated it was determined that 324 patients (30,9%) were discharged after ambulatory care. 40,1% of the patients were hospitalized in one of the department of the tertiary care and 21,6% of the patients were followed in an emergency observation unit. 4,1 % of the patients were undertaken to an emergency operation and 0,7 % of them were died. The rates of the patients who were admitted to the emergency department for the first time and two or more times were 49,4% and 50,6% respectively.

Conclusion: The intensity and unnecessary use of services in our hospital is similar to results of studies from other countries as well

as other hospitals in our country. At this early phase of family medicine model in the city, it seems that there is huge unnecessary use of emergency care with nonurgent cases and chronic conditions, and repetitive admissions by the same patients are common issues. Further study is needed to explore whether these issues would be solved by strong primary care with the new introduced model.

# SC.02 - Clinical Research 01 - Mix 1

#### SC02.01

Assessment of health status of the elderly residents (65 years and above) in Al-Salt Qasabah District Jordan/2008

#### S. M. H. A. Al-jazzazi;

Ministry of Health / Balqa Health Directorate/ Jordan, AsSalt City, Jordan.

#### Background:

Jordan, like other countries in the region where ageing is growing fast , has special characteristics such as strong family obligations and a patriarchal family system, declines in fertility and growth rates, while increases life expectancy, and low infant mortality rate

The main objective of the study is to describe the current health status among elderly, in Al-Salt Qasabah District, Jordan 2008, as well as to identify the relation between the socio-familial and economic factors affecting their current health status.

Methods: A descriptive cross-sectional survey was conducted on a sample of 320 elderly (aged 65 and above) in Al-Salt Qasabah.

Relevant data were collected through face- to- face interviews using a standard questionnaire .Data were entered and analyzed using the SPSS program

Results: Mostly of the sample (68.4.8%) suffered from two and less of classic chronic diseases . Elderly aged less than 80 years old are less likely to have 3 and more of classic chronic diseases. Only (14.3%) had three and more geriatric syndromes and health issues. Aged less than 80 years, were at lower risk to have 3 and more of geriatric syndromes and health issues. 32.5% of elderly needed to take three and more medications daily, female elderly took 3 and more medications daily more than men did.

Moreover, 15.4% of the elderly are dependent in daily living activities. Aged less than 75 years, were at lower risk to become dependent and living in crowding houses, were found to be risk factor to become dependent. Mostly of the sample perceive their health status as good (66.6%) and only 9.7% of elderly perceive their health status as very good. Living alone was at lower risk to perceive their health status as not good and poor.

Conclusions and recommendations Families in Al-Salt Qasabah district remains the most important place where the elderly live and from whom they receive there cares. Mostly of elderly in Al-Salt Qasabah district living healthy. There is a need to develop a standard scale or measure to assess current health status among elderly.

# SC02.02

The role of pedometer as a tool for enhancing weight loss among oil and gas male workers

**A. Latif**, M. Al Jaidah, H. Al Shami, R. Hooper; Qatar Petroleum, Doha, Qatar.

Context: As part of the health & wellness program in Qatar Petroleum, a pedometer device distributed to a group of employees to motivate them to reduce their weight. Pedometers have recently become popular as a tool for motivating physical activity. However, there are no enough data that have evaluated their effectiveness.

Objective: To determine whether using pedometers will be associated with weight loss more than exercise alone.

Design: A prospective cohort study with two volunteers groups, 48 obese employees in each group, the study implemented for 12

weeks. Method: The control group has been motivated through leaflets, posters and verbal instructions regarding exercise, the study group given the same instructions, besides providing Pedometer machine to each volunteer. Height, weight and body mass index (BMI) collected on day 0 and then weight taken monthly among the control group , in the study group, instructions regarding pedometer use given during the first interview, Then steps count and weight measurements were taken monthly for 12 weeks. Data were analyzed by NCSS 2004 statistics package, comparison of means, to test the statistical significance of Body Mass Index changes by unpaired two samples T test.

Results: The mean (SD) BMI change in the control group was 0.41 kg/m2 (0.5) and in the study group the mean BMI change was 0.51 kg/m2 (0.49). The T-test result was not able to reject the null hypothesis &there is no statically significant difference between the BMI changes of the two populations, (P>0.5).

Conclusions: The final result reflects that the Pedometer has a modest effect on BMI reduction, and it is statistically insignificant, and the study may give better results if a bigger sample & prolonged period used.

#### SC02.03

Cardiovacular risk factor and treatment in patients who have suffered a stroke in primary care

**E. Burgos Monegro**, M. Lozano Espinosa, L. Bocanegra Seminario, C. Alfonso Cano, C. Martinez Toldos, J. Arnaldos Herrero, M. Martinez Villalba;

Centro de Salud Docente Murcia San Andres, Murcia, Spain.

**Objectives:** To determine the degree of registration and control of cardiovascular risk factors in patients who have suffered a stroke treated at our health center.

**Material and Methods:** A cross sectional observational study, assessed through the information of the medical history of the patients, 57 cases of confirmed strokes and followed from primary care were analyzed. The variables analysed were age, sex, type of stroke, cardiovascular risk factors recorded (hypertension, diabetes, dyslipidemia and smoking), HbA1c, LDL-c (and its control), and received medication.

Results: Out of the 57 patients, 12 (21.05&) were under the age of 65 and 45 (78.95%) in 32 patients (56.14%), dyslipidemia in 14 (24.56%), diabetes in 23 (40.36%) and smoking in 3 (5.26%). Of the 23 registered diabetic, 13 (46.52%) had registered the glycosylated haemoglobin. The LDL-c was registered in 30 patients (52.63%). Out of these 30 patients, in 16 (53.33%) the level was under 100 mg/dl, in 12 (40%) the level was between 100 and 130 mg/dl, and 2 patients (6.66%) the level was higher than 130 mg/dl. As well as the treatment is concerned, 29 patients (50.88%) were antiplatelet, 3 (5.26%) were anticoagulation, 10 (17.54%) were with double antiplatelet treatment plus anticoagulated, and 15 patients (26.32%) without antiplatelet or anticoagulated treatment.

**Conclusions:** It is necessary to optimize both the registration and the control of the cardiovascular risk factors as well as the treatment of these patients in order to improve their quality of life and their functional prognosis.

#### SC02.04

Electrocardiogram and chest pain - a cross-sectional study

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Introduction: Chest pain is a common symptom in General Practice / Family Medicine and an important reason to ask for an electrocardiogram (ECG).Aim: To evaluate the management of patients who made an ECG after an episode of chest pain attributed to heart.Methods: We conducted an observational cross-sectional study of a consecutive sample of ECG requested by 9 general practitioners of *Centro de Saúde de S. João*, Oporto, Portugal, between 01/03/2007 and 28/02/2009. A structured grid

was filled on the request of ECG in order to characterize clinical reason for request. All ECG were read by GP with experience and classified by Novacode. Six months later, clinical files were handsearched to check about alterations on clinical guidance related to initial episode. The inclusion criterion was the presence of chest pain reported to heart on the motive for asking the exam.Results: We found 160 ECG from 149 patients with chest pain corresponding to 18,4% of all ECG request in same time period. ECG were normal in 60%, and presented minor or major abnormalities in 33,1% and 6,9%. There was no alteration on previous guidance in 66,3% of patients at 6 months follow-up (Cl95%:58,4-73,5%). In 10,6% (Cl95%:6,3-16,5%) there was an alteration of cardiovascular therapeutics, in 12,5% (CI95%:7,8-18,6%) there was a requisition of another test. Referral to hospital care occurred in 9,4% of patients (CI95%:5,3-15,0%). There were 2 deaths. Multivariate analysis with multinomial logistic regression adjusted for age and gender showed that predictors for change of patients' clinical guidance the presence of Diabetes Mellitus (p=0,001), the urgency on request (p=0,002) and the presence of electrocardiographic abnormalities (p<0,001). Conclusion: In most of patients that made an ECG for chest pain in General Practice / Family Medicine, clinical guidance as it was defined previously to office's visit remains unchanged in a medium term. Urgency of request and the presence of electrocardiographic abnormalities are relevant decision factors, suggesting on one hand that ECG is useful for patients with probable coronary disease and on the other hand that there may be other motives for requesting an ECG when likelihood of ischemic disease is low.

#### SC02.05

# Attitudes of Slovak GPs towards smoking cessation counseling

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Background: Tobacco dependence should be considered and managed as chronic relapsing medical disorder. Smoking cessation is highly effective preventive strategy. More than 70% smokers wish to quit. GPs can increase smoking cessation rates among their patients.

Objective: Our purpose was to investigate what are the attitudes of Slovak GPs towards smoking cessation interventions.

Methods: cross-sectional study, questionnaire.

Results: 400 questionnaires were distributed to GPs from different parts of Slovakia attending annual conference with 46.8% respond rate (187), 35% men and 65% women. 50.3% GPs were older than 50 years, 30% had GP working experience more than 30 years. 65% were non-smokers, 22.2% smokers and 12.8% ex-smokers. 66.3% GPs agree with the national guideline recommendation to perform smoking intervention at every visit. However 58% don't follow this guideline. 53.5% believe, that regular intervals or at respiratory problems are enough. Attitudes toward smoking intervention vary from:

- I never initiate the discussion about smoking 2%,
- I do it sometimes, but don't intend to do it more often 12.3%,
- 48% do smoking interventions during regular visits.

GPs consider as important or very important the following barriers:

- Patients don't understand the importance of smoking cessation (89.5%).
- Patients forget advice or motivation quickly (84.7%).

On the other hand the following barriers are of little or no importance:

- l m not paid for the time spent on smoking cessation counselling (62.9%).
- Providing unsolicited information can be harmful for the patient-doctor relationship (62.2%).

Only 5.7% GPs participated at smoking cessation training due to it's unavailability in Slovakia.

Conclusions: Slovak GPs are willing to help their patients to quit smoking. Nearly half of GPs does smoking interventions regularly. Time and financial constrains are of little or no importance for most of them. Availability of smoking cessation courses in Slovakia could increase the rate of trained GPs, thus increasing the rate of GPs who perform smoking interventions effectively.

#### SC02.06

# Economic rationale and immunization in industrialized countries

#### W. Maurer:

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Most immunizations are considered to be cost effective. However there is no consensus on the threshold of the term Qaly (quality adjusted life year) making a medical intervention cost-effective. Due to this problems calculations of numbers needed to vaccinate to prevent one death are used increasingly.

In Austria some childhood immunisations are free of charge, they a bought by the Ministry of Health by tender. These prices are less than the purchase prices for pharmacies. So when calculating the price ex manufacturers for pharmacies this price is similar to the cost of immunization including honoraria for the physician.

Calculating the costs for immunisations in industrialized countries to prevent one death the costs range from  $964 \in$  for influenza immunisation in patients > 65 yrs with chonic heart disease,  $380,937 \in$  for prevention of cervical cancer with HPV vaccines to  $45,500,000 \in$  to prevent one death caused by rotavirus in children < 2 yrs.

Costs to avoid one death due to a traffic accident are accepted if < 1,500,000 €. Costs to avoid death in an avalanche is considered to be highly cost effective, when < 3,000,000 €.

One can identify a gender effect, comparing accepted costs (3 mio €) to avoid death in an avalanche (80% men) with the costs (0.38 mio €) to avoid death due to cervical cancer.

Costs of immunisation strategies should be compared with costs of other preventions to prevent one death in order to implement routine immunisation to avoid as much deaths as possible with accepted costs.

# SC.03 - Research 02 - Training 1

#### SC03.01

Evaluating implementation products using the Balanced Score Card

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Evaluating implementation products using the Balanced Score Card

#### Background:

Regarding to Minzberg's organization typology, the Dutch college of GPs (NHG) is a professional organization. The organization focuses not only on the development of Evidence Based Practice Guidelines, but also on the preparation of materials and methods supporting the implementation of the Guidelines in day to day practice. GPs (part-time practice based, part-time employed by the College) use their own clinical experience in making these implementation materials. As a consequence of the fact that materials are prepared by experienced GPs, evaluation didn't seem essential. Two years ago though, the College started to evaluate products, and found a proper evaluation model useful in a professional organization.

# Method

Several implementation products (e.g. courses, distance-learning materials (e-learning), webcasts, video films, ICT-guidelines and applications, materials for practice nurses) were evaluated using the Balanced Score Card (BSC) as a model.

# As an example:

- **Financial**: the answer to the question "How do shareholders evaluate the product?"
- Customer: answers the question "How do customers see the feel and looks?"
- Internal Business Processes: answers the question "How do colleagues of different departments within the College cooperate on this product?"
- Learning and Growth: answers the questions "Can the authors and the organization continue to improve and create value and how?".

#### Results

Evaluation with the BSC provides both financial and customer data; and insight in bottlenecks in cooperation matters. But even more important: authors can express their view on their own learning and growth and that of the organization.

Conclusion: the Balanced Score Card is useful as an evaluation model for a professional organization, especially because one of the four perspectives is an item on learning and growth.

#### SC03.02

# What makes an MD an excellent teacher? Experts' conceptions

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#### Introduction:

Education in medical schools has traditionally been executed by medical doctors who usually had little or no specific training in teaching. When asked, clinicians will remember some of their own teachers in medical school as outstanding, while others will be remembered as inadequate.

What factors contribute to the excellence of a medical teacher? Is it an innate talent? Does it require certain personality traits or mainly expert knowledge in the medical subject being taught?

The aim of this study is to identify conceptions of behavioural characteristics of excellent medical teachers. We investigate expert-medical teachers' conceptions at two different medical schools and review the relevant literature.

<u>Research question</u> is: what are conceptions of expert- medical teachers of good teaching in medical schools? <u>Method:</u>

### Medical Schools involved:

This research has been carried out at two different medical schools: Stanford University School of Medicine, California, USA and Leiden University Medical Center, Leiden, The Netherlands. *Instruments*:

Semi structured interviews with teachers. We audio-taped the interviews and transcribed verbatim (anonymously).

MD-faculty, 13 at each medical school, teaching in the pre-clinical curriculum. We selected on the basis of perceived excellence in teaching by a senior educator in the respective medical schools. *Data analysis*:

The qualitative method of analysis proceeded from coding all the interviews to categorizing and clustering the participants' answers. Results: the categories that emerged from the data fit well in the framework of Korthagen on teacher functioning.

This 'onion model' of concentric circles distinguishes six levels, from outside to inside: environment, teacher behaviours, competencies, beliefs, identity and mission. Experts' conceptions fell most often in the outer categories of 'teaching behaviours' and 'competencies' and the inner category of 'teacher identity'. Examples of these are: 'An excellent teacher prepares and innovates' (behaviour); 'has the ability to restructure information' (competency); 'is someone who is wise and experienced'(identity). Conclusion: Conceptions of what a good teacher is comprises different dimensions, which fit well into an existing framework. All of these dimensions should be taken into consideration when developing educational programs for medical teachers.

#### SC03.03

Are FP trainers and their host practices any better? Comparing general practice trainers and training practices with non-trainers and non-training practices

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'IQhealthcare, Nijmegen, Netherlands, 'Health Sciences Research Group – Primary Care, University of Manchester, Manchester, United Kingdom.

**Background** Family Physician (FP) trainees are expected to be provided with high quality training in well organized practice settings. This study examines differences between FP trainers and non-trainers and between training practices and non-training practices.

**Method** 512 FPs - 335 FP non-trainers and 177 FP trainers working in 88 non-training practices and 115 training practices respectively - participated in the Dutch FP accreditation program in 2006-2007 using the "Visit Instrument to assess Practice organization (VIP)". There are 369 items in the VIP- tool; 142 at the FP-level and 227 at the Practice level. Analyses were conducted for each level.

Results FP trainers scored higher on 141 of 142 FP-level items, and significantly higher on 47 of these 142 items. 13 Remained significant after correcting for covariates. Training practices scored higher on all 227 items and significantly higher on 61 of the 227 items. 23 Remained significant after correcting for covariates. FP trainers (and training practices) provided more diagnostic and therapeutic services, made better use of team skills and scored higher on practice organization, chronic care services and quality management than non-training practices. FP trainers reported more job satisfaction and commitment and less job stress than non-trainers.

#### Interpretation

There are positive differences between FP trainers and non-trainers in both the level and the quality of services provided by their host practices. Training institutions can use this information to promote the advantages of becoming a training practice and to improve the quality of training settings for Family Physicians.

#### SC03.04

Survey of criteria for selection / maintenance of Specialty Trainers in Family Medicine & General Prcatice in European Healthcare Systems; Results of a study of EURACT Member

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This paper includes results of descriptive study carried out among Council Members at EURACT (European Academy of General Practice Teaching). The purpose was to describe process and criteria whereby candidates are selected to become Specialty Trainers in General Practice, and to describe what criteria they are required to maintain their accreditation as ST Trainers.

Methodology included a questionnaire survey, to EURACT Council members. Profiles of respondents (n=29) indicate a high level of expertise in General Practice Teaching.

Key results are as follows. In the 29 countries for which responses are available, it is estimated there are 30,088 Specialty Trainers. There is variation throughout Europe in criteria used, in the selection and maintaining of accreditation as a Specialty Trainer. 20/29 respondents were able to confirm written criteria for selection of ST Trainers. Such criteria were most likely to be determined by National Colleges of GP (6/29), Health Ministries (6/29), or Professional Medical Associations (3/29). Selection of ST Trainers was most likely to be carried out by University Departments (11/29), or by Health Ministries (6/29).

Almost half of those surveyed indicated candidates were required to submit written information, with only a minority (4/29) indicating a practice visit to the candidates' practice. A majority (18/29) indicated the candidate required to be in practice for a minimum

length of time, the mean being 5.2 years. A majority (19/29) indicated candidates required to be on a Specialist Register.

While there is expected and significant diversity evident in the results of this study, there are clear similarities evident in the manner in which ST Trainers in General Practice are selected, and also basic standards evident in what they are required to provide and maintain in order to maintain their accreditation as ST Trainers throughout Europe.

#### SC03.05

#### Trainers need to be trained

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Municipal primary health care centre doctors supervise medical students as well as postgraduate students as a part of their regular work. Medical skills are not enough for this work, but training and coaching in training is needed. In the university hospital district of Varsinais-Suomi, Finland, two pilot courses for training the trainers were organised by applying the programme of EURACT Training the Trainer -courses. The course teachers were from the Faculty of Education and General Practice discipline of the University of Turku. The courses concentrated in the following areas: learning, teaching, supervising, basic competencies of a general practitioner (GP), assessment and feedback. The courses were organised as teaching days and tasks in between. Participatory learning methods were used according to adult learning principles.

Data and methods: questionnaires for participants were used to evaluate the course after every meeting day, and the first course responded to a large final evaluation questionnaire. Altogether 40 participants submitted an evaluation. Observation was used during the second course as a pedagogic student was doing her master's thesis on this course.

Results: Most participants did not have any previous training in training, even though they supervised pre- and postgraduate students. Evaluation of the course was positive. The participants regarded the training as necessary. They experienced the knowledge and skills adopted important and provided tools for training useful. Understanding and supervising of core competencies of a general practitioner became more effective during the course and easier to demonstrate in supervision. For course faculty it was surprising that the participants were always willing to attend the educational meetings and were active although at the same time they were at a stressful daily clinical work.

Discussion: It is important to provide training courses for general practice trainers, but the content has to fit in the everyday work of a GP. It became evident that GPs need to discuss their own work; and training course can contribute to this issue too.

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# SC03.06

What do European GP/FM teachers' educational needs?

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# Background:

Teachers in family medicine need to learn different teaching methods regarding the variety of practice and teaching settings. The organization of specialist training in family medicine varies throughout Europe and available "training the trainers courses" also shows big variation among countries. EURACT has earlier arranged international courses, regarding these variations. In 2010 a project was launched in order to provide enhanced international courses to support the GP trainers' professional development from

novice to expert. A baseline analysis of the GP trainers' needs and wants was part of this project.

Objective:

The study aim was to identify opinions of expert and novice teachers and see if the educational needs of GP/FM teachers change regarding the teaching setting.

Method:

A combined quantitative and qualitative questionnaire was developed by a group of experienced EURACT members. Three experts and five novice trainers from 15 countries were invited to participate in the study. The open-ended questions were analyzed by empirical thematic analysis using a grounded theory approach Identification of statements, coding, categorization and thematization were done by two researchers in collaboration. A third researcher approved the categorization and thematization independently.

Results:

71 trainers returned the questionnaire. The educational needs of trainers were correlated to their training settings. Novice trainers requested training in teaching skills and how to enhance the learning environment. The experienced trainers requested a better theoretical and practical understanding of topics such as: educational management, adult learning, assessment, conflict management.

Both experienced and novice GP trainers felt, it was challenging to combine theory and practical training in clinical setting. Furthermore they pointed out that a quest for better training should also address problems such as high workload, limited available time, lack of motivation and inadequate regulations.

Novice and expert trainers and trainers from different countries seemed to share views to a large extent.

Conclusion:

Educational needs of the GP trainers from different countries showed very little variation in topics but they seem to be correlate to the GPs actual settings and their level of experience. It seems rational to design "Train the trainers" courses which address different levels of experience.

reduction vs. 3.2%-point (95%Cl 1.4-5.0) and among T2D patients 6.8%-point (95%Cl -0.8-14.5) vs. 3.7%-point (95%Cl 2.1-5.2) reduction, HbA1c <7.0% among T2D patients -2.9%-point (95%Cl -10.5-4.6) vs. 5.3%-point (95%Cl 3.7-6.8) reduction and systolic BP <140 mmHg among BP patients 4.7%-point (95%Cl 0.0-9.5) vs. 5.0%-point (95%Cl 3.9-6.2) reduction.

Conclusion: Our main hypothesis hold: Outsourcing health centres did not lead to lower quality of care in chronic diseases. Most of the indicators improved in both types of centres, the private improved best in reaching the LDL-cholesterol levels and the public in the HbA1c levels.

#### SC04.02

Pay for Performance in Primary Care- Lessons Learnt and Implications for the Future

#### M. C. Wright;

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Pay for performance programs are an increasingly common funding apparatus used in primary health care settings. Theory suggests that by targeting specific activity with financial incentives, improvement in the performance and quality of the health system may be achieved. Pay for performance programs have been introduced in a number of countries, with varying uptake and effectiveness. The structure of these programs and the nature of their related health systems have considerable variability. The author has conducted a literature review looking at recently published evidence assessing the impact and effectiveness of pay for performance programs in primary care. There exists minimal evidence about the overall effectiveness of pay for performance programs in improving the quality of primary care. There is emerging information about effects (both positive and negative) of pay for performance programs on health systems and health care providers. This information may guide implementation of future pay for performance programs.

# SC.04 - Practice Organisation 1

# SC04.01

Quality matters - should we have private or public services in primary care?

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Background: Municipalities are responsible for organizing health care in Finland. Most municipalities run a local health centre, but some outsource the services to private companies, mainly because of difficulties in recruiting GPs.

Attendo MedOne (AM) has produced outsourced primary care in Finland since 2004. The nationwide goal of AM is to enhance primary prevention and care of cardiovascular diseases. The implementation tool has been local process descriptions on coronary heart disease (CHD), type 2 diabetes (T2D), hypertension (BP), dyslipidemia, asthma and smoking cessation. For quality improvement all the AM health centers participate in the Finnish Quality Network (FQN) which is a network that has focused on systematic improvement in the care of cardiovascular diseases since 1994. A common debate in Finland concerns the quality of care in outsourced vs. public health centres. In this study we hypothesized that outsourcing does not lead to lower quality.

Methods: We compared the results of all immerging AM centres (n=7) to all immerging public centres (n=138) joining the FQN during 2005-2008. The follow up measurement took place 3 years later. We measured the change in the proportion of patients reaching the indicator level of good care and run statistical analyses between private and public centres. The indicators were: proportion of T2D and CHD patients with LDL-cholesterol ≤2.6mmol/l, proportion of T2D patients with HbA1c < 7.0% and proportion of BP patients with systolic BP < 140mmHg.

Results:There were no statistical significant differences in the indicators between the AM and public centres: LDL-cholesterol ≤ 2.6mmol/l among CHD patients 1.0%-point (95%CI -6.6-8.7)

# SC04.03

The Quality and Outcomes Framework (QOF): its impact on GPs' principles and practice

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#### Background

Audit culture and managerialism coupled with the evidence based medicine have been the bedrock for gradually controlling doctors' autonomy over the past three decades.

To highlight the changes on the GPs' core values with the adoption of a payment for performance modality.

Method:

A review of literature followed by in-depth interviews with 13 GPs in different regions of the UK.

Results

There has been a shift towards a more biomedical model with little space for a holistic practice and authentic doctor-patient relationship. The practice has moved towards a team-based type of care, since more practitioner nurses and other health care staff has been employed 'get the points' attached to specific disease conditions. Clearly, there has been an increase in medicalising patients' life both through labelling and use of medication rather than non-pharmacological interventions.

Conclusion:

This payment modality has strengthened a scientific-bureaucratic model of practicing medicine which may threaten GPs' core values to the point that is becoming hard to distinguish them from other medical specialities.

#### SC04.04

Trend of referral in the general practice setting in the centre of Portugal: the experience of a health centre

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#### Introduction

Referral is one of the core competencies of general practitioners (GP). In 1992, the European study of referrals from Primary to Secondary care indicated a referral rate (RR) of 5,56% to Portugal. In 2003, the RR related to a health centre in the north of Portugal was 10,11 % and the higher percentage of referrals was to Otolaryngology, Gynecology and Surgery. Objectives

To study the trend of referral to Secondary care, in a Centre of Portugal Health Care Unit, with standardized population indicators, between 2007 and 2010.

Material and Methods

Observational, retrospective, descriptive study using a statistical program to study the informatics generated data of referral in a health centre with 11 doctors and 5 trainees. Calculation of the RR, (n referral/n total consultations) \* 100, and the number of referral by day adjusted to population at the middle of each year (CRA), (n referral\*1000/ population at the middle of the year\*365). We characterized the six specialties with more referrals, for each vear.

#### Results

In 2007, 2067 referrals were registered (14,7% of patients with consultation (PC)); in 2008, 2639 (17% of PC); in 2009, 3125 (18,6% of PC); in 2010, 3100 (18% of PC). The RR and the CRA were 3,93% and 0,34% in 2007; 4,77% and 0,42% in 2008; 5,51% and 0,48% in 2009; 5,64% and 0,46% in 2010. In decrescent order of volume, the specialties with most referrals were Orthopedics, Dermatology, Stomatology, Gynecology, Otolaryngology, Surgery and in 2009 Ophthalmology, in detriment to Gynecology.

Discussion

During the time considered there is growth of RR, to values similar to those of 1992, and of CRA, an indicator of comparability with other contexts. The three specialties with the higher percentage of referrals suggest the need for technical response (orthopedics and stomatology) and clarification / clinical orientation (dermatology). The reduction in referral to Gynecology and the increase to Ophthalmology might reflect technical and scientific options in General Practice performing skills. The volume of referrals and its characterization may improve our knowledge in these areas and about the need for continuing professional development.

# SC04.05

The patient with a rare disease as information liaison between specialist and GP

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# Background and aims

Rare diseases are common in general practice. This might seem a contradiction, but almost each general practitioner (GP) takes care of a patient with one of over 6000 rare diseases. Since 2005 the Dutch College of General Practitioners has collaborated with the Dutch genetic alliance VSOP and other patient organizations in composing 32 brochures with specific information for GPs on rare diseases. The aim of the project is to provide the GP with relevant information at the right time and place. The patient is the carrier of this information. After being diagnosed with one of these 32 rare diseases in hospital, the patient can take the specific brochure to the GP. We now aimed to evaluate the actual use and appreciation of the brochures in daily general practice.

### Methods

Questionnaires, focus groups and workshops were used to evaluate the project among GPs, patients and patient qualitative and organizations. methods assessed These quantitative aspects of the use and appreciation of the brochures in daily general practice.

# Results

In this presentation we will give an overview of the development of the brochures. One brochure is available in English. The evaluation showed that the brochures are useful, are being used and are appreciated a lot by patients and GPs. Nevertheless, the 'patient as information liaison' principle did not seem to be suitable for all patient groups.

# Conclusions

With the patient as a liaison, GPs get the right information at the right time and place when encountering a patient with a rare disease.

# SC.05 - Clinical Research 02 -Diabetes 1

### SC05.01

Atherosclerosis and Inflammation Among Prediabetic Patients

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OBJECTIVE: In prediabetes, the risk of cardiovascular disease and disease has been increased and attention should be focused on its diagnosis and treatment. We aimed to assess carotid intima media thickness CIMT and serum hs CRP levels as estimated markers of subclinical atherosclerosis and inflammation in prediabetic patients.

METHODS: One hundred and eighty six patients were included in our cross sectional study (mean age 50.8±9.2 years; 30.1% male). One hundred and ten patients were defined as prediabetic and seventy six age and sex matched subjects were assigned as control group. Bilateral CIMT measurements and hs CRP levels were evaluated for each patient. Mean CIMT was calculated. Student T test and pearson correlation test were used for statistical analysis.

RESULTS: There were no significant difference between the groups in terms of age and gender. The prevalance of hypertension, hiperlipidemia, angiotensin converting enzyme receptor inhibitors (ACEI) and antihyperlipidemic agents (statins) use were found to be statistically higher in prediabetic group. Among biochemical parameters, serum insulin, fasting glucose and HbA1C levels were significantly higher, serum triglyceride levels were significantly lower in prediabetic group. Left, right and mean carotid intima media thickness and serum hs CRP levels prediabetics were statistically higher among prediabetics (table 1). Hypertension, hyperlipidemia, ACEI and statins use, serum triglyceride and HbA1c levels were not found as predictors for CIMT and hs CRP. There was a positive, significant correlation between left, right, mean CIMT and fasting plasma glucose (r=0.24, p=0.003; r=0.23, p=0.004; r=0.24, p=0.002), and HbA1C levels (r=0.31,p=0.001; r=0.23, p=0.01; r=0.29, p=0.002)

CONCLUSIONS: We found higher CIMT and hs CRP levels as subclinical atherosclerotic markers in prediabetic patients compared to control group. We suggest family physicians to take steps toward recognizing prediabetes and focusing on the intervention of prediabetic status as early as possible for primary prevention of diabetes and cardiovascular disease risk.

# SC05.02

Identification of type 2 diabetes in primary care medical offices in Austria. A multicentre randomized study

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In Austria the prevalence of type 2 diabetes (DM2) increases. Early identification of DM2, initiation of lifestyle changes and treatment are crucial to public health budgets. Only recently, guidelines recommend glycosylated haemoglobin (HbA1c) for diagnosis as potentially being more feasible in primary care offices

(PCO). Prior to publication of guidelines we initiated a study in 8 PCO's measuring HbA1c in comparison to oral glucose tolerance test (OGTT) in subjects visiting PCO's.

During 8 months 3724 persons were screened. Individuals with a history of known DM2 (19.73 %) and of impaired glucose tolerance (IGT, 15.81 %) were excluded as were patients with corticosteroid treatment (3.2 %) or active infection (7.16 %). The inclusion criterion "age  $\geq$  40 years" was fulfilled in 2805. Finally, 573 individuals agreed to participate and filled in a questionnaire. Among these 231 were selected randomly for extensive blood and urine tests.

Using OGTT 10 patients with DM2 were identified (blood glucose at 2 hours ≥200 mg/dl). Mean HbA1c was 5.77 ± 0.64 % and differed significantly from persons with normal OGTT (mean HbA1c 5.07  $\pm$  0.37 %; p=0.0001). Patients with IGT (blood glucose at 2 hours >140 and <200 mg/dl; n = 26) had a mean HbA1c of 5.49 ± 0.54 %. ROC analyses using HbA1c 5.2% revealed sensitivity and specificity of 0.72 each. A specificity of 100 %, i.e. having no DM2 or IGT, was given at HbA1c ≤4.6 %, and a sensitivity of 100 %, i.e. manifest DM2, was given at HbA1c >6.5 %. Univariate analyses of no-DM2 versus IGT + DM2 showed a significant impact on diagnosis of higher age (p=0.0001), body mass index (p=0.0133), systolic blood pressure (p=0.0015), total cholesterol (p=0.0462) and presence of proteinuria (p=0.0017). Using stepwise multivariate logistic regression analysis age (p=0.0007), body mass index (p=0.0118) and proteinuria (p=0.0365) showed to significantly influence the diagnosis of no-DM2 versus IGT + DM2.

In conclusion HbA1c is useful to diagnose DM2 irrespective of fasting state and day time from only one blood sample. The pretest probability to identify IGT or DM2 increases with increasing age, body mass index, systolic blood pressure and proteinuria.

#### SC05.03

The importance of family history and andropometric measurements in progression of type 2 diabetes mellitus and the importance of 30th, 60th and 90th minutes glucose levels in 75-gr oral glucose tolerance test in diagnosis of type 2 diabetes mellitus

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Background and Aim. The aim of this study is to determine risk factors in progression of type 2 diabetes mellitus and the importance of other glucose levels besides 120th minutes in 75-gr OGTT in diagnosis of type 2 diabetes mellitus. Method. A total of 336 patients with impaired fasting glucose (FGL: 100 - 126 mg/dl) in two measurements, enrolled and planned to perform 75-gr OGTT. Family history and antropometric measurements were taken. Glucose and insulin measurements 0th,30th,60th,90th,120th minutes were taken during OGTT. Four groups were performed according to glucose measurements in OGTT;1st group: Normal glucose levels, 2<sup>nd</sup> group: IFG, 3<sup>rd</sup> group: IGT and 4<sup>th</sup> group: DM.Results In 1<sup>st</sup> group the glucose peak is seen in 30th minutes. In second, third and fourth groups' glucose peaks were also seen in 60th and 90th minutes. While BMIs and waist circumferences show high correlation with laboratory tests; on the other hand, family history, gender and age do not show correlation with laboratory tests. Conclusion. When we evaluate the results of OGTT, we should draw attention also 30th,60th and 90th minute glucose levels with 120th minutes.

#### SC05.04

Health status of well-controlled type 2 diabetes patients is severely afflicted by number and type of comorbidities

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Objective: To assess the associations between the number and type of comorbidities and health status in well-controlled type 2 diabetes patients.

Research Design and Methods: Data from 2215 type 2 diabetes patients, between 40 and 80 years old, diagnosed with type 2 diabetes for more than a year, treated by their primary care physician, not on insulin treatment, with HbA1c ≤58 mmol/mol, systolic blood pressure ≤145 mmHg and total cholesterol ≤5.2 mmol/l. Health status was assessed with the Short Form-36 and EuroQol. From the medical records the following comorbidities were retrieved: myocardial infarction, angina pectoris, heart surgery, heart failure, stroke, transient ischemic attack, peripheral arterial disease, COPD, rheumatoid arthritis, osteoarthritis of hip or knee and cancer. Linear regression was used to assess if there was an association between number and type of comorbidities and health status, adjusted for age, gender, ethnicity, education, living alone, BMI and duration of diabetes.

Results: Type 2 diabetes patients with any comorbidity scored significantly lower on all health status domains than type 2 diabetes patients without. Health status decreased with an increased number of comorbidities, except for mental health domains. For patients with both a cardiovascular and non-cardiovascular disease, mainly domains related to physical health were significantly lower than in patients with only cardiovascular or non-cardiovascular comorbidity.

Conclusions: Both the number and type of comorbidities are relevant in relation to reduced health status in well-controlled type 2 diabetes patients. These patients may require a comprehensive treatment, not a simple 'disease management'.

#### SC05.05

Screening for type 2 diabetes and 3 year follow-up in a familiy doctor's praxis

# S. M. Pusarnig;

general practitioner, Vienna, Austria.

Individuals with undiagnosed type 2 diabetes are at a high risk for stroke, coronary heart disease and peripheral vessel disease. Early detection and proper treating may reduce complications. The Finnish Diabetes Risk Score (FINDRISK) questionnaire is a practical screening tool to estimate the diabetes risk.

In 2008, we asked patients of our office to hand out FINDRISK forms to healthy subjects in their personal environment - family,

relatives, neighbours... We rewarded them with small gifts for returning questionnaires, for the 10 persons that brought us the most we had a official ceremony.

Totally we received 1487 answered questionnaires. Against our expectations and former findings there were only 327 (22%) with FINDRISK-score 12 or higher.

High risk subjects were invited to a half-day workshop, in groups of 10 - 12 persons. We performed an Oral Glucose Tolerance Test (OGTT), HbA1c and provided general information during the OGTT - about "things that everybody, healthy or not, should know about diabetes". After 3 hours, the results of the OGTT and HbA1c were handed out and explained while having breakfast together.

From the 327 tested subjects, we found 89 (27%) newly diagnosed type 2 diabetics. They were immediately provided with a meter and information about healthy lifestyle. Because of the inspiring atmosphere in those groups, they seemed less afraid of the diagnosis and rather curious to test their blood sugar.

All of them were invited to participate in the Austrian Disease Management Program "Therapie aktiv", 78 persons (88%) agreed. They took part in a 9 hour Diabetes-Course and are ever since part of our diabetes program.

Outcome after 3-years: 71 (80%) persons still participating, the mean HbA1c is now 6,3% (+/- 0,7), one NSTEMI, 3 STEMIs and 1 stroke occurred in the first 3 years after diagnosis.

46 persons (52%) take part in exercise programs.

We find working with this group of diabetics very inspiring and encouraging. We think that the good adherence and compliance of those patients may result from a personal and motivating approach in the beginning and from their good personal relationship with their "diabetes team in a family doctor's setting".

#### SC05 06

# Will new screening criteria for gestational diabetes mellitus (GDM) increase the diagnosis of GDM?

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# Background

and Āim. Gestational diabetes mellitus (GDM) is a potentially serious condition that affects many pregnancies. Evidences suggest

early detection and treatment improves outcomes. Universal screening for GDM has been a topic of ongoing controversy for many years. In 2011, American Diabetes Association (ADA) published new screening recommendations for GDM, in which after performing a 75-gr oral glucose tolerance test (OGTT), only one abnormal value not two is sufficient to make the diagnosis. In this study, we aimed to investigate the affect of new screening recommendations of ADA on the diagnosis rate of GDM. Method. A total of 145 pregnant women in the second and third trimester of pregnancy who have referred to diabetes outpatient clinic from obstetric outpatient clinic because of having high risk for gestational diabetes mellitus enrolled study. A 75-gr OGTT was performed for all of the pregnant women. Diagnostic cut points for GDM were ≥95 mg/dl for fasting blood glucose (BG), ≥180 mg/dl for 1-h BG, ≥155 mg/dl for 2-h BG according to old diagnostic criteria and 92≥ mg/dl for fasting BG, ≥180 mg/dl for 1-h BG, ≥153 mg/dl for 2-h BG according tonew diagnostic criteria. To make the diagnosis, only one abnormal value was sufficient according to the new criteria, on the contrary two or more according to the old criteria. Results: The mean maternal age was 31.13±5.5 years old. According to old screening recommendations for GDM, 26.9 % of pregnant women with high risk of GDM were diagnosed as GDM, however 26.9 % them have one abnormal value in OGTT and considered as non

diagnostic. According to new screening recommendations, 57.9 % of our study group have GDM. Conclusion. New screening criteria will increase the diagnosis of GDM, but solve the important problem of

the old screening criteria by eliminating the 'borderline' group who have one abnormal value in OGTT and the quandary as to how to treat these patients.

# SC.06 - Research 03

#### SC06.01

The Art and Science of General Practice: What about treating people living in poverty?

**C. Bedos**<sup>1,2</sup>, M. Lévesque<sup>1,2</sup>, A. Levine<sup>1</sup>, C. Loignon<sup>3</sup>, S. Dupéré<sup>4,5</sup>, Listening to others/À l'écoute les uns des autres;

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Timely access to quality care and patient-centred care are crucial issues in Canada. Indeed, people living in poverty experience difficulty in accessing medical and dental services: they tend to consult less often than more affluent people, be less satisfied in

terms of quality of care, and more often express unmet health needs. An important barrier faced by people living in poverty is related to their relationship with doctors: many feel uncomfortable with health professionals and experience stigma. For their part, many health professionals harbour stereotypes toward people living in poverty, blaming them for their difficult situation; they also experience frustrations with this type of patient and often feel powerless to treat them.

In order to improve general dental practitioners' relationship with people living in poverty, we have mainly adopted qualitative methodologies and conducted semi-structured interviews with both people living in poverty and general dental practitioners. All interviews have been audio-recorded and then transcribed; analyses of transcripts have included coding and interpretation. The initial results of these analyses have led to the development of partnerships with anti-poverty groups and professional bodies. One of the purposes of these partnerships was to better translate research into knowledge and develop appropriate interventions.

In our presentation at WONCA, we will describe several elements of our research program. First, we will briefly explain how our partnerships function and describe the advantages of participatory approaches in primary health care research. Second, we will present the main results of our research program. In particular, we will show how general dental practitioners experience treating people living in poverty, what kind of difficulties they encounter, and how they deal with those difficulties. Third, we will describe "graphic stories" that we are developing to help health professionals to better understand poverty. Indeed, in association with graphic artists, we are using narratives of people living in poverty to develop photo novellas and comics. These stories describe the lives of people on social assistance and aim to develop empathy and promote critical reflection among general dental and medical practitioners.

#### SC06.02

# Counselling for physical activity in family practice

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### Background

Physical activity offers major health benefits and counselling for it should be integrated into medical consultation.

The aims of the study were to find out whether patients ask their family doctor for advice and whether family doctors counsel their patients for physical activity.

#### . Methods

To find out whether family practice patients seek advice from their family doctors regarding physical activity, we invited consecutive adult patients (aged 18-75 years) in 5 family practices to fill in a questionnaire. The questionnaire assessed seeking advice and counselling for physical activity in family practice.

To study whether family doctors counsel their patients regarding physical activity, we sent the questionnaire to family doctors who had subscribed to an electronic list of physicians.

Altogether 239 patients and 208 family doctors completed the questionnaire.

#### Results

Of the patients 23% reported having sought their family doctor's advice about physical activity. Elderly patients and those who considered their health poor or had been diagnosed with some chronic disease reported having sought advice more frequently than others (p<0.05). Of the patients 34% reported having received advice about physical activity from their family doctors. In the patients' opinion, family doctors counsel patients with chronic diseases, such as ischemic heart disease, hypertension, diabetes and obesity, more often compared with patients without these diseases (p<0.001).

Of the family doctors over 94% claimed that they counsel their patients with chronic diseases for exercising. Furthermore, family doctors reported that patients with heart problems, diabetes, and obesity seek their advice about physical activity more often than patients with depression.

# Conclusions

Family doctors reported that promotion of physical activity was part of their everyday work. In the patients' opinion, the frequency of counselling for physical activity is low. Both family doctors and

patients considered it important to counsel patients with chronic diseases. The discrepancy between the high level of counselling reported by family doctors and the low level of received advice reported by patients could be related to the counselling style. Further studies are needed regarding how to counsel primary care patients for regular physical activity in a simple and acceptable way.

#### SC06.03

# Characterization of ICPC2 chapter Z use in Primary Care consultations in a ACES (group of health centres) in 2010 in Portugal

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Introduction: Since the Primary Health Care (PC) new paradigm developped (approach to patient-centered problems in a biopsycho-social view and family system) it reshaped clinical management and created the need to a unique classification system - the ICPC2 - which meets the requirements for: reason for visit (S), diagnosis of a problem (A) and outline a plan of procedure (P). Being widespread worldwide, helps clinic and informatic management and investigation. Its chapter Z, extends the PC paradigm and reflects the impact of the European Definition of Family Medicine.

Objectives: Determine the frequency of the encoding of the group Z ICPC2 in (S) (A) and (P) in 2010 in a ACES in Portugal.

Methods: Observational, cross-sectional analysis. After authorization, global results were obtained for each doctor record in 2010 on all Health Centres (HC) in the ACES, by using SAMSTAT statistical program. We studied the components of Z on (S) (A) and (P), using descriptive and inferential statistics by Kruskal-Wallis and OneWayANOVA.

Results: Studied 7 of the 8 HC that compose the ACES. The chapter Z components coded in S represents 0.2% and 0.4% in the components of the total registered in all 17 chapters. The use of Z chapter does not differ statistically by HC but the average number of components per HC has a significant difference in (A)  $13.4\pm17.2~(p=0.008)$  and (S)  $14.0\pm8.4~(p<0.001)$ . There is almost no coding in (P). The six components most registered are Z22, Z14, Z18, Z12, Z20 and Z5 representing on average 62.6% of the Z codes in (A) (40.5 to 85.1%), and 49.2% of Z codes in (S) (18.9 to 94.9%) by HC. Discussion: The coding for Z is 0.2% (S), 0.4% (A) and almost zero in (P), without quantitative and qualitative difference between the HC. The average number of components (13 in A and 8.4 in S) differs by HC, and the six more registered Z components represent 62.6% and 49.2% of A S, within the group Z. No comparative data prior or later. The low prevalence found could motivate coding training for physicians.

#### SC06.04

The preventive consultation in Dutch general practice: implementation experiences and new developments

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Aims and background

In 2010 the Dutch College of GPs developed an evidence based practice guideline for stepwise screening of cardiovascular disease, diabetes and kidney disease, followed by lifestyle advice and treatment: the Preventive Consultation. In 2011 the guideline was published, and the educational materials for GPs (protocol, elearning programme) and the public (website, questionnaire) became available. We conducted a survey to investigate the experiences with the implementation in daily practice. In 2012 new modules on COPD, mental health and cancer will be developed and tested.

Material and methods

Half a year after publication of the guideline an online survey was carried out among the 250 GPs who ordered the educational

materials. Questions were asked about the use of the materials, the experiences with the implementation in daily practice, and the reasons for not using yet the Preventive Consultation.

Results

71 GPs (27%) answered the questionnaire. First results show that 60% of the participants started with the preparation and execution of the preventive consultation in their practice. 22% of the GPs did invite their patients to fill in the screening questionnaire. The most important reasons for GPs who did not yet start with the implementation were: too busy (40%) and lack of reimbursement (40%).

More detailed results about the use of the preventive consultation will be presented.

Conclusions

GPs are very positive about the content of the Preventive Consultation and feasibility of the educational materials. The implementation is still limited, mainly because of lack of time and reimbursement. Preventive consultation modules on COPD and Cancer are under development.

#### SC06.05

# P and Z chapters ICPC-2 Codification - The reality in a Portuguese Health Centre

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INTRODUCTION: Psycho-social problems can lead to profound effects on individual health and familiar dynamics. These aspects are included in the ICPC-2 chapters: Z (social problems) and P (psychological). Nevertheless, the magnitude of the coexistence of P and Z problems in Portugal is unknown.

The coding of these problems should reflect its prevalence, enabling activities of prevention / early intervention, health education and awareness for encoding.

OBJECTIVES: To determine in 3 Family Medicine files, in the first half of 2010:

- Prevalence of the Z chapter coding;
- Prevalence of the P chapter on those that are encoded in the Z chapter and see if it is made whether before or after;
- Components most often encoded in both chapters.

MATERIALS AND METHODS: Observational, descriptive and transversal study.

Population: registered users of 3 Family Medicine files in the 1st half of 2010.

Variables: P and Z codes registered in "A" item (SOAP registration method)

Data collected by "SAM" statistics software on the 23th November 2010. Considered Z codes in the 1st half of 2010 and P codes from 2 months before until 2 months after this period.

Data analysis: descriptive statistics.

RESULTS: 108 out of the 5408 users in the 3 files were coded in the Z chapter, corresponding to a prevalence of 2%. 81% of the patients are women. Codification's activity was: 73% in one of the files, 17% and 10% in the two remaining.

Of these users, 46% were coded in P chapter, 32,6% before,

Of these users, 46% were coded in P chapter, 32,6% before 17,4% after and 50% simultaneously to the Z code.

The Z and P codes more frequent were: Z05 (14%), Z22 (13%), Z20 (10%), Z12 (10%), Z14 (9%), P74 (36%), P76 (28%), P01 (10%) and P06 (8%).

DISCUSSION / CONCLUSIONS: File's sizes and characteristics of users are similar. Therefore, we expected similar codification activity, but this did not happened. So, we must try to understand the reasons and alert clinicians to this aspect.

Before the illness, death or relational problem with family / partner, problems related to adverse working conditions (Z05) are more frequent, which confirms the actual socio-economic status.

#### SC06.06

# Polypharmacy and Inappropriate Drug Use in hospitalized patients

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Background: The share of elderly in Turkish population has been increasing rapidly. Life expectancy at birth is 72 years for men and 77 years for women (WHO 2011). Percentage of the elderly population is 3,4%, 4,0%, 4,6% and 7,2% in 1945, 1965, 1977 and 2010 respectively (population of Turkey is 73.722.988). It's expected that by the time of 2050 Turkey will have biggest elderly population in Europe. It's known that chronic diseases and number of prescribed drugs increase with the age. On the contrary bioelimination rate of many drugs is decreased. Most of the old people have to face polypharmacy, its increasing adverse effects and drug-drug interactions. In 1991 a new criteria called Beer's Criteria is developed which inapropriate drugs in elderly is listed. It's revised in 1997, 2001 and 2003. Although a lot of clinical trials were carried on geriatric population, there is no study with Beer's criteria in Turkey. Aim and Purpose: Aim of this study is to investigate polypharmacy and inappropriate drug use in inpatients of Ankara Numune Training and Research Hospital according to Beer's criteria. Design and Methods: We chose a randomized sample of 503 patients from a total of 3000 patients who were hospitalized between 01.01.2011-31.03.2011. We investigated polypharmacy and inappropriate drug use among these pateints according to Beer's criteria. Results: It is shown that inappropriate drug number per patient is 0,48. 189 (37.57%) patients use at least 1 inappropriate drug (148 patients use 1; 33 patients use 2; 5 patients use 3; 3 patients use 4 or more inappropriate drugs). Most used inappropriate drugs: Non steroid anti-inflammatory drugs (13,91%); long acting benzodiazepines (9,15%); short acting benzodiazepines (0,4%); barbiturates (4,37%); digoxines (4,37%) Conclusions: Drug choice in elderly is extremely important for avoiding unwanted interactions and side effects. The results show that an important amount of inpatients face inappropriate drug use. Primary care physicians should have the role to follow polypharmacy in all patients and follow these patients while they are hospitalized and after their discharge. A holistic approach to such patients is a must.

# SC.07 - Clinical Research 03 - Mix 2

#### SC07.01

Efficiency of the cervical cancer early detection protocol in a health care centre

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CS Fuensanta, Valencia, Spain.

Objective: To assess the protocol of cervical screening tests of a health care centre (HCC)

Methodology: We assessed the cervical screening tests performed in our HCC during the period 2008-2010. Variables: age, nationality of origin, results based on Bethesda System 2001 and follow-up of the non-inflammatory pathology.

Results: Our HCC looked after a population of 6,117 adult women on average in the evaluated period. 18.5% of the women who usually come to the surgery are emigrants. We performed 742 smear tests, out of which 29.8% were in foreign women. Mean age was 39.8 years (SD 12.8), 66% of the women to be less than 46 years old. Smear tests results: 66.8 were normal, in 28% we found an inflammatory pathology, in 4% we suspected non-inflammatory pathology and 1% had an erroneous technique. 30 cases (4%) presented abnormal epithelial cells, such as follows: ASC-US (atypical squamous cells with unknown significance) in 15 cases (50%); ASC-H (cannot exclude HSIL or high grade changes) in 2 cases (6.7%); LSIL (low grade squamous intraepithelial lesion) in 12 cases (40%) and HSIL (high grade squamous intraepithelial lesion) in 1 case (3.3%). Pathology was confirmed posteriorly in 28 cases (93.3%) and 2 women could not be localized. After confirmation: 10 (35.7%) were released home and 18 (64.3%) are still being on follow-up. Pathology was found in 16 cases (53.3%) in Spaniards and 14 (46.7%) in foreign women.

Conclusions: There were 12% of the women visited in our HCC who had a cervical screening test done. The majority of the cervical screening tests (2/3) was performed in young women (<46 years old). Proportionally, the emigrant women took more advantage of this protocol. The abnormal epithelial cells were found in 4% of the cervical screening tests. Proportionally there were detected more pathological tests in foreign women.

#### SC07.02

Assessing the association between intimate partner violence and at-risk drinking in primary care

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#### Introduction

Intimate partner violence (IPV) has physical, psychological and social implications and its long-term mental health consequences may include substance and alcohol misuse. Although GPs are in a key position to implement screening for IPV and brief interventions for alcohol problems, there are limited data from primary care settings in Greece.

#### Aim

The aim of this study was to assess the association between atrisk drinking and IPV in primary care settings.

### **Material and Methods**

661 women were selected randomly among the health users of seven peripheral practices and Health Centres in Northern Greece (mean age = 46.1 years, sd=13.53). The Women's Experience with Battering (WEB) scale, questions from the Behavioral Risk Factor Surveillance System (BRFSS) and the Conflict Tactics Scale (CTS) were used for the IPV assessment. Initially, alcohol consumption was evaluated with a prescreen question. At-risk drinkers were then identified with the Alcohol Use Disorders Identification Test (AUDIT). Psychiatric conditions, medications and drug use were investigated for both women and their partners.

# Results

85.5% of the women were either married or with a partner. According to the WEB and BRFSS, 16.2% experienced psychological battering, 17.1% physical violence and 6.5% sexual violence. Though 25.9% of the women sometimes drank alcoholic beverages and 30.3% mentioned that their partners did so, no significant associations were found between the referred use of alcohol and IPV.

Conversely, 10.4% of the sample was considered as positive screens according to the AUDIT. Women who were at-risk drinkers were 4.4 times more likely (95%CI: 2.58-7.45) to report IPV, 2.8 times more probable (95%CI: 1.60-4.87) to have undergone psychological battering and 3.8 times more likely (95%CI: 1.85-7.83) to have experienced sexual violence in the last five years. Moreover, this group of women had 2.8 (95%CI: 1.52-5.13) and 3.0 (95%CI: 1.68-5.33) more probability to refer shame and fear respectively, due to the actions of their partners.

#### Conclusions

A significant association emerges between women who are at-risk drinkers and those who undergo IPV. It is, hence, important to investigate their relevance further and enable GPs to be prepared to identify them in primary care settings.

#### SC07.03

#### Tonsillitis treatment in primary care: a quality study.

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USF Espaço Saúde, Porto, Portugal.

Introduction: Tonsillitis is a very frequent pathology in medical practice. The diagnosed is based on the presence of tonsillar exudate, tender cervical adenopathy and fever. Nevertheless it has usually spontaneous resolution, the treatment with antibiotics is imposed due to reducing the duration and severity of clinical signs and symptoms, including suppurative complications (eg peritonsillar abscess) and nonsuppurative complications (eg., acute rheumatic fever) as well as Reducing transmission to close contacts by reducing infectivity. Streptococcus pyogenes is the most common cause of bacterial pharyngitis. In the last studies made in Europe, there was no resistence of S. Pyogenes to betalactams. In a study made in Portugal, S. pyogenes is susceptible to penicillin and other beta-lactams but 18.9% were resistant to macrolides. So, first line antibiotical treatment is penicillin IM one dose or oral amoxicillin for 10 days. Cephalosporins can be use in recurrent tonsillitis or beta-lactam hypersensitivity. Macrolides should be use in penicillin allergic patients. The use of amoxicillinclavulanate remains controversial and is not indicated.

Goal: Our main goal is to evaluate the quality of antibiotic treatment in acute tonsillitis

Methods: We gather the antibiotics prescribed by all the physicians in a health centre in the last 3 years (2009 to 2011) when the diagnosed of tonsillitis was made.

Results: We analyzed 178 cases of tonsillitis of which 25 were children under the age of 3 years. The most frequently used antibiotic was amoxicillin-clavulanate (43.3%) for 8 days. Single dose penicillin was prescribed in 19.7% amoxicillin in 15.2% and macrolides in 18.5% .There was only evidence of 2 cases of history of allergy to beta-lactams.

Discussion: We noticed an excessive use of amoxicillinclavulanate. We also found that antibiotics, other than first-line, were used when there was no indication.

### SC07.04

# The effect of physical activity and body mass index on menopausal symptoms

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**Objective:** Menopausal symptoms can affect womens' health negatively. It is important to develop interventions to alleviate symptoms, especially many women no longer prefer hormone replacement therapy in regard with given recent evidence. Although there is conflicting evidence of their effectiveness, physical activity and weight control may be useful for imroving symptoms. The aim of this study is to invastigate the effect of physical activity and body mass index (BMI) on menopausal symptoms among perimenopausal and postmenopausal women.

**Method:** In this cross-sectional study, 305 women aged 45-60 were selected randomly from the list of five family physicians working in the same area. Two scales; Menopause Rating Scale and International Physical Activity Questionnaire and an information questionnaire which includes sociodemographic factors, general health, use of hormone replacement therapy, smoking, menopausal bleeding patterns, physical activity status, weight and height and were used.

Results: Women who were physically active reported better total menopausal, somato-vegetative, psychological and urogenital symptom scores than women who were not active (p<0.05). No difference in vasomotor symptoms were recorded related with physical activity status but significant differences were found for most menopausal symptoms, including sleep, sexual and bladder problems, joint and muscular discomfort and dryness of vagina (p<0.05). BMI was not associated with total menopausal symptoms and with subscales except depressive mood (p=0.009). The most common symptoms were physical and mental exhaustion (76.1%), sexual problems (71.8%) and hot flashes (70.5%). Mean scores of total menopausal symptoms were lower among the participants who were well educated, already working, without chronic

diseases and without chronic use of medications. Smoking was positively associated with somato-vegetative symptoms.

**Conclusion:** Menopausal symptoms are influenced by different factors. Physical activity may play an important role in ameliorating menopausal symptoms and women should be encouraged to become physically active. For primary care physicians lifestyle changes may be an opportunity not to be missed in terms of improving menapousal symtoms as well as preventive medicine.

#### SC07.05

# Chilblains: An evidence-based analysis of pharmacologic options

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#### Introduction

Chilblains, also known as erythema pernio or perniosis, consist of inflammatory concise lesions, caused by excessive cold and humidity exposition, in susceptible individuals. They

represent a worldwide problem, with great social impact, largely recognized in the Primary Care setting. We could not access Portuguese epidemiologic data, but several studies in other nearby countries reveal an incidence of 2 to 6% of general population.

Objectives

Review the existent evidence concerning the treatment of chilblains.

Metodology

We performed a research of data in Evidence Based Medicine websites, using as key-words (MESH terms): "chilblains" and "erythema pernio". Articles were limited to English, Spanish and Portuguese and published from January of 1980 to the present date. The selection process was made through abstract evaluation, and we aimed to include original randomized studies, meta-analysis and case reports, considered to be pertinent on this theme. We excluded studies that were not related to the treatment of chilblains, or were related to other childblains comorbidities (ex. Lupus), and

all paper works we could not access integrally. To attribute a level of evidence, we used the SORT Scale (Strenght Of Recommendation Taxonomy) of American Academy of Family Physicians.

Results

We found 8 articles with reference to 4 therapeutic interventions: vasodilators (diltiazem, nifedipine and pentoxifilin), ultraviolet irradiation (UV), vitamin D, and corticosteroids. Concerning the use of vasodilators, it was found to have a beneficial effect on symptoms, with an evidence level of B (with better results using nifedipine). Corticosteroids have also shown efficacy, but they appear to be less effective than vasodilators and we found less evidence supporting its use, so it was attributed an evidence level of C. Vitamin D and UV did not show to change the clinical course of B disease, and both this treatments received an evidence level of B

Conclusion

Chilblains are a frequent complain and cause pain and disability to its sufferers.

Vasodilators are often the first pharmacologic option, and data collected in this review work, came to support this attitude, since it was the therapeutic intervention that has shown to achieve the best results, with greater evidence supporting the use of nifedipine.

# SC.08 - Research 04 - Training 2

#### SC08.01

Physical activity on medical students

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Background: Physical exercise is an important factor on health promotion and physicians counseling varies with relevance they give to this matter in their own life.

Āim: To characterize physical exercise habits of medical school students' population.

Methods: Baecke's questionnaire, validated for Portuguese language, was applied to students from first three years of Oporto Medical School. This questionnaire divides habitual physical activity on three components: physical activity at work, sport during leisure time and physical activity during leisure time excluding sports.

Results: We got 292 responders corresponding to 38% of population, with a mean age of 19,6 years (SD=3,3 years), 65% of females. Habitual physical activity index was 7,75/15 (Cl95%: 7.62-7.88). Physical activity at work was 2,42/5 (Cl95%: 2,38-2,47), sports was 2,56/5 (Cl95%: 2,47-2,65), and activity during leisure time was 2,77/5 (Cl95%: 2,70-2,83). Males are more active than females (p=0,004), specially in the sports component (p<0,001). There are no differences between academic years but there is a positive correlation with age (r=0,183; p=0,003).

Conclusion: On this 15 points scale, medical students presented a low physical exercise activity index. Attention should be paid to integration of exercise on their activities in order to promote their own health and to enhance interventions on patient's prevention programs.

Key-words: Motor activity, Sports, Medical students; Preventive medicine

#### SC08.02

#### Training health professionals in smoking cessation

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# Background

The first systematic review on training health professionals (HPs) in smoking cessation was published over a decade ago and showed a positive effect on professional performance. However, there was no strong evidence that it changed smoking behavior. Since then, new training programs to support HPs in overcoming frequent mentioned barriers and in helping patients to quit smoking have been developed.

# **Objectives**

To assess the effectiveness of training HPs to deliver smoking cessation interventions to their patients through systematic review.

#### Method

The Cochrane Tobacco Addiction Group register for randomized controlled trials was searched, for interventions in which one of the interventions was training of HP in methods to promote smoking cessation. Outcome measures included point prevalence of smoking cessation after at least six months follow-up in patients smoking at baseline, continued abstinence of smoking cessation, and professional performance of the HPs, such as the number of smokers counseled, receiving self-help materials or nicotine replacement therapy (NRT) and asked to set a quit date. Two reviewers independently assessed studies for inclusion, extracted data on characteristics of the HPs, training, outcome measures, and design and scored methodological quality using a standardized template.

#### Main results

We included 12 studies from 283 citations (13204 smokers for analysis). There was a clinically and statistically significant effect in favor of training of HPs for point prevalence of smoking cessation (OR 1.4 95%CI (1.09, 1.80), *p*< 0.05; random effect model). We

found a clinically relevant, though not statistically significant effect for continuous abstinence (OR 1.65 95% CI (0.92, 2.96), p= 0.09). Training also had a significant effect on all other dimensions of professional performance, with the exception of prescribing NRT, where the analysis crossed the link of no-effect.

**Conclusion** In a systematic review of 12 studies, training HPs to provide smoking cessation interventions has a positive effect on professional performance and cessation rates.

#### SC08.03

Changing Physician Behavior to Achieve Quality Goals: Using Motivational Techniqes for Differing Generational Physicians

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Changing Physician Behavior to Achieve Quality Goals: Using Motivational Techniques for Differing Generational Physicians An essential yet challenging element in the creation of any quality project is the ability to change physician behavior. Previous experience with quality project direction has shown that changing physician behavior is one of the most difficult tasks, yet one critical to project success. Previous techniques to achieve physician behavior change have included peer pressure, mandates, economic incentives and disincentives, education, competition, and appeals to professionalism. With the exception of economic incentives, most of these tactics have been shown to produce minimal and short-lived results in effecting physician behavior change. Motivational interviewing techniques, however, have been used in non-medical settings and have been shown to effect change in personnel behavior. This technique also has been used clinically to effect changes in patient behavior.

Many physicians are familiar with the technique of motivational interviewing to influence patient behavior. Using the motivational change first described by the Prosci Research Corporation in 1998, this project has incorporated these industrial techniques to influence physician behavior. This approach uses ADKAR:

- •Awareness of the need for change;
- Desire to participate and support the change;
- •Knowledge on how to change
- Ability to implement required skills and behaviors; and
- •Reinforcement to sustain the change.

Rather than using a generic motivational behavior change model, the change message needs to be tailored to the prospective audience. By tailoring the message to the specific audience, focusing on their goals and values, a more effective message is delivered. The current United States physician workforce is made up of three generations: Baby Boomers, Gen-X, and the Millennials. Each generation possess differing values, career goals, priorities, and dynamics. This presentation will discuss the unique communication styles that are required to influence behavioral change in these divergent groups.

#### SC08.04

Using photography to improve the care of chronically ill patients living in poverty: the EQUIheaThY project

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**Background:** General practitioners face considerable challenges in delivering care to people living in poverty. While the public and many professional associations recognize the importance of better

addressing social inequities in healthcare, the family medicine curriculum and physicians' skills regarding poverty's impact on healthcare need strengthening.

Objective: To describe how the photovoice method can enhance general practitioners' competence regarding the impact of poverty on healthcare.

Design: Our research project comprised two phases. In the pilot phase, an interdisciplinary group of 4 medical residents, 2 social scientists and 2 family medicine teachers used photovoice to understand the barriers between residents and people in poverty. Photovoice is an innovative participatory action research method using photography to help participants share experience and develop critical consciousness. We conducted six meetings, including two photo session discussions in which participants exhibited photos. Discussions were recorded and transcribed for data analysis. Data reduction, pair debriefing and interpretation supported the data analysis process. The second phase, EQUIhealThY, is a photovoice participatory research design expanding the use of photography with different healthcare providers (GPs, residents, nurses, psychologists, receptionists) and people living in poverty. This ongoing project is being conducted in collaboration with College of Family Physicians of Canada and ATD Quart Monde Canada, an international organization devoted to supporting people living in poverty.

Results: Photovoice was a powerful tool for grasping the complex implications of poverty for health and healthcare. Medical residents identified many deep-rooted barriers between them and people in poverty. Our data demonstrate that the photovoice method has the potential to help healthcare providers recognize prejudice and common misconceptions about poverty. Unexpectedly, during the pilot phase medical residents changed some of their attitudes and started developing and testing new skills with their patients in poverty. We will discuss a variety of processes and outcomes of using the photovoice participatory research approach in primary care organizations. We will present phase 1 results and preliminary phase 2 results of EQUIhealThY at WONCA 2012.

**Conclusions**: Photovoice offers many advantages encouraging the involvement of vulnerable groups in primary care research and for instilling transformative practices into the healthcare system.

# SC08.05

Impact of a 360 degree evaluation in Family Medicine Residency Education through Home Visit Curriculum

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# **Background**

360 feedback assessments are powerful tools for helping individuals improve, grow and develop their interpersonal skills. Our assessments gather information from several people about an individual's or Team's performance as seen by their mentors, self, peers, patients and family members. Faculty have traditionally evaluated Resident Physician's core educational skills without input from patients, family members or peers. The objective of our study is to use 360 degree evaluations to enhance Family Medicine Residency Education through Home Visit Curriculum

Family Medicine Residents perform home visits for their continuity patients as a team based approach. An extensive evaluation tool is used for patient, residents, physician and psychologist. Patient, Family members faculties, residents both self and peers evaluate the Home visit and debriefing session takes place during lunch hour in a restaurant

#### **Objectives**

To measure behaviors and competencies

To provide feedback on how patients, family members, faculties and peers perceive the home visit

to address skills such as listening, planning, and goal-setting to focus on subjective areas such as teamwork, character, and leadership effectiveness

A total of 34 home visits were conducted since March 2010 and all evaluators scored the home visit highly. There was an abundance

of positive feedback and tremendous improvement in team work was noted.

Patients and family members also highly appreciated home visits and almost all patients desired repeat home visits for continued

# Significance/Implications/Relevance

360-degree feedback model gives a multi-lens view of their performance

Use of 360-degree feedback provides a variety of benefits. It creates a much more accurate picture of performance, as it offers an overall assessment of the individual/ team not just a faculty's viewpoint. It allows mentors and residents an opportunity to provide feedback and influence the way the patients are managed and it can create a culture where residents become more ready to commit themselves to seeking and accepting feedback towards better patient care. 360-degree feedback increases the leader's performance because it:

Enhances information quality Targets developmental areas Provides strong motivation Facilitates performance improvement Allows measurement of training effectiveness Enhances self-awareness Supports continuous learning Improves the reliability and validity of performance information

# SC.09 - Practice Organisation 2

#### SC09.01

Assessment of a First-Line Ultrasonographic Diagnostic **Program in Primary Care** 

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Sonography is one of the most versatile methods among imaging techniques. Sonograms can be performed without special requirements and thus they can be carried out at a primary care setting. In previous work we described our clinical experience in implementing a first-line ultrasonographic diagnostic program in primary care. This program has been now evaluated with special reference to its economical outcomes.

#### Methods

Our primary care center attends 34,289 inhabitants. During a oneyear period, two trained medical doctors performed sonographic studies using JazzVison (Toshiba®) equipment. Sonographic examinations were classified likewise: 1) urgent, performing sonographic studies within a 24-hour period and 2) non-urgent studies that are scheduled within a few days.

During the accomplishment of this program we carried out 286 sonographic examinations: 146 (51 %) were abdominal and urorenal studies; 85 (30 %) were thyroid sonograms; 40 (14 %) were soft-parts analyses and 15 (5 %) were miscellaneous ones. The estimated overall cost of these sonograms in a regular radiology department would be 5,205 E. The whole delays in performing sonograms were shortened for 43 ± 21 days among non-urgent studies and for 9 ± 5 days for urgent examinations. Among abdominal and uro-renal sonographic studies, 40 % were considered normal (absence of abnormal observations) while cholelithiasis (11 %) and urolithiasis (13 %) were the more frequent pathologies. Among soft-parts and thyroid sonograms, 14 % and 22 %, respectively, were normal while supraspinatus tendonitis (28 %) and nodular goiter (60 %) correspondingly, were the more common findings among these examinations. Based upon normal sonograms, 74 specialized consultations with an estimated cost of 21 E were saved. Conversely, 212 pathological sonograms saved at least one of the double specialized consultations scheduled. Taken together an additional 6,000 E were saved. It is worthy to mention that we identified several

tumors of different localization: 5 retroperitoneal ones (among them, 4 incidentalomas), 3 bladder malignant tumors, 3 hepatic carcinomas and the presence of hepatic metastasis in one patient. Conclusions

Our clinical and economical data sustains the convenience of a progressive implementation of ultrasonography among the first-line diagnostic arsenal of primary care settings.

#### SC09.02

# Performance of five different C-reactive protein point-of-care tests compared to a laboratory reference standard

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#### Aim and background

Rapid C-reactive protein (CRP) testing is increasingly used in primary care patients suspected of infections. Several different point-of-care (POC) tests are currently available for rapid CRP measurement. Before implementation in daily practice, agreement with the laboratory reference standard should be validated. Also, user-friendliness of the CRP assay is an important issue in daily practice. This study aims to compare the analytical performance and user-friendliness of five different CRP POC tests for implementation in primary care practice.

#### Materials and Methods

All five currently available POC tests available in the Netherlands were evaluated. The diagnostic agreement between the various CRP POC tests and the laboratory reference standard (Olympus AU2700) was assessed using Bland-Altman plots. The user-friendliness of the various CRP POC tests was evaluated by general practitioners (GPs) and GP assistants using a questionnaire that combined available objective information about the device (e.g. size, weight, ICT options, ability to test other biomarkers) with more subjective information, like the ease of operation and perceived risk of errors in the measurement procedure.

# Results

All POC tests showed good agreement with the laboratory standard at low CRP values. However, with increasing CRP values the diagnostic agreement with the standard decreased for all POC tests. In these high CRP regions, Afinion showed a consistent overestimation of CRP values, both Nycocard and QuikRead Go showed a consistent underestimation of CRP values and Eurolyser showed both an overestimation and an underestimation of CRP values.

Afinion, QuikRead Go and Eurolyser were regarded as most userfriendly assays. Also, Afinion and Eurolyser were the easiest to operate, with the least actions to perform a single analysis and had the smallest liability to flaws in the procedure according to the GPs and GP assistants.

# Conclusions

All POC tests showed sufficient agreement with the laboratory standard. Based on our combined findings regarding diagnostic performance and user-friendliness, we recommend Afinion, with successively QuikRead Go, QuikRead 101, Nycocard and Eurolyser Smart as alternatives for use in general practice.

## SC09.03

Producing general practice guidelines using the experience of Practice Exchange Groups (PEG)

# i. CIBOIS-HONNORAT;

MGForm, MIRABEAU, France.

Since the introduction of Continuing Professional Development (CPD), analysis of practice among peers has grown considerably in France.

Practice Exchange Groups (PEG) ask questions concerning actual practice.

Answers do exist, but are not always identified in recommendations as they are too general or ill-suited to the field of practice.

OBJECTIVE: To use the PEG issues, to generate short references, adapted to practice in general medicine. (Structured Critical Evaluation Results: SCER)

METHOD: 50 PEGs over the country. A scientific council (a dozen doctors, in pairs), coordinate their questions, and define appropriate recommendations with regards to daily general practice, in 4 steps: exposing a situation, asking relevant questions, seeking answers, writing the synthesis and updating the bibliography validated in the discipline.

Each subject responded to a question written in 3 parts (for who, what, which outcome?), using a structured approach to identify and assess the literature. The method identifies gaps in the evidence used.

The results are posted on a website available to French-speaking physicians.

We will present the method of this work being written using specific examples.

DISCUSSION / RESULTS: Similar SCER, more oriented towards emergency medicine, exist in the UK. (Best BETs).

Strengths: repositories available to all on a website.

Weaknesses: updating requires close watchfulness with regards to documents, SCER are slow to build, requiring the systematic search and reading of literature, and detailed assessment of the evidence.

CONCLUSION: Work from the PEGs can provide the physician with short answers, accurate, evidence-based, clinical questions from practice.

#### SC09.04

# Identifying High-risk Patients to Better Target Care Management Intervention Programs

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Case-mix can facilitate identifying the patients most in need of care management interventions and recognizing their morbidity profile to ensure more appropriate programs.

Population analyses were performed to assess changes in population morbidity over time and to create a population management plan. Additionally, the ACG System Predictive Models were run to identify and stratify individuals for health management programs. Health education and promotion were offered to the patients with the lowest ACG System risk scores. Patients with moderate risk scores or single chronic disease were offered health coaching resources for lifestyle management to improve health behaviors. Members with multiple chronic conditions and high ACG System risk scores participated in Guided Care, a nurse-led, patient-centered, comprehensive chronic care program delivered in the primary care setting and in the patient's home. Guided Care integrates eight successful innovations in chronic care, including disease management, case management, self-management, geriatric evaluation management, transitional care, lifestyle modification, and caregiver education and support.

The Guided Care Program demonstrated:

- Improved quality of patients' care. Guided Care patients were more than twice as likely as usual care patients to rate the quality of their care highly.
- Reduced use and cost of expensive services. Guided Care patients experienced fewer hospitals days, fewer skilled nursing facility days, fewer emergency department visits, and fewer home health care episodes. Based on current payment rates and Guided Care costs, these differences in utilization produced net savings for payors.
- Reduced family caregiver strain. Guided Care caregivers' "strain" and "depression" scores were lower than the comparison (usual care) caregivers' scores.
- Improved physicians' satisfaction. Compared to the physicians in the control group, the physicians who practiced Guided Care rated

their satisfaction with patient/family communication and their knowledge of their chronically ill patients' clinical conditions significantly higher.

Applying the ACG System to identify and stratify high risk patients for inclusion in care management programs enables better targeting of patients into appropriate levels of intervention programs. Applying the Guided Care Program improved patients' quality of care, physicians' satisfaction with care, efficiency of resource use, as well as led to desirable outcomes for other stakeholders.

patients who were admitted to diabetes outpatient clinic enrolled (mean nage: 32.7 years old, female/male: 38/19). Overall 15.8% of the type 1 diabetic patients were diagnosed as having painful peripheral neuropathy (18.4% in women and 10.5% in men). The 5.4% of DN4+ patients did not aware that they had painful peripheral neuropathy, on the other hand 33,3% of DN4+ patients don't have idea about painful peripheral neuropathy. Conclusion. We should educate type 1 diabetic patients about diabetic painful peripheral neuropathy in order to decrease unawareness.

#### SC09.05

Health promotion in the professional self conception of General Practitioners in Germany

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As a consequence of social and epidemiological changes, demand for professional health care service is rising. In particular, health care at home, or rather primary health care, is becoming more and more important. According to national and international political request, General Practitioners, responsible for the provision of comprehensive and continuing care to every individual seeking medical care, shall take up a key role in it. Primary health care means more than only medical treatment and medical care. It equally includes promoting health, preventing illness, restoring health and alleviating suffering. General Practitioners are in a strategic position to enable people to increase control over their health and its determinants, and thereby improve their health. As the professional associations of General Practitioners declare, health promotion is already part of the doctors' daily routine. But is this really true? Although the term health promotion is frequently used concrete clues about its application or the way it is

But is this really true? Although the term health promotion is frequently used, concrete clues about its application or the way it is used in primary health care have not been found yet. What do General Practitioners themselves mean by using the term health promotion when describing their patient-orientated work? In episodic interviews General Practitioners were asked to describe their daily job routine and their ideas and views about the topic »relevance and practise of salutogenetic-orientated medical care«. The results of this qualitative research, based on the methodology of Grounded Theory, provide insight into the General Practitioners' conceptions of health promotion. In spite of general affirmation there is a strong problem of speechlessness and uncertainness and there are a lot of different concepts. The findings of this study help to give a better understanding about opportunities and problems that could arise when implementing health promotion in professional health care. At the same time they give important clues about needs for further qualification of General Practitioners.

# SC.10 - Clinical Research 04 - Diabetes 2

#### SC10.01

Prevalence of painful diabetic peripheral neuropathy in type 1 diabetic patients attending a diabetes center in Turkey

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Background and Aim. The painful diabetic peripheral neuropathy is one of the important problems that affect the quality of life in diabetics. The aim of this study was to determine the prevalence, risk factors and awareness of painful diabetic peripheral neuropathy in type 1 diabetic patients attending a major Turkish diabetes center.Method.The presence of painful diabetic peripheral neuropathy investigated by using validated DN4 pain questionnaire. Score of ≥4 was considered positive. We divided patients in two groups according to DN4 results as painful DN positive and negative. Results. A total of 57 consecutive type 1

#### SC10.02

Prevalence of painful diabetic peripherial neuropathy in type 2 diabetic patients attending a diabetes center in Turkey

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Background and Aim. The painful diabetic peripheral neuropathy is one of the important problem that affects the quality of life in diabetics. The aim of this study was to determine the prevalence, risk factors and awareness of painful diabetic peripheral neuropathy in type 2 diabetic patients attending a major Turkish diabetes center. Method. The presence of painful diabetic peripheral neuropathy investigated by using validated DN4 pain questionnaire. Score of ≥4 was considered positive. We divided patients in two groups according to DN4 results as painful DN positive and negative. Results. 621 consecutive type 2 diabetic patients who were admitted to the diabetes outpatient clinic, enrolled (Mean age 59±9.9years, female/male: 359/262). Overall 33% of the patients were diagnosed as having painful diabetic peripheral neuropathy. Female gender(p<0.001), low education level(p<0.001), the duration of diabetes(p<0.001) and insulin treatment(p<0.001) were found as significant predictors of painful diabetic peripheral neuropathy. There was not a statistically significant difference between DN4+ and DN- patients according to smoking and body mass index. The 21.4% of DN4+ patients didn't aware that they had painful peripheral neuropathy Conclusion. High prevalance and unawareness ratio of painful in Type 2 diabetic patients was remarkable. Early screening, education and appropriate treatment for preventable risk factors.

### SC10.03

Is office measurements enough for determining blood pressure control in hypertensive type 2 diabetics?

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Background and Aim: Diabetes is classified as a high-risk factor for cardiovascular disease, and when hypertension co-exists with diabetes, not only is the cardiovascular risk magnified, but cardiovascular target organ damages such as silent cerebral infarcts (SCIs) and left ventricular hypertrophy (LVH) may progress. Our aim is to evaluate 24-hour ambulatory blood pressure monitoring (ABMG) in hypertensive Type 2 diabetics who were treated with antihypertensive agents and have blood pressure measurement <130/80 mmHg in office. Method. The hypertensive diabetic patients, which had blood pressure measurement <130/80 mmHg in diabetes outpatient clinic, enrolled the study and 24-hour ambulatory blood pressure monitoring was performed. Results. A total of 23 patients (43% women 57% men) enrolled with the mean age of 53.08 years. When we evaluated the 24-hour ambulatory blood pressure monitoring, we determined that 58.6% of blood pressure measurements ≥130/80 mmHg in the day time period and 65.8% of blood pressure measurements ≥120/70 mmHg in the night time period. Conclusion. In patients with diabetes and hypertension, ambulatory blood pressure monitoring should be performed at least once for the early detection of

nocturnal hypertension (in its most extreme form, a "riser pattern") is very important for preventing cardiovascular events.

#### SC10.04

Follow-up care after a first acute coronary syndrome in type 2 diabetes: what do patients want?

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Background and aims: Both type 2 diabetes (T2DM) and acute coronary syndrome (ACS) are associated with a decreased quality of life and an increase in depressive symptoms. After their first ACS, patients with T2DM may have problems in coping with both T2DM and their heart disease and they may need tailored self-management support. We aimed to investigate the perspectives of T2DM patients and their partners on follow-up care shortly after the first ACS and to explore needs and wishes for self-management support.

Methods: Two semi-structured focus groups with 14 T2DM patients (71% male, aged 61-77 yrs) who recently suffered from a first ACS were conducted. In addition, one focus group with three partners (2 males, aged 64-75) of T2DM patients was conducted. All interviews were transcribed verbatim and analyzed with WinMAX. Results: T2DM patients with an ACS mostly mentioned problems on physical exercise (n=7), sexuality (n=7) and medical treatment (n=8). Fewer problems were experienced on diet (n=1). Furthermore, the patients (n=9) were not satisfied with the type of information and support offered by healthcare professionals. Partners had a lot of concerns about the patients as well (n=3). In general, patients and their partners welcomed a self-management program tailored to T2DM patients with a first ACS; they emphasised the importance to tailor it to the individual patient's home environment.

Conclusion: Patients with T2DM and their partners are in need of tailored support after a first ACS, especially on the topics sexuality, physical exercise, and medication use. They would like to have more information about the combination of diabetes and heart problems as well. At the moment we are preparing a self-management support program tailored to the individual home environment to help T2DM patients and their partners in continuing normal life after a first ACS.

# SC10.05

Assessing risk of dialysis, transplantation or death from renal failure in patients with type 2 diabetes

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Background: End stage renal disease (ESRD) is a growing, serious and expensive problem in type 2 diabetes often leading to dialysis, renal transplantation or early mortality. However ESRD is often preventable by early intervention and tight blood pressure (BP) control, particularly using ARB or ACE inhibitor medications. Aim: To derive a renal risk score to identify those at increased risk to prompt early intervention.

Methods: Prospective open cohort design in primary care. Study population included adults with type 2 diabetes assessed between 2000 and 2006, followed to December 2010. Risk variables included were age, gender, ethnicity, socioeconomic status, smoking, body mass index, BP, serum creatinine (sCr), urine albumin:creatinine ratio (UACR), glycated haemoglobin (HbA1c), lipid profile, previous cardiovascular disease and medication use (e.g. antihypertensives). Primary composite outcome was fatal or non-fatal ESRD event (peritoneal dialysis or haemodialysis for ESRD, renal transplantation or death from ESRD). Cox proportional hazards models were used to calculate hazard ratios (HR) and derive the equation.

Results: 22,615 participants (49% female) were followed for 0.3-11.0 years (median 8 years). There were 505 ESRD events. At baseline: mean age 62 years (SD 13); median duration of diabetes 4 years (IQR 1-9); 7,642 (34%) non-European ethnicity; mean HbA1c 7.6% (SD 1.7); mean sCr 85.0  $\mu$ mol/l (SD 22.3); and 7,423 (33%) had albuminuria. After adjusting for significant risk factors, HR for renal event in the next 5 years was 1.6 (95%CI: 1.3-2.1) with microalbuminuria, 3.6 (2.7-4.9) with macroalbuminuria and 7.5 (5.6-9.9) for those with UACR>100mg/mmol. HR increased 1.32 (1.28-1.36) for each 10  $\mu$ mol/l increase in sCr, 1.04 (1.00-1.09) for each 10mmHg increase in systolic BP, and 1.20 (0.93-1.54) for current smokers compared with non-smokers. Some ethnic groups had significantly increased risk after controlling for other factors (p<0.001). An equation was derived that can be applied to calculate renal risk for individual patients.

Conclusions: A valid renal risk score has been derived for use by primary and secondary care clinicians to assess prospective risk of ESRD events and thus to target prevention and early intervention.

# SC.11 - Research 05

#### SC11.01

Evaluation of the German version of the Patient Activation Measure (PAM13-D) in the primary care setting

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Background: The patients' active participation in their medical care is of growing importance especially in chronic diseases. Thus, there is a need for reliable measurements of patient activation as outcome variable for studies and as an instrument in daily family practice. The Patient Activation Measure (PAM) is a reliable and valid questionnaire to measure patient activation and also available in a short form (PAM13). However, there is no German translation available which was evaluated in German speaking European primary care setting.

The aim of this study is to translate the English PAM-13 into German and to evaluate this questionnaire in the primary care setting.

Methods: The questionnaire was translated by a physician, back-translated by a native speaker and cross-checked by another physician and a psychologist. The translated questionnaire was complemented by demographic questions and the Self-Efficacy Scale. 400 primary care patients from 16 primary care practices in Austria, Switzerland and Germany were consecutively included and completed the questionnaire. Data was analysed statistically for reliability and external validity.

Results: The PAM13-D could be feasibly applied in the primary care setting. At the congress, we will present reliability scores and correlation with the Self-Efficacy Scale. Preliminary results show an acceptable reliability of the PAM13-D.

Conclusion: The German version of the PAM13 may be reliable and valid instrument to measure patient activation. It can be successfully applied in family practice and primary care. Thus, it may be an instrument to use in daily practice and primary care based research.

Acknowledgments: W.J. Herrmann and K. Brenk-Franz are contributed equally as first authors to the presentation.

#### SC11.02

The results of monitoring bio-clinical parameters in a panel of children born as a result of in vitro fertilization vs. a control group - Clinical study conducted over a period of 10 years, between 2001 and 2011

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- The study conducted between 2001 and 2011 included 15 children which resulted from IVF. The panel was compared with a control group consisting of 15 children born in the same period, regular pregnancies. The practice cares for 3200 patients, and between 2001-2011 it registered 1090 newborns out of which 1.6% were a result of IVF.
- Purpose-Monitoring the evolution of bio-clinical parameters in a group of children born as a result of IVF, starting with 2001, when IVF officially became available in Romanian clinics.
- Objectives-To present the complexity and the impact of monitoring, raising and providing medical care to children resulted from IVF pregnancies, the challenges encountered by the family practitioner, the interdisciplinary teams vs. a control group (children born in the same period, normal pregnancies-without IVF).
- In the study conducted over a period of 10 years which included a panel of 15 children (out of which 26,6 % girls and 73,3% boys) and a control group (15 children, comparable sex distribution), we were able to obtain data concerning the evolution of clinical and biological parameters, in different age and health status stages. The following factors were taken into account: type of birth (natural 85% for the control group/C-section-100% for IVF panel), weight at birth (640-4000g), length at birth, Apgar score (1-10), neonatal and perinatal pathology (respiratory distress syndrome, cerebral hemorrhage, pneumothorax, pyopneumothorax), adaptation to extra uterine life (50% for IVF children), alimentation difficulties ex-feeding tube for premature babies (under 1000g and under30weeks), aspiration syndrome. A compared evolution was monitored in the first year of life, of the 1-3 years age period: pathology, the articulate language skills development, social integration -within a collectivity, social adaptation - within same age group, acquiring behavioral and educational norms, affectivity, emotional intelligence (EQ) and intelligence quotient (IQ) at 7 years of age.
- An compared analysis (IVF panel and non-IVF control group) of medical care needs, medical care costs within the healthcare system, the need for cross-specialty teams ( cardiological , nose-ear-and throat, pneumology etc.) was also included.
- Key words-in vitro fertilization, assisted human reproduction, genoma

#### SC11.03

Quality of cardiovascular prevention in individuals at risk and patients with diagnosed coronary heart disease in European primary care: The EPA Cardio study

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### Background

Cardiovascular disease (CVD) and coronary heart disease (CHD) in particular are major causes of premature death in Europe and also important causes of morbidity, contributing substantially to escalating healthcare costs. Cardiovascular prevention can be targeted at three populations: 1) Healthy individuals; 2) individuals at high risk of developing CVD due to known risk factors and 3) patients with diagnosed disease. The aim of this study was first, to compare the quality of prevention and risk factor management between patients with CHD and individuals at risk without diagnosed CVD using common quality indicators and second, to

investigate predictors of the cardiovascular risk at both patients' and their physicians' level

Methods

The international cross-sectional observational study was simultaneously conducted in 10 European countries between 2008 and 2009. Clinical record data were abstracted from 8,928 patients of 10 countries and patient questionnaires were available from 7846 patients of 9 countries. A hierarchical multilevel analysis was performed to adjust results for country and practice origin.

Recording of risk factor levels and lifestyle behaviours and counselling activities were better in the group of patients with diagnosed CHD in comparison to individuals at high risk, e.g. blood glucose levels (77.8% vs 74.8%; p=.001), motivational status of smokers (50.1% vs 39.2%; p=.002. The achievement of risk factor goals was greater in the CHD group than in the risk group: Uncontrolled levels of blood pressure (49.3% vs 34.2%; p<.0001), cholesterol (64.5% vs 32.4%; p<.0001), and BMI (35.6% vs 32.1%; p=.0012). Predictors of reducing cardiovascular risk were medication adherence (p=.003) and Health Related Quality of Life (p=.003). Being single (p<.001) and lower educational level were associated with increasing CVD risk (p<.001).

Conclusions

Adherence to guidelines of cardiovascular prevention in European primary care is quite high in diagnosed patients, lower however in patients at risk. It is a challenge in health care systems to develop innovative strategies to encourage the uptake of risk reduction interventions in the general population. Lateral thinking may be helpful for policy-makers responsible for CVD control, prevention and health promotion to link primary health care and public health services together.

# SC11.04

Implementing family practice research on the island of Crete: a focus on content and research methods.

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The Clinic of Social and Family Medicine has created the Cretan Practice Based Research Network (PBRN) in 2006. The PBRN was endorsed by the 7th Health Region of Crete and it currently consists of 18 GPs working in Primary Health Care (PHC) settings. Since its establishment this research network has developed several research projects either national that mainly focused on diseases monitoring and surveillance or on early diagnosis and management of chronic illness in rural populations or European collaborative studies. The cross sectional studies and the European collaborative projects will be briefly presented, while problems, financial restrictions, strengths and barriers will be reported and allocating time for discussion with participants about their content and research methods. The workshop will attempt to motivate GPs to design and implement research projects even in a an un-favored setting, and as well as to invite them to reflect and discuss their own research questions, experiences and ideas. The following questions will be responded: How can primary care organize research? Is it possible to conduct research in rural and remote areas being implemented? To what extent research in those areas is feasible when financial resources are limited? Which are the skills that should be developed to efficiently evolve research in this setting? Which are the main problems that GPs should expect and what could be the research benefit? This workshop is anticipated to show that research in rural and isolate areas is possible through the coordination and support of a primary care based research network.

#### SC11.05

Knowledge, attitudes and access to healthcare among Maasai and Chagga communities in Tanzania, with a particular focus on hypertension

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Background: Non-communicable diseases are the leading cause of preventable mortality worldwide. Within Africa they are increasingly important due to profound changes in demographics and lifestyle, creating a "double burden" of infectious and non-communicable disease. Hypertension is of particular importance due to its high prevalence and severe complications. Underdiagnosis of hypertension and inadequate access to treatment are major challenges in resource limited settings<sup>1</sup>.

Aims: To assess differences in knowledge regarding hypertension, attitudes towards health systems and perceived barriers to accessing healthcare among Maasai and Chagga communities in the Hai District, Northern Tanzania.

Methods: A cross-sectional descriptive community based study was conducted in two villages, Tindigani and Mudio. These consist of largely Maasai and Chagga populations respectively. After providing verbal consent, 134 participants were interviewed using a structured semi-qualitative questionnaire. Study approval was obtained from the District Medical Officer.

Results: Prevalence of hypertension was higher among the Chagga, as were levels of health knowledge. 68% of Chagga respondents were aware of stroke as a complication of hypertension, compared to only 11% of Maasai. Levels of current medication use were higher in the Chagga sample (42% vs. 33%) but use of traditional medicines lower. Travel time to the nearest healthcare facility was significantly higher for the Maasai, due to road conditions and lack of transport (mean journey time 130 vs. 34 minutes). Maasai respondents felt transport and treatment cost were the main barriers to accessing healthcare. Chagga respondents cited unreliable supplies of medication.

When presented with a range of scenarios more Maasai than Chagga reported they would initially consult traditional healers/birth attendants rather than conventional healthcare.

Levels of awareness and uptake regarding government schemes to reduce healthcare costs were lower among the Maasai. We speculate that this may be related to markedly lower levels of formal education (29% vs 86%).

Conclusions: There are significant disparities in access to healthcare between the two groups. Factors include lower levels of literacy, transport, income, and lack of awareness of funding initiatives. Less access to healthcare was reflected in lower levels of health knowledge.

1. Opie, L.H., Seedat, Y.K. (Circulation, 2005;112:3562-3568) Hypertension in Sub-Saharan African Populations.

#### SC11.06

Is there a rural area in central Europe? A cultural adaption of the Rural Ranking Scale.

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**Introduction** In Germany the discussion, which strategies are the best to face physician shortage in rural areas, is at the beginning yet. To support this discussion process it would be useful to have a definition of rurality from a medical point of view. In New Zealand the Rural Ranking Scale (RRS) has been developed to measure this aspect of rurality.

Aims The objective of the present study was to translate, cultural adapt, and test the quality criteria of the RRS for Germany.

**Material and Methods** The RRS was translated by two researchers separately. Cultural adaption was performed by consensus meeting. To explore the test quality criteria, 724 primary care physicians located in rural area, or urban area by OECD definition where asked to fill out the instrument.

**Results** The translation of the RRS was possible. Three items had to be changed during cultural adaption. The test quality criteria study had a response rate of 34% (n=244), with 44% female respondents and an average age of 54 years. Almost one third of the participants lived in a rural area. Comparing to New Zealand

where the cut off for rurality score is 35, the cut off for rurality in Germany was 16.

**Conclusions** The translation and cultural adaption of the RRS was possible. However, cut off for rurality differs remarkably. Within knowledge transfer, instruments have to be tailored to the country where they are intended to be used. The adapted instrument can be used to gather data about the distribution of medical care and might be helpful to select the appropriate measures against physician shortage in rural areas.

# SC.12 - Clinical Research 05 - Mix 3

#### SC12.01

Menopausal symptoms and Quality of Life among indigenous menopausal women of Borneo Island

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Objectives: To document the common menopausal symptoms and their effect on quality of life among indigenous women of Borneo Island.

Methods: A face to face interview using the MENQOL questionnaire was conducted on 276 indigenous women ,aged 40-65, to determine the mean age of menopause and the common symptoms experienced. (divided into vasomotor, psychosocial, physical and sexual domain).

Results: The mean age at menopause was 50.78± 2.47 years (range 47.3 - 58.2 years). The most common symptoms reported were muscle and joint ache (82.6 %); lack of energy (77.5%); and low backache (77.2%). The typical menopausal symptoms of hot flushes, night sweats, sweating and vaginal dryness were experienced by 42.4%, 34.8%, 29.7% and 49.3% of the women studied.

Perimenopausal women (n = 114) experienced the most physical and psychosocial symptoms while postmenopausal women (n =102) experienced most sexual symptoms. Perimenopausal and postmenopausal women were reported to suffer more compared to premenopausal women (p < 0.001) within the four domains of symptoms (vasomotor, psychosocial, physical and sexual).

Although all of the mean scores of each four domain of the menopausal symptoms were associated with a decrease in quality of life, the vasomotor symptoms had the greatest impact.

Conclusions: The symptoms experienced by menopausal women indigenous to Borneo corresponds to other studies of Asian women however the prevalence of typical and classical menopausal symptoms was lower than that reported in Caucasian women. Reported reduction in quality of life was most strongly associated with the presence of vasomotor symptoms and was most marked in perimenopausal women followed by post

menopausal women. The least reduction in quality of life reported by premenopausal women.

# SC12.02

Simple spirometry as a first line test for asthma diagnosis in primary care

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Rationale: Spirometry is recommended as a first line test for asthma diagnosis in a number of guidelines. The present study was undertaken to determine whether there is sufficient evidence to promote spirometry as a first line test for asthma diagnosis in primary care as compared to methacholine challenge test (MCT). Methods: Medline/Embase were used (search words, spirometry, bronchodilator responsiveness (BDR), asthma diagnosis, methacholine challenge testing, comparison, sensitivity, specificity) to identify articles comparing BDR using simple spirometry to MCT

in the primary care setting from 1960-2011. There were insufficient randomized-controlled studies with comparable design, patient populations and outcomes to carry out a systemic review or meta-analysis. A critical analysis of relevant publications was carried out.

Results: The available publications reviewed suggest that MCT has far greater sensitivity for asthma diagnosis; some studies showing that MCT can include/exclude a diagnosis of asthma at a rate of 60% or greater among primary care patients compared to BDR using simple spirometry. In fact, most asthma patients in primary care present with normal baseline spirometry on initial testing with less than 20% demonstrating BDR with simple spirometry; few studies describe practical strategies for spirometric asthma diagnosis and management when initial spirometric testing is normal.

Conclusions: This study suggests that asthma diagnosis can be confirmed in only a small minority of patients using simple spirometry and BDR compared to MCT. The current evidence does not support simple spirometry as a first line test for asthma diagnosis in primary care. Further studies comparing simple spirometry to MCT for asthma diagnosis confirmation and de-novo asthma diagnosis in primary care are required. Such studies should also address practical considerations related to how test selection may influence costs and outcomes related to asthma care. Current International asthma guidelines should highlight the low sensitivity of simple spirometry for asthma diagnosis compared to MCT, including practical strategies designed to promote management of patients in the interim between suspected and confirmed asthma diagnosis.

#### SC12.03

Breaking assumptions - the perceptions of 'at risk' women offered osteoporosis preventive medication

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The ATOM (Adherence To Osteoporosis Medicines) study is a 2 stage qualitative study of 30 women aged 70-85 in the UK who have been deemed at higher than average risk of fracturing a bone in the next ten years. We interviewed women twice - once soon after they had first been told they were 'at risk', and again after 2 years of potential preventive treatment. The aims of the study are to: (1) ascertain the perceived factors that influence older women to adhere to prescribed medication for fracture risk factors, (2) examine their key perceptions and motivations to adhere to osteoporosis prevention regimens. (3) establish guidance to maximise the possibility of patient adherence in this patient population.

Methods: in-depth interviews of women recruited from a large randomised controlled trial of screening for fracture risk.. Transcripts were coded using NVivo software based on applied framework analysis.

Results: 25 women completed both interviews.. There was considerable variation in adherence, reflecting complex narratives around issues of control, self care, choices, and influence of professionals- also issues such as side effects, co-morbidity and understanding of risks and benefits. The uncertainty of risk, the experience of 'pseudo'diagnosis, and the perception that health professionals were doubtful of the value of the medications seemed to influence uptake of medication as much as more biological issues such as convenience or adverse reactions. Other factors such as personal experience of family or friends with fracture history, and a clear understanding of what the risks and treatment options meant also seemed very central to adherence patterns.

Discussion: The understanding of personal risk of osteoporosis is complex, and can be confused with actual diagnosis and being at risk of falling. Women may be more sceptical of the value of preventive medications in later life, especially if health professionals themselves are not convincing and persistent about their benefits. Low levels of adherence may undermine the health benefits of bisphosphonate treatment. In order to overcome this, health professionals must avoid assuming that a single brief consultation giving a general risk will lead to women being longterm adherent to osteoporosis prevention medications

#### SC12.04

#### Talking of back pain

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Background In primary care many complaint are symptom based diagnoses, like non-chronic low back pain. This complaint is frequently seen in general practice. Besides the advice to stay active, no therapies are known that contribute more than context effects do. The Cochrane collaboration, as well as the Dutch College of General Practitioners (NHG) indicate the need for further research to effects of different therapies for a-specific low back pain. It is known that context factors are important in recovery of the ailment. Context factors are i.a. influenced by patient expectations and affective behavior between patient and provider. Shared decision making is an excellent method to increase patients satisfaction and incorporate patient preferences in treatment plans, which will raise their expectations of chosen therapy.

The Dutch vocational training institute together with the Netherlands Institute for Health Services Research (NIVEL), currently researches the use of shared decision-making followed by a positive reinforcement of therapeutic choice on recovery of patients suffering from a-specific non-chronic low back pain in general practice. Training and decision aid will be presented in the workshop on Saturday 11.00.

**Objective** To measure the effect of a combined communicative strategy by the provider, on recovery of patients suffering from non-chronic a-specific low back pain in general practice in the Netherlands

**Design** A prospective clustered randomised controlled trial. **Setting** 68 general practitioners in the Netherlands **Participants** 244 patients visiting their GP for a new episode of

non chronic a-specific low back pain.

Intervention The intervention group GP's received two trainings of 2,5 hours based on the process steps of Shared Decision-Making as defined by Glyn Elwyn, aiming at deciding on a treatment plan, where patient preferences and expectations were taken into account followed by a positive reinforcement of that plan by the GP. The control group GP's performed care-as-usual.

**Main outcome measure** is level of recovery measured with the Dutch version of Roland Morris Disability Questionnaire. Secondary outcomes: Pain and adequate relief at 2, 6 and 12 weeks after the consultation and duration of complaints measured on each consecutive day with a maximum of 14.

**Results** currently are analyzed and Preliminary results will be presented.

# SC12.05

# On the Control of Riser-Hypertensive Patients

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### Background

Ambulatory blood pressure monitoring (ABPM) can identify four patterns of blood pressure: dipper, non dipper, extremely dipper and riser. In essential hypertension (EH), the riser pattern is an independent risk factor for both incidence of cardiovascular events and their associated mortality. The unique method to evaluate riser patterns among patients with EH is ABPM. Thus, changes in therapeutics must also be monitorized using this approach. ABPM was implemented in our primary care setting four years ago. Since then, 450 ABPMs have been performed and 69 riser subjects identified. We have now evaluated how our professionals control this clinical situation.

Aims

To assess the amount of control of EH among riser patients and to evaluate how our health professionals manage therapeutic changes in riser individuals.

Patients and Methods

This is a retrospective study involving 34,289 inhabitants served in a centre of Barcelona's metropolitan area. EH individuals (450) were recruited and at least one ABPM was performed following guidelines of MAPAPRES

(http://www.cardiorisc.com).

Results

In our set of 450 patients, the pattern of ABPM was: 193 (43 %) dippers, 163 (36 %) non dippers, 69 (13 %) risers and 24 (7 %) extremely dippers. While a good control (blood pressure within normal ranges for ABPM) was observed in 52 % of dipper and non dippers subjects, only 35 % of riser were within good control ranges. The measured cardiovascular risk was high or very high in 35 % of riser individuals. Changes in medication (changes in type of drug used and/or chronotherapy) were introduced in 45 % of riser patients with good blood pressure control and in 100 % of badly controlled ones. A second ABPM was only done in 12 % riser individuals. In these subjects, therapeutic changes successfully modified ABPM patterns in 85 % of cases. Conclusions

Therapeutic changes in riser patients are always introduced when these subjects are badly controlled. These changes are effective in a very high ratio. An additional ABPM to assess effectiveness of therapeutic changes was only performed in some individuals. Thus, implementation of ABPM needs more specific training in riser-hypertensive patient management.

# SC12.06 COPD in Primary Care. Need of improvement

S. Belinchon Moyano, V. Hernandez Santiago, B. Martinez Villena, E. Quiros Navas, C. Vaamonde Paniagua, P. Costa Zamora, G. Mora Navarro, B. Albarracín Moreno, M. Vidal Martinez:

Las Calesas Health Centre, Madrid, Spain.

#### AIMS:

To describe the current situation and management of patients diagnosed of COPD in an urban health center (covering a population over 30.000 patients) and to compare it with the COPD quidelines.

METHODS:

Our study includes all patients diagnosed of COPD in year 2008 in our health center, and the review of their clinical records during the next two years.

RESULTS:

The number of new patients diagnosed of COPD in 2008 was 74. A 77.8% of the COPD labeled patients in year 2008 fit into the diagnosis criteria of COPD.

Mean Age was 67,5 (60,75-83,5). A 83,3% of them were Men while a 16,7 were Females.

55,6% had their respiratory symptoms registered on the clinical records one year after diagnosis. 47,2% had registered the review of their chronic treatment on their records.

72,2% patients had a blood test exam done 2 years after the diagnosis.58,3% patients had been quantified the severity of their illness by spyrometry two years after the diagnosis.

47,2% were referred to secondary care, and 82,4% were followed up by both Primary and Secondary care.

CONCLUSIONS.

The IBERPOC study underlines there is an important underdiagnosis of COPD in Spain. In our study 26,6% of the population was diagnosed, meaning an underdiagnosis of the 73%.

The sex distribution was similar to other studies.

22% patients were diagnosed of COPD without meeting the spyrometric criteria.

Respiratory function tests were not used as much as required in the patient follow-up.

# SC.13 - Clinical Research 06 - Mix 4

#### SC13.01

Evaluation of urinary symptoms and urinary dipsticks as a diagnostic method for Urinary Tract Infections in women

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Introduction: Urinary Tract Infections (UTI) are among the most common infections seen in general practice. Their diagnosis is made on a clinical basis and urinary dipsticks have been recommended as a useful tool for excluding the diagnosis of UTI. However, the accuracy of dipsticks for the diagnosis of UTI as well as their importance in a context of suggestive symptoms has not been well studied in Portuguese people. The authors aimed to analyze and compare the diagnostic accuracy of UTI symptoms and urine dipsticks in women with criteria for uncomplicated cystitis, using urine culture as the standard method.

Methods: Cross-sectional study of women aged 18 to 65 years who met clinical criteria for uncomplicated cystitis. The data were collected using a questionnaire on patient urinary symptoms and recording the results of both urinary dipsticks and culture (considered positive whenever the number of colonies was >10³). Sensitivity, specificity, positive and negative predictive values were calculated for urinary dipsticks and UTI symptoms. Receiver operating characteristic (ROC) curves were plotted to measure the performance of urine dipsticks parameters and severity of UTI symptoms.

Results: Clinical data of 85 eligible patients were analyzed. A positive urine culture was found in 57.8% and *Escherichia coli* was the most frequent pathogen (85.4%). The presence in urine of leukocytes, nitrites or proteins was associated with UTI (p<0.001; p=0.01; p=0.02, respectively). Frequency was also more prevalent in patients with UTI (p=0.03). The sensitivity and the negative predictive value increased combining the presence of leukocyte esterase (LE) and/or nitrites (97.2% and 95.2%, respectively). The area under the ROC curve (AUC) showed that leukocytes had the best performance (AUC=0.80: 95% confidence interval=0.68-0.89). Proteins were the only dipstick parameter with AUC<0.60 (0.56: 95% confidence interval=0.44-0.69). All the UTI symptoms presented AUC<0.60.

Conclusion: Our results suggest that a dipstick test result negative for both LE and nitrites can effectively rule out the diagnosis of UTI. Using only cystitis suggestive symptoms have both low sensitivity and specificity for the diagnosis of an UTI. Because dipstick test is easy to perform and potentially cost-saving, it should be used in the evaluation of these patients.

#### SC13.02

# Electronic cigarette:Is secondhand smoke harmful?

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Background: The electronic cigarette (e-cig) has been proposed as a 'healthier' alternative to conventional cigarette smoking and has become extremely popular worldwide despite the lack of evidence on its safety. E-cigs are used in places where smoking is allowed even though there is no research on the impact that e-cig secondhand smoke (SHS) may have on health. The aim of this

study was to assess and compare the acute and short term effects of e-cig and tobacco cigarette SHS on lung function.

Methods: Fifteen never-smokers (8 males, 7 females, aged 28.87  $\pm$  10.45 years) volunteered to participate. Participants attended three exposure trials in an environmental chamber administered in a random order with a 5-7 days interval. In the tobacco cigarette trial they were exposed to tobacco cigarette SHS for 1 hour. In the e-cig trial they were exposed to e-cig SHS for 1 hour, while in the control trial they were exposed to normal room air. Measurements were performed before, immediately after and 1 hour after each exposure. We assessed lung function by spirometry (FVC, FEV<sub>1</sub>, FEV<sub>1</sub>/FVC ratio, PEF, FEF<sub>25-75</sub>), the fraction of exhaled nitrous oxide (FeNO), exhaled carbon monoxide (CO) and serum cotinine levels.

Results: Immediately after tobacco SHS exposure FEV<sub>1</sub>/FVC ratio was reduced significantly (z = -2.38, P = 0.017) whereas CO (z = -3.31, P = 0.001) and cotinine (z = -2.96, P = 0.003) were increased. The increase in CO (z = -2.99, P = 0.003) and cotinine (z = -2.62, P = 0.009) was observed even one hour after passive tobacco cigarette smoking. Immediately following e-cig SHS exposure FEV<sub>1</sub>/FVC ratio was reduced (z = -1.91, P = 0.05) while cotinine was increased (z = -2.70, P = 0.007). Both indicators had returned to normal levels one hour thereafter.

Conclusions: A 1-hour exposure to the tested e-cig SHS generates a short-term mild lung obstruction and augments serum cotinine levels. A similar exposure to tobacco cigarette SHS generates a short-term mild lung obstruction, as well as prolonged increases in exhaled CO and serum cotinine.

#### SC13.03

#### Life long weight change and metabolic disease

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Diabetics and hypertensives represent the largest proportion of primary care patients under continuous care. Patients with these two components of metabolic syndrome (*MetSy*) are often overweight or obese. While the patients can measure their weight and height by themselves, a medical setting is required to diagnose other *MetSy*-related parameters.

#### Aim

The aim of this study is to analyse the patients' self-recorded lifelong data on weight and compare them according to hypertension and diabetes.

# Patients and Methods

Seven-hundred and fifty-nine elderly people (337men and 422women) between 60 and 70 years of age were eventually selected in different primary care settings.

Data on recent weight and height, retrospective self-recorded data on weights in every decade since the age of 20 y in both genders and data on weight about gravidity and menopause in females were collected. The data of patients with and without diabetes and/or hypertension were compared.

# Results

The current mean body weight and BMI were significantly higher in all groups than at the age of 20 y and less than their maximal values. Compared with the control group, hypertensive men and women were approximately of the same weight in their twenties, but they gained more weight in the  $4^{\rm th}$  and  $5^{\rm th}$  decades of their life. Diabetics started at higher weights. The greatest weight gain was observed between 20-30 years in men, and between 30-40 years in women, and in the last decade prior to diagnosis in both genders. Weight gain in the control group was steady at a lower rate.

Pregnancy related weight changes were higher in diabetic women. There were no differences between groups in the occurrence of menopausal symptoms.

#### Conclusions

Weight gain between 20-40 years of age has a great importance in the aetiology of diabetes. Stable or at least limited weight gain may be a preventive factor. More contribution is expected from primary care physicians in the prevention of overweight and obesity.

#### SC13.04

#### Headache - a practical approach to a common complaint

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#### Introduction:

Headache is a very common complaint with an estimated prevalence of 12 to 16% in Europe and North America. The life quality of patients is clearly affected, with headache being in the list of the 10 leading causes of morbidity.

Objective:

The main objective is to provide skills for the correct evaluation of headache in primary care.

Methodology:

The 90 minutes session will address the following items:

- Diagnosis: particularities of history and physical examination in patients with headache, characteristics of the main types of headaches, differential diagnosis and alarm signals;
- Guidance therapy: medical treatment of the main types of headache and preventive actions;
- Referral: Referral criteria to hospital care;
- Education material for patients

The session will be divided in two parts. In the first part the theoretical aspects of headache will be approached using a lecture method, with computer support. The second part will consist of an interactive analysis of clinical situations, through the techniques of "role-play", and presentation of clinical cases by computer. Results:

At the end of the workshop, all participants should be able to approach appropriately the patients referring headache. Discussion:

Headaches are a major cause of morbidity. The vast majority of them can and should be oriented in primary health care. It is therefore essential that the family doctor be able to address this type of complaint.

### SC13.05

Evaluation of health related quality of life and general symptoms in Hashimoto's Thyroiditis: Are factors other than thyroid function effective? Analysis of preliminary results

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Factors affecting health related quality of life (HRQOL) in Hashimoto's Thyroiditis (HT) are controversial and research on the topic is limited. This study aimed to evaluate the factors that may affect HRQOL and admitting symptoms in a group of patients with HT. For the evaluation of HRQOL; SF-36, Beck Anxiety Scale and Beck Depression Scale were performed on subsequent 57 cases with HT admitting to an outpatient clinic of the endocrinology department of a university hospital. The patients were asked to score their admitting symptoms between 0-10 using a visual analog scale, where 0 stands for no symptom and 10 stands for very severe symptom. A blood sample was collected to analyze thyroid function tests, thyroid autoantibodies and a thyroid sonography was performed for each patient. The most frequent symptoms mentioned were dysphagia, dyspnea, feeling of swelling in the neck, difficulty wearing collared clothing, snoring, night sweating, headache, lightheadedness and pain in the neck. According to SF-36 form assessment, there was a correlation between thyroid volume and mental health (p<0.05; r=-0.31) and physical role limitation (p<0.05; r=+0.30) subscales. As for general symptom evaluation, headache and light-headedness were more severe in patients who were not on L-T4 than those on L-T4 ( p<0.05 and p<0.01, respectively). Correlation analysis revealed a positive relation between the symptom of difficult breathing and thyroid volume (p<0.01; r=+0.39). In conclusion there was almost no relation between HRQOL scales and thyroid hormone levels. But there were significant relations between some HRQOL subscales and thyroid volume in HT cases. Our preliminary results are indicating that morphological factors may contribute to the

symptomatology of HT. Final results of our ongoing study may reveal more information on this topic.

#### SC13.06

Hospitalizations due to stroke in municipalities of Central-West Brazil

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Interventions relating to chronic diseases (especially for hypertension) at primary care level are very effective and is associated with improvement in process indicators or in intermediate results. The rate of hospitalizations due to stroke (a hypertension complication) measures the effectiveness of the healthcare service indirectly. Primary care-sensitive conditions as hypertension are health conditions that can be dealt with through care provided at the first level of care within the healthcare system. The objective was to analyze rates of hospitalization due to stroke as a primary care-sensitive condition. This ecological study on 16 health's district (246 municipalities in the state of Goiás, Central-West Brazil), between 2009 and 2011, used data from the Hospital Information System. Ministry of Health, Brazil. The hospitalization rates were calculated as the ratio between the number of hospitalizations due to stroke and the population between 30-59 years. The data were evaluated according to sex, municipality of residence, whether the individual belonged to the metropolitan region, distance from the state capital and living conditions index. The variability of the rates was evaluated using the t test and ANOVA. A total of 4,138 hospitalizations occurred due to stroke (man 50.84% and female 49.15%). The hospitalization rates was 5.85/10,000 (male: 6.08; female: 5.64). There was not a reduction in hospitalization rates for both males (5.8 to 5.9) as for women (5.8 to 5.3). The highest rates occurred in areas of greatest need of health services including primary health care. The rates of hospitalization due to stroke not decreased in the period analyzed in male population. The rates in female population decreased (not statistically significant) perhaps because the population that benefits most of the services of primary health care. The lack of structure of health services can significantly influence the behavior of these rates.

# SC.14 - Practice Organisation 3

#### SC14.01

Are Personal Health Records new clinical instruments? Comparing Patient's and GPs' opinions

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Personal Health Record (PHR) seems to have great potential in improving the patient empowerment and its use is rapidly increasing.

The TreČ (Three C) is a web-based Personal Health Record recently developed in the Provincia Autonoma of Trento (northeastern Italy).

The TreC System has three main features. First of all it is an *Electronic Health Booklet* of medical reports, instrumental examinations and laboratory test results, directly available from health institutions. Secondly, it is a *Health Diary* where personal observations about the personal story of life and illness may be stored from users; patients can also decide to share this information with their relatives in order to support the active participation of their families in health care process. Finally the System aims at improving relationships and communication between patients and their health care providers.

In 2011 500 citizens were involved in a first experimental phase of the TreC.

The Regional School of Training for General Practitioner has elaborated a research protocol to investigate the opinion on the system of the local GPs and of the first users of the TreC.

Regarding the GPs opinion we have sent all 372 regional GPs a multiple choice questionnaire of 11 items and 36 questions; the goal was to investigate the concerns and expectations about the TreC in relation to their daily practice. The analysis aimed also at correlating personal and professional characteristics with responses. The high response rate (30%) made it possible to have a good overview of GPs' beliefs and attitudes on PHR.

Regarding the patient's opinion we have realized ten in-depth qualitative interviews with the major users of TreC to investigate positive and negative aspects of the use of the PHR, critical areas of the system and expectations of the citizens, especially with regard to the relational aspects with the GP. The analysis of the interviews revealed several critical areas that will need special attention. These areas are expecially related to the concepts of "speed of diagnosis and treatment", "control on the health", "monitoring activities of the doctor". We were also able to collect some critical "sentinel" episodes, which should be considered in the future development of the system.

We will compare the patient's point of view with the GPs' opinion on the strengths and weaknesses of the system.

#### SC14.02

The e-patient is here, what about the e-GP?

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Dutch College of General Practitioners, Utrecht, Netherlands.

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In this workshop we discuss key issues in developing a digital relationship between GP and patient in addition to the existing relationship. Today, the modern patient is empowered, engaged and electronically literate. E-patients with (chronic) diseases have multiple digital tools at their disposal. Abundant health information, online self-care programs, personal health records, communities and social media offer a wealth of possibilities. This is not a future vision but day to day reality; 80% of Dutch citizens use Google prior to consulting their GP. People and thus also patients use the internet as their main source of information and - especially through social media - their platform for communication with peers. How does a GP establish a sound "digital relationship" with his patient? What opportunities and challenges does this offer to GPs? Design & method

In this workshop the Dutch College of General Practitioners (NHG) will introduce key issues in establishing a sound "digital relationship" with the patient:

Why is e-care necessary?

What skills does this type of care require?

What can be said about good practices?

What are common pitfalls?

Experiences in the Netherlands as well as in other countries will be shared. As the field of e-health is very broad, we will focus on three areas of growing interest to most GPs:

- (1) Personal health records, which enable patients to keep record of their own health and wellbeing and share this with, amongst others, their GP;
- (2) Online consultation, e.g. through e-mail, websites and videoconferencing;
- (3) Online self-triage: websites as well as mobile applications can assist in delivering personalised information to the patient, including decision support.

Conclusions

The workshop will contribute to participants' understanding of the possibilities as well as the challenges posed by e-health in general practice. Results can be used to further develop e-health in daily practice.

#### SC14.03

A Study of GPs' and patients attitudes to the doctor's use of the internet and other information sources during the consultation

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**Background:** General Practitioners have clinical information needs beyond what they can hold in their heads. The need for information arises most frequently during the consultation. Up to date evidence based summaries are now available online to help GP's make better informed clinical decisions, and are suitable for use during the consultation.

**Objectives:** To find out the prevalence of GPs in Irelands' use of information sources during the consultation and to ascertain their comfort level, and their perception of the effect on patient confidence of doing so. Secondly, to find out the actual effect on patient confidence of the doctor accessing information sources including the internet during the consultation.

**Methodology:** A 23 item postal questionnaire sent to a random sample of 300 GP's in Ireland. Simultaneously a 19 item questionnaire was offered to 318 patients aged 18 and over and to adults accompanying children in three practices (one urban, one rural, one mixed). Response rates were 59% for GPs and 77% for patients surveyed.

Results: GPs consulted formularies most frequently (86.2% consulting at least weekly) followed by internet medical sites (53.8% at least weekly), colleagues (29.2% at least weekly), Google/Wikipedia (26.6% at least weekly) and textbooks (20.1% at least weekly). 75% of GPs were somewhat or very comfortable consulting internet medical sites, compared with formularies (96%), colleagues (87.5%), textbooks (69.8%) and Google/Wikipedia (42.9%). GPs perceived that for the doctor consulting all resources except Google/Wikipedia, more patients would have their confidence increased than decreased.

Patients' confidence was increased for doctors' use of formularies, colleagues and textbooks, and decreased for use of internet medical sites and Google/Wikipedia. Contrary to GP's perception, more patients lost in confidence than gained in confidence for the doctor consulting an internet medical site. (p = 0.0001)

**Conclusions:** Evidence based clinical summaries available through internet medical sites are an effective way of general practitioners meeting their information needs during the consultation. Many GPs in Ireland are using these resources and perceive that their patients' confidence is increased as a result. This study shows more patients losing confidence than gaining in confidence when a GP consults an internet medical site.

#### SC14.04

Motivation, key point for nurses leading the management and resolution of spontaneous visits in primary care

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A cornerstone for achieving an excellent organization within the health system is to manage effectively the spontaneous visits that have increased in recent years. Two years ago we created a service where a nurse was responsible for management and resolution of spontaneous visits in a primary care health center, showing that, giving nurses more responsibility and autonomy in the management of spontaneous visits, excellent results were produced. Two years later, after closing this service for purely economic reasons, we have studied whether these good results were maintained by other nurses including this task to their daily practice. Material/Method: This is a comparative study of nursing's resolution ability of spontaneous visits in primary care in which we compare the results obtained by a nurse who was the only responsible for these visits from December 2009 to February 2010 (first period) versus the results produced by several nurses from December 2011 to February 2012 (second period). For the Statistical Analysis SPSS 11.0 was used. It was used measures of central tendency and dispersion for quantitative variables. For comparison of data was used chi-square test for qualitative

variables. Results: In the second period, only 9.14% of all the visits were related to acute demand protocols. In the second period the average of spontaneous visits for protocolized reasons only reached 29% of visits that occurred for the same reason in the first period. Nursing resolution is similar to the first period reaching 71 %. Conclusion: More responsibility and resolution capability of nurses produces good health and organizational results and still they are better if a single nurse is responsible because of her greater motivation being her primary function. The fact that only 9,14% of all visits were spontaneous, means that nurses spend too much time on visits with appointments having little time for unexpected visits which can be managed by nurses with great results. The resolution remains constant because visits realized in the second period were filtered through the admissions staff, noting down only visits that were going to be solved by nurses, which leads to reduce the total number of unexpected visits.

## SC14.05

HAweb, the Dutch GPs professional network: first results after launch

# K. H. Njoo;

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#### Background and aims

The Dutch College and the Dutch Association of GPs collaborated in buildingtheir own professional network for GPs only. The aim was to facilitate networking and collaboration among peers. Therefore a complete set of tools were integrated in HAweb: a personal dashboard, discussion groups, filesharing, writing documents together and exchanging news and information between peers. This presentation will adress the lessons learned while building the network, the evolution of the network in its first phase and how the Dutch GPs adopted their network.

- Methods

  1. Yearly questionnaire for college members before start of HAweb
- 2. Focus group in prototyping phase and user groups during testing
- 3. Monitoring network statistics
- 4. Yearly questionnaire after start of HAweb Results
- 1. Yearly Questionnaire amongst GPs before launch of HAweb (n=646, respons rate 61%): Respondents feel the need to interact with colleagues. Although 46% participated in existing social networks, they were reluctant to use these social networks for professional collaboration and didn't consider them as important for their work as a GP.
- 2. Before and during the prototyping phase, a focusgroup of GPs and practice assistants/nurses were asked for their input. In may 2011 more than 30 existing discussion and working groups were invited to test the beta version of HAweb. Their feedback was essential to improve the functionality and navigation of the network.
- 3. Within 6 weeks after official launch (october 2011) 40% of all Dutch GPs (n=4013) became a registrered member of Haweb and 394 discussion groups were formed. Other network statistics will be presented.
- 4.Yearly Questionnaire amongst GPs after launch is currently send to the GPs. In july 2012 we'll present the results of this evaluation. Conclusions

The response of the Dutch GPs to the network was overwhelming. The rapid increase of registered members and number of groups seem to indicate a trust in an own community and a need for interaction and information exchange between peers. To what extent this exchange promotes the dissemination of evidence, experience and quality of care is for future research.

(When online access is available during presentation, HAweb can be shown live.)

# SC.15 - Research 06 - Training 3

#### SC15.01

Validation of a questionnaire designed to evaluate attitudes towards and knowledge of family medicine

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SESCAM, Albacete, Spain.

**Aim:**To know the predictive validity of a questionnaire that evaluates medical students' knowledge of and attitudes towards primary care and family medicine.

Design: Cohort study.

Setting: Albacete Medical School.

**Participants:** Students enrolled in a primary care course in 2005-2006 academic year. They graduated in 2009-2010 course and chose speciality in 2011.

Main outcome measures: We designed a questionnaire with 34 closed response items (5 options on a Likert scale). The students were asked to respond it before taking the primary care subject in second year and they were asked again at the end of this course. The students who attended the six year in 2009-2010 were also invited to answer it.

The speciality they chose in the MIR exam was registered.

To determine the predictive validity of the questionnaire we estimated it sensitivity and specificity, analysing ROC curves.

**Results:** Forty four students responded to the questionnaire at the beginning and 79 at the end of 2<sup>nd</sup> year. Seventy six students responded to the questionnaire at the end of 6<sup>th</sup> year.

The area under the ROC curve was, respectively, 0.299 (95% CI: 0.094 - 0.504), 0.482 (95% CI: 0.280 - 0.684), 0.688 (95% CI: 0.282 - 1.093).

Only in the last one, the ROC curve was above the diagonal. The best cutoff value in this case was 31, with a sensitivity= 0.75 and specificity= 0.714.

**Conclusion:** Our questionnaire has shown unsuitable prediction validity related to the election of family medicine as career. Only in the last year of the degree it improves.

SC15.02

Knowledge of and attitudes towards family medicine of medical students in the last year of the degree

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**Aim:** To determine knowledge of and attitudes towards family medicine of medical students with and without previous curriculum in primary care, in their last year of the degree.

Design: Cohort study.

Setting: Albacete and Sevilla Medical Schools.

**Participants:** Students in the 6<sup>th</sup> year of the degree in 2009-2010 academic year.

**Main outcome measures:** The students were asked to responded a questionnaire with 34 closed response items (5 options on a Likert scale). Students from Sevilla at the beginning of the 6<sup>th</sup> year, before taking a primary care course and the Albacete students ones at the end of it. They had already taken the course in the second year of the degree.

**Results:** Seventy six students (96.2% of registered) responded to the questionnaire at the end of 6<sup>th</sup> year in Albacete, and 26 (61.9%) at the beginning of the 6<sup>th</sup> year in Sevilla.

Albacete students showed a significative higher level of agreement with high satisfaction of patients with primary care (p=0.001), containing expenses is more feasible in primary care (p=0.012), good knowledge of family doctors' professional tasks (p=0.03), primary care is the first medical contact with the healthcare system (p=0.002), the family doctor should provide comprehensive continuing healthcare, regardless of age, sex or illness (p=0.031) and the family doctor provides healthcare both at his/her consultancy and at the patients' homes (p=0.002).

However, Sevilla students showed higher agreement with the usefulness of knowing the foundation of family medicine, despite of they choose another speciality in the future (p=0.044). In the other

hand they had a higher disagreement with the idea about Family Medicine is highly regarded within the Medical School (p=0.001). **Conclusion:** Medical studens who take a course in primary care in the first years of the degree showed a better opinion towards family medicine and primary care.

#### SC15.03

The art of disagreeing: How should medical students act when facing "questionable" therapeutic plans in internship?

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Introduction - During internship, while facing clinical problems, students watch not only teachers performing but also residents and other practitioners. The question is: are these good role models? When students feel that there are mistakes on physicians's practices, there are ethical and educational implications. What students should do besides "learning what not to do" when it comes to possible harmful effects for the patient? How should students behave in such situations? Are students really capable of noticing mistakes? What is the role of teachers on this subject? How should students be thought on disagreements? Methods - Four case vignettes are presented, with highlights on teachers and students' points of view, as well as the Brazilian version of the medical students ethics book as a helpful tool on such situations. Discussion - Ethical implications and student atitudes are discussed, emphasizing practical solutions. Conclusion -Discussing the ethics of student-physician disagreement promotes great educational benefits. Also, tools that concern this situations are not avaiable in most educational settings, which highlights the need for the development of new research on this subject. We invite all individuals, including students and teachers who believe that disagreement may be a powerful tool to development of the art and science of Family Practice.

#### SC15.04

How can we appraise empathy in undergraduate medical students? A qualitative analysis of two different empathy scales

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#### Aims

We live in an era where outcomes, guidelines, and clinical trials are at the forefront of medical training. However, caring implies an understanding of the human being. The fostering of human values and the development of interpersonal skills, particularly empathy, are essential issues for proper doctoring. While the holistic approach of medical practice grows up, empathy becomes a primordial skill for improving doctor-patient relationship. In order to appraise empathy the researchers used two scales: the Davis' Interpersonal Reactivity Index (IRI) and the Jefferson Scale of Physician Empathy (JSPE). Method

The Davis' Interpersonal Reactivity Index (IRI) - adapted version to Brazilian context - is a multidimensional scale composed of 26 self-report items designed to measure both cognitive and emotional components of empathy. The appraisal of empathy analysis derives from a 5-point Likert scale. The Jefferson Scale of physician empathy consists of 20 topics, and the analysis derives from a 7-point Likert scale. Using qualitative analysis we perform an interview with 10 faculties of different medical schools in Brazil to ponder the positive and negative aspects of these scales. Results

Some limits and advantages were identified in both scales. In JSPE the emotional component of empathy is not analysed. However, one positive aspect is that this scale is student-based. IRI is addressed to the general population and not specifically to health care professionals, which could be a limitation. On the other hand, a great advantage of IRI is a multidimensional approach - analyzing both cognitive and emotional aspects of empathy.

Measuring empathy of undergraduates is a challenge. Applying both scales during undergraduate period could allow the construction of new educational strategies for solving this emerging problem.

Over the past 2,5 years, 56 cases were reported (about 2,5 % of the students), most of them during the internships. The majority were male students (n=39), about 30% (n=18) was of foreign background and mostly a combination of domains was impaired. A variety of measures were taken; all of them tailor-made.

# Conclusions:

Unprofessional behavior is mostly seen during internships, men and foreign students are over-represented. More research is needed to confirm our findings.

#### SC15.05

Palliative Care ambulatory clinic: teaching palliative care in Brazil

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There is no curricular palliative care teaching in Brazil. Brazilian's doctors are not training to deal with terminally ill patients. We believe that we can teach some important skills using palliative care. Topics, that the students can finish medical school in Brazil, without any formal contact.

In our group, Brazilian Society of Family Medicine (SOBRAMFA), we diced to create a palliative care setting. Our main objective was to observe students and residents and try to identify how this experience can influence their medical training.

After five teachers' discussion meetings tree different topics were listed: keep the focus on the patient, learning to deal with families and from fear to comfort. The ideas presented are the final result of a qualitative analysis about the students and residents' experience. We used the stories related by them to exemplify what they learned

# SC15.06

Lack of professional behavior among medical students: the experience of a professional behavior board in the Netherlands.

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#### Introduction:

A good future doctor is not only a student who has good notes on exams. Therefore, there is a growing interest in monitoring and evaluating professional behavior of medical students. We defined professional behavior as "observable behavior from which the norms and values of the medical professional can be inferred". Professional behavior can be divided in three domains, i.e. 'dealing with tasks/work', 'dealing with others' and 'dealing with oneself'. When a teacher judges the behavior of a LUMC student as unprofessional, the student can be referred, properly documented, to the LUMC professional behavior board. This board consists of MDs as well as psychologists and may invite the student to discuss his/her case. Depending on the findings, the board will formulate a personalized advise, which may vary from a temporary hold of the study to psychological support or no measure at all. Research questions:

- 1. Which cases (number, demographic characteristics) were reported to the professional behavior board during the period 2009-2012?
- 2. How were reported cases related to the three professional domains?
- 3. Which measures followed a negative judgment? Method:

We categorized the reported cases (June 2009-January 2012) in terms of the three domains, and in terms of the phase in the curriculum, gender and background of the student.

Results:

# SC.16 - Research 07

#### SC16.01

Accessibility to health care - how information from local politicians can be used to estimate the needs of GP resources.

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#### Introduction

As in most western countries, in the German Federal State of Baden-Wuerttemberg (BW) with its 10.7 Mio inhabitants - especially in rural areas - a shortage of GPs exists. Due to preferences of the next generation of GPs and to demographic changes rural areas are facing an important challenge in keeping their communities attractive.

#### Aims

The objective of the study was to evaluate the perspective of local politicians about the current situation of GP distribution in the communities of BW. Information raised about infrastructure and accessibility to health care on community level can be used helping to judge the need of future medical workforce.

# Material and Methods

A self-developed survey was sent to all 1101 mayors of BW in spring 2011 exploring the communities' perspective regarding their present health care situation and their perception of future needs. Demographics, GP numbers and remoteness of the community were asked. Additionally, questions about accessibility to pharmacists, GPs, and hospitals were examined.

#### Results

The response rate was 63% (n=698), with 91% (n=632) seeing a high relevance in having at least one GP in their community. Of the participants 69% (n=468) stated to be located in rural areas. The percentage of inhabitants older than 65 years was 20%, suggesting an increasing demand of GP consultations in the future. The responding mayors intend to keep up the existing level of medical infrastructure (distance to GP, pharmacist, next hospital) within the community. The acceptable time to travel to a GP was on average 11.50 minutes, whereas a different medical specialist is expected to be reached within 26.12 minutes.

## Conclusions

The rising GP shortage is important on community level and proves how urgent the development of strategies ensuring a sufficient distribution of GP practices across the country is. Data based on community level is expected to be a helpful addition in developing new models to calculate the GP needs. The results of this study have the potential to serve also other countries dealing with the question of how to create a needs adapted GP distribution.

#### SC16.02

# Prevalence of emotional and behavioral problems among refugee children living in Canada

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Intro: <u>Pages similaires</u> At the end of year 2010, the United Nations High Commissioner for Refugees (UNHCR) estimated the worldwide number of refugees to be around 15,4 millions, 44% of which were children. T+1 publié par vous pour ce contenu <u>Annuler</u>here has been various studies reporting psychological distress and behavioral problems among those children.

**Objective:** To evaluate the prevalence of emotional and behavioral problems among refugee children of 6 years old and older who have been living in Quebec City for less than 3 years and who attended the Healthcare Refugee Clinic of Quebec City from June 2007 to June 2008.

**Method**: 35 children participated in this study. Among them, 20 children were South American, 14 were African and one was Afghan. Emotional and behavioral problems were assessed using the *Child Behavior Checklist* (CBCL), the *Youth Self-Report* (YSR) and the *Teacher's Report Form* (TRF), as well as a sociodemographic test. Proportions for each detected problem were compared to standard population rates and their association with sociodemographic variables was analyzed.

**Results:** Refugee children reported internalizing problems at a higher level than children from the standard population. Teachers witnessed more conduct problems among refugees. Parents reported more emotional or behavioral problems in children who experienced a traumatic event or a parent death. Moreover, a difference between informants has been detected for the perception of internalizing and behavioral problems.

**Conclusion**: This study emphasizes the importance for clinicians to pay close attention to the psychosocial components of the life of refugee children, not only upon arrival but also during the following months.

### SC16.03

# Knowledge, attitude and behavior of female health care workers towards human papilloma virus and cervical cancers

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Cervix cancer is worldwide the second most frequent gynecologic cancer and the first most frequent one in developing countries. Numerous recent studies claim that health care workers are the main source of information for the general population regarding cervical cancer and HPV prophylaxis. This study aims to investigate knowledge, attitude and behavior of female health care workers towards cervical cancers, associated risk factors, HPV and prevention methods. Four hundred thirty eight volunteering subjects working at Baskent University Ankara Hospital facilities which comprises of 79.4% of the total, joined the study between 05.01.2011 - 15.02.2011. The subjects filled out a questionnaire after a face to face interview and hand it out to the investigator. All collected data were analyzed using SPSS 15.0 program. After confirming the normal distribution of the data, all discrete data were analyzed using chi-square tests for identifying statistical significance. Of the subjects 51.8% knew the pap-smear test as a screening method and 52% underwent such investigation, while only 24.4% knew the appropriate initiation time for this test. Most of the subjects, who did not undergo such an investigation, were single and graduated from a university, and only 6% of them had a periodic gynecological investigation. HPV-Cervix cancer relation was known by 33.3% of all participants and this ratio decreased proportionally with the education level of the subject. While 44.5% of the subjects knew that HPV is transmitted with sexual intercourse, only 18% knew about the appropriate genital lesion. Although 79% of all the participants knew that there is a vaccine for preventing HPV lesion, only 61.9% were ready to use the vaccine. Also 74.8% of the subjects were convinced to vaccinate their daughters against HPV, with a proportionally increasing ratio of high educational status. The knowledge level of female health

care workers, even the doctors, regarding cervical cancer and HPV was remarkably low. We concluded that there is an urgent need for education programs towards health care workers.

#### SC16.04

# Doctor-patient relationship in chronic diseases

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The study project is based on the prominent role we give to doctor-patient relationship in family medicine, particularly in chronic diseases like type 2 diabetes, where counterbalance needs pharmacological therapy as well as fair directions about life style. We enlisted 55 patients, 41 to 85 years old, coming from three general practitioner's cabinets. One consultation for every patient has been tape-recorded and then written out in a copy to be rated (7 to 35) according to CGRF method (Common Ground Rating Forms). Using this one, an external observer, bystanding at the consultation, estimates the interaction doctor-patient.

At the end of the consultation every patient received two sets of questions: 1) HCCQ (Health Care Climate Questionnaire) to appraise ( rate 1 to 7) the doctor-patient relationship by the patient's point of view. 2) "Quality Life Questionnaire" of Turin Medical School (Dr Trento) which estimates life quality in "diabetes group case" (rate 23 to 115).

After all we assembled some counterbalance disease's indicators: HbA1c, glycaemia, BMI, blood pressure, triglyceridemia, diabetes' complications ( four measurement for each indicator since 2008 to 2011)

Study's target is to evaluate the correlation's significance between:

1) Quality of dector nation, relationship (by observer point of view)

- 1) Quality of doctor-patient relationship ( by observer point of view) and:
- a) counterbalance disease
- b) life quality
- 2) Quality of doctor-patient relationship (by patient's point of view) and:
- a) counterbalance disease
- b) life quality

The statistical table is in progress.

# SC16.05

# Patient safety in primary care daily practice

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#### ntroduction

Hippocrates recognized the risk for injuries, arising from the well intentioned healing, millenia ago. But, only from the begining of the new millenium, the "Patient safety" arised as a new, comprehensive healthcare discipline, that emphasizes the prevention of medical errors.

Aim

Description, evaluation and comparation of activities, focused on strengthening of "Patient safety" in primary care in different European countries.

Design and method

Different methods of prevention/reduction of adverse healthcare events were introduces in the last two decades in most European countries. In many countries reporting and analysis of medical errors became a mandatory process, as a part of quality improvement in health care. Medical error reporting system was implemented f.e. in Denmark, Germany and UK. Other countries, like Slovakia, Poland and Spain are intensively working on preparation and implmentation of comprehensive adverse healthcare events reporting system. Analysis of reported cases helps in defining of the main causes of medical errors and consequently in their reduction. First studies, focused on "Patient safety" in primary care daily practice, indicated that the main reasons of medical errors are related to human factors. These are f.e. poor communication between doctor and patient, or unclear

recommendation for treatment. Much more serious human factors based medical errors are related to insufficient professional attitude of the physicians, nurses and other medical staff members. Complicated medical technologies and powerful drugs can act as dangerous weapons.

### Conclusion

Description and comparation of the "Patient safety" focused activities in primary health care in different countries, will bring not only a clear message about the recent situation, but can be used for the definition of the "Patient safety best practice" in the future.

#### SC16.06

Desmopressin in the management of primary nocturnal enuresis: what does evidence have to say?

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#### Aims and Purpose

Nocturnal enuresis is a childhood disorder with significant life impact, which affects around 15% of five-year old children. In the clinical cases without spontaneous resolution desmopressin is an optional treatment. The aim of this study is to assess the effects of desmopressin in the management of primary nocturnal enuresis in children, and to compare its effectiveness with alarm interventions and/or placebo.

#### **Design and Methods**

A search for clinical practice guidelines, meta-analyses, systematic reviews, evidence-based reviews and clinical trials published between January 2000 and April 2010, in English, French, Spanish and Portuguese was performed using the MeSH terms: "nocturnal enuresis". The data sources used were National Guideline Clearinghouse, Guidelines Finder, Canadian Medical Association, Fisterra, U.S. Preventive Services Task Force, Cochrane Collaboration, DARE, Bandolier, PubMed and the Index of Portuguese Medical Journals. The Strength of Recommendation Taxonomy scale of the American Family Physician was used to assess the quality of the studies and the strength of the recommendation.

# Results

We identified 154 articles, but only seventeen met all of our inclusion criteria. These consisted of five clinical practice guidelines, nine systematic reviews and three randomized controlled trials. Alarm intervention is indicated when behavioural intervention is not effective. Despite the high rates of relapse associated with the discontinuation of the medication when compared with alarm intervention, desmopressin is effective when fast and short-term enuresis management is required.

#### Conclusions

The available evidence suggests that desmopressin is less effective than the alarm intervention in the management of long-term primary nocturnal enuresis in children (SORT B). Alarm intervention is indicated after initial behavioural intervention failure (SORT B)

Desmopressin is effective when fast and short-term enuresis management is required (SORT B), and can be safely recommended by the Family Physician.

# SC.17 - Research 08 - Training 4

#### SC17.01

Family medicine and interprofessional education - a response to the challenges of the Lancet Commission report

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Family medicine and interprofessional education—a response to the challenges of the Lancet Commission Report

A global independent commission, now popularly known as the Lancet Commission, recently published a critical analysis of the status of health professional training worldwide. It concluded that

professional education has not kept pace with the many challenges facing our population, producing "fragmented, outdated, and static curricula that produce ill-equipped graduates." The commission added that health education should be more systems-based, and core professional competencies should be addressed while utilizing global knowledge. Two educational changes were urged in the report—transformative learning and interdependence in education. While the transformative learning is about developing leadership in learners, interdependence in education is achieved by promoting interprofessional and transprofessional education that "breaks down professional silos and enhanc..(es) effective teams." The University of Kentucky has addressed these concerns and is using core collaborative interprofessional competencies to develop consensus in several domains around global health. We have used the primary care experience for student service learning to develop training objectives for medicine, public health, dentistry, pharmacy, and allied health schools. We will describe the process and the challenges in attempting to address these training challenges laid out by the Commission.

#### SC17 02

Educating rural and remote GPs about Type 2 diabetes: Impact of online continuing medical education on GP knowledge, attitudes and practices, and barriers to online learning

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**Background:** The gap between current and evidence-based management of Type 2 diabetes is widely acknowledged in Australia. Thus there is a need to find effective strategies to encourage GP awareness and uptake of evidence-based diabetes guidelines. A well developed and evaluated web-based education strategy is considered to be an appropriate method for practicing GPs in rural and remote areas to undertake continuing medical education.

This PhD research forms one part of an NHMRC project "The effectiveness of continuing medical education and feedbacks in altering diabetes outcomes at a population level-A RCT".

Aims: To examine the current knowledge, attitudes and stated practices of Australian rural and remote GPs regarding Type 2 diabetes management, test the impact of an online education intervention on GPs' learning outcomes, and identify barriers to GPs completing both this online diabetes module and online learning in general.

**Methods:** A cross sectional survey is being conducted to assess the current knowledge, attitudes and stated practices regarding Type 2 diabetes management. The survey has been sent to 854 rural and

remote GPs practicing in rural and remote Australian communities that have a population of 10,000 to 30,000. A time series design is being used to compare the knowledge, attitudes and reported changes in practice of GPs who complete an online diabetes module. The module has been offered by the main project to 146 rural and remote GPs in the seven intervention towns of NSW and QLD which have a population of 10,000 to 30,000. A short survey and a semi-structured interview will then be used to identify enabling and inhibiting factors in completing the learning module. **Results:** Data collection is currently ongoing. Preliminary analysis on a cross sectional survey examining the current knowledge, attitudes and practices on Type 2 diabetes management in rural

GPs and a short survey identifying barriers in the online CME

learning will be done and presented at the conference.

#### SC17.03

Using a learning coach and reflection forum to develop selfdirected learning skills among residents

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Background: To prepare for practice in the context of rapidly expanding knowledge and continuous change in healthcare, physicians-in-training must develop self-directed learning (SDL) skills. They must be able to identify learning needs, set goals, and reflect on learning, as well as access current medical knowledge to answer clinical questions in practice.

Program: We developed an intervention to promote SDL in a US based 3-year family medicine residency. One faculty physician serves as a learning coach, (based on Collins' cognitive apprenticeship model). The coach meets monthly one-on-one with second-year residents, coaching them in generating goals, reflecting on learning experiences, and practicing point-of-care evidence-based medicine (EBM). Residents record goals and reflections in an electronic portfolio containing their formative assessments, procedure logs, and projects. The class also meets for bi-monthly two hours forum, where residents and faculty reflect on their learning & teaching, life-work balance, and professional identity. A mixed-methods program evaluation included surveys and interviews with residents and faculty to assess changes in residents' SDL skills.

results: Twenty-six residents participated in the curriculum and attended an average of 5.5 meetings with the coach. Learning coach ratings of residents' goal setting skills increased from a mean of 1.9 to a mean of 4.6 during the final session (p< 0.001). Learning coach ratings of the residents' reflection skills increased from a mean of 2.0 during session one to a mean of 4.7 (p < 0.0001). Pre- and post-surveys and interviews with residents and faculty documented

significant improvements in residents' goal setting, reflective ability, and use of EBM triangulating the ratings above. These effects persisted 12 months after participation in the intervention. However, the electronic portfolio interface was disliked, the goal of involving the residents direct advisors not achieved, and scheduling the coaching meeting was always a challenge. Conclusions: In spite of portions of the intervention

working less well, by investing 1.5 hours of resident time a month on the average ,combining individual meetings of a learning coach with residents using an electronic portfolio as well as a group reflection forum , development of SDL skills was enhanced

#### SC17.04

Genetics and cancer in general practice - Tools and ways of implementation

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#### Background

Most general practitioners are not familiar with genetics. Although they do not encounter genetic issues every day, the consequences of hereditary diseases can be of great importance for patients and their relatives. Cancer is a common disease in family practice and some cancers have a genetic cause: this is the case in at least 5% of all breast and bowel cancers. Research in The Netherlands shows that the knowledge of Dutch GPs about genetics is not always sufficient. To improve the knowledge of GPs the Dutch College of General Practitioners (NHG) recently developed a webbased CME-programme on the relation between cancer and genetics. A website for GPs about genetics has been developed as to improve up to date knowledge about genetics.

#### Aim

The aim of the workshop is to share the initiatives to make GPs more familiar with the current knowledge on genetics and cancer, in the expectation that it will help them to react more proactively in the likelihood of a genetic cause of cancer.

# Methods

In an interactive workshop the Dutch guidelines about inheritable cancer (especially breast/ovarian cancer and colon cancer) will be discussed. This will be illustrated by patient case histories. Red flags (when to think of genetics when there is cancer in a family) will be explained and the tool for GPs, family history taking and pedigree drawing, will be practiced. The different approaches and their results in other countries can be discussed.

# Results

The workshop will lead to a better understanding of genetics and cancer. Besides, sharing experiences amongst the participants gives the opportunity to learn more about different approaches in other countries, which could improve care in daily practice.

#### Conclusions

CME-programmes and easy accessible information on the internet about genetics for the general practitioner will make the GP more alert to a genetic cause of a disease and might prevent morbidity and mortality in patients.

#### SC17.05

"One for all, all for one" - A collaborative project-based curriculum to promote residents' engagement in practice-based research

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**Background:** Although academic departments of family medicine invest many efforts to expand their research capacity and encourage more residents and graduates to participate in the generation of new knowledge, family physicians are less likely to engage in and practice research comparing to their colleagues from other specialties. A consensus has grown that to achieve this goal, residents need to be exposed to the principles of research early in their training.

**Objectives:** To study the effect of a collaborative project-based curriculum in research in family medicine on residents' competence in practice-based research.

**Design and methods:** A twelve-meeting (one semester) research curriculum for 1<sup>st</sup> year residents in family medicine was designed. Learners were expected to work collaboratively to explore a predefined practice-based problem in family medicine, following all the major steps in designing and conducting a cross-sectional survey study. Learners were asked to complete pre/post questionnaires to asses program's contribution to their research knowledge, skills, and willingness to conduct practice-based research in the future.

Results: Nineteen residents participated in the program and completed a cross sectional survey study on "Barriers to adherence to oral hypoglycemics". Through out the course, learners designed the research question, study variables, survey questionnaire, decided on target population and sample, collected data from medical charts and interviews and analysed the results. At the end of the program, most learners (79%) thought that the program was useful and contributed to their teamwork competencies and research related skills. In addition, significantly more learners reported having an acceptable or a good level of research related knowledge and skills (OR=7, p=0.01). However, learners' attitudes towards research in family medicine, and their willingness to conduct research in the future were not changed following program participation. Learners also felt that the assignment load was too high, and that choosing their own research question was preferable.

Conclusions: A collaborative project-based curriculum can promote research-related competence of family medicine residents. However, a longitudinal program that would allow time for residents to choose their own research question and reduce the load of assignments might contribute to learners' satisfaction and willingness to engage in research in the future.

#### SC17.06

A new meaning for 'going Dutch' - a reflective report on general practice in Veghel, The Netherlands

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#### Background

Through the Hippokrates Exchange Programme, young general practitioners interested in international and global health are given the opportunity to witness family medicine in another European state for a period of two weeks.

#### Methods

Reflective report on such an exchange in September 2011 using the learning objectives as based on European Academy of Teachers in General Practice's (EURACT) definition of a General Practice/Family Medicine by means of an interactive workshop.

#### Results

Dutch general practice is an excellent example of an alternative primary care model in Europe: professional, co-ordinated and integrated. Similarities and differences between the two countries will be highlighted from the perspective of young GP.

#### Recommendations

This exchange is a great learning and reflective experience from both host and visitor perspectives. Understanding the language well is essential to grasp the subtle nuances during a GP consultation. Tips and further advice for future potential candidates will be highlighted.

# SC.18 - Clinical Research 07 - Mix 5

### SC18.01

Are drivers really capable for driving a car until 80-ies?

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Background: In Slovenia drivers acquire the driving licence legally until the age of 80. Many family physicians are concerned about the age of extension of the driving licence due to rising the morbidity of the patients which probably influence on capability for driving the car and should be checked before 80-ies. In fact it is little known about the functional capabilities of the elders and the epidemiological data are missing.

Aim of the study is to check the functional capability and find out more about the impairment of the visitors of general practice between 64 and 79 years old.

Methods: On the purpose of the study special protocol was prepared which consists of different short checking about cardiovacular, vestibular, neurophysiological and psychological checking and is completed with some questions about their mood, mobility, using drugs and alcohol.

Results: The pilot study was implemented in the general practice in urban area and 71 visitors of the practice were examined by protocol. Mean age of visitors is 72 years, 41% men and 59% female. 59% are drivers, another 17% use bicycles or motorbikes, 24% do not participate in street traffic actively. Majority of men drive (82%), among women only 42% of them. Almost all drivers (95%) use drugs for chronic disease, half of them(48%) feel irregular beats of the heart. 40% of them feel dizzy sometimes, 21% have measured blood pressure higher than 180/110 last year, the same percetage have fallen without a reason. All drivers wear glasses, but their vision is seriously impaired at 17% of them. 24% overuse alcohol regulary and clock drawing test was performed perfectly only in 62% of examined patients.

Conclusions: Almost two thirds of visitors in general practice between age 65-79 years are stil driving a car. In pilot study some serious impairment of their health was found which suggests that periodical medical checkup before age of 80 is needed for extension of the driving licence.

#### SC18.02

Gut feelings as a diagnostic instrument in early cancer diagnosis in general practice?

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Background: Studies show that early recognition of symptoms can contribute to early detection of cancer and is an important factor for prognosis and survival. Gut feelings, the uncomfortable feeling that something is wrong without specific symptoms, are a common feature among general practitioners (GPs) and often related to a suspicion of cancer. Although research concerning gut feelings is limited, it is known that such sense of alarm can activate the GPs' diagnostic behaviour. In this way it may be hypothesized that gut feelings can help identify serious disease at an earlier stage.

**Objective:** To examine whether gut feelings among GPs can contribute to early recognition of cancer, to identify the reasons of cancer-related gut feelings and the therapeutic actions that were driven by these feelings, to investigate whether the symptoms that caused these feelings have ultimately lead to a cancer diagnosis and if so, to the anticipated diagnosis.

**Methods:** Data were collected via the Dutch Sentinel Network of General Practitioners; a network of 42 general practices, nationally representative by age, gender, regional distribution and population density. From January 2010, GPs were asked to fill in questionnaires for each patient causing a gut feeling that he/she may have cancer. After 3 months, the GPs were asked to evaluate the patients' final diagnosis.

**Results:** 150 questionnaires were completed. The GPs indicated that gut feelings were mainly caused by: a palpable tumour (17%), unexplained weight loss (19%), the unhealthy appeal of a patient (11%), or consultation of a patient who rarely visits the GP (11%). GPs reacted on their gut feeling by referral to a specialist (58%), or further diagnostics like laboratory tests (35%), X-ray (25%) or echo (17%) examination. Evaluation of the diagnosis after three months show that gut feelings lead to a diagnosis of cancer in 35% of the cases. In almost one third of the cases, this was the diagnosis anticipated initially.

**Conclusions:** This study reveals that gut feelings act as a diagnostic instrument in cancer diagnosis in daily practice and it may be worthwhile to pay attention to it in GP-training and guidelines.

# SC18.03

Decisions in general practice in unwanted pregnancies in The Netherlands

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### Background

In the Netherlands, abortion is - under well-defined conditions free of legal sanctions up to 24 weeks of pregnancy. Before undergoing abortion, patients have to observe a five-day 'reflection period'. The official start of this period has to be established by a medical doctor. The doctor also has to confirm that the woman undergoes the procedure out of free will, that she has considered alternative options, and that she has access to care after the procedure, especially concerning contraceptives. The general practitioner (GP) is frequently the first consulted doctor establishing the start of the five-day reflection period.

Aim
When consulted on unwanted pregnancy, a GP can but is not obliged to engage in abortion counseling tasks, such as discussing alternative solutions or scheduling a follow-up consultation. This study investigates the actions taken by GPs during consultations on unwanted pregnancy to provide insight into the role GPs play in abortion counseling.

Design of study

Dynamic cohort study based on data collected during the years 2003-2009.

#### Method

Standardized registration forms after the first GP consultation and follow-up questionnaires 6 months after this consultation were used to collect data on unwanted pregnancy via the Dutch Sentinel

GP network. This network of 45 general practices is nationally representative by age, gender, geographic distribution, and population density.

#### Results

One in five women who consulted a GP on unwanted pregnancy was either undecided about preferring an abortion (15.6%) or changed her mind after the consultation (7.8%). A change of mind about preferring an abortion was predicted by parity; women without children were more likely to change their mind than women having children. Of the women who were undecided about preferring an abortion, 39% discussed alternative solutions with the GP and 68% scheduled a follow-up consultation. Women who changed their mind about their initially planned outcome were more likely to have discussed alternative solutions with their GP than women who didn't change their mind (p = .00).

#### Conclusion

Counseling by the GP is crucial at an early stage of the decision making process. Training may enhance GP skills in counseling of women with unwanted pregnancy.

#### SC18.04

# Improved patient safety with new drug packaging design

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Background: Automatic generic substitution is standard in many countries. The main problem with generic substitution is patient compliance. Research shows that approximately 5% of Norwegians and 10% of immigrants use both the original and generic drugs. It has been suggested that improved packaging design could decrease patient drug errors.

Aim: The aim of this study was to test if a new standardized drug packaging design could improve recognition and discrimination.

Methods: A mental rotation test, a validated cognitive test used to measure recognition and discrimination performance, was carried out on 30 older people (69-86 years, mean 75.9) and 29 students (18-38 years, mean 25.9). We measured the ability of participants to decide whether drug packages contained the same active ingredient or not, depending on packaging design. In the new standardized design, the active ingredient was prominently displayed in the upper right hand corner of the package.

Results: The important measures in a mental rotation task are accuracy (percent correct answers) and reaction time. The results are summarized in the table:

Group/Test	Original design (mean)	Improved design (mean)	P value
Old /Accuracy (%)	59	82	<0.001
Young /Accuracy (%)	79	94	<0.001
All / Reaction Time (ms)	1134	1005	<0.001

Conclusions: Our study, the first to evaluate a new standardized design of drug packaging, shows that recognition and discrimination are significantly improved compared to manufacturers' original design. Our findings suggest that a standardized design may increase patient compliance and safety and should be tested in a clinical setting.

#### SC18.05

Annual systematic review and plan, an effective strategy for improving cardiovascular prevention. Results of a real life five-year experiment in general practice on 12,505 individuals at high cardiovascular risk

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Background: subjects with established cardiovascular disease (CVD) or with multiple risk factors are at high cardiovascular (CV) risk and should be the main target for preventive strategies. However epidemiological surveys consistently report inadequate control of modifiable risk factors in everyday practice even in high risk population. Methods: at baseline and annually for 5 years, GPs had to sistematically review the overall CV risk profile of their patients at higher risk. In the presence of sub-optimal control of CV risk factors (hypertension, hypercholesterolemia, diabetes), of obesity, of unhealthy life style habits (smoking, unhealthy diet, physical inactivity) or in the absence of recommended preventive drug therapies (antiplatlets, statins and ACE-inhibitors-ARBs) GPs had to plan, in agreement with the patient, pharmacological and non-pharmacological interventions for the next year, by setting specific goals. Results: a total of 12,513 patients with multiple CV risk factors or atherosclerotic diseases were recruited into the study from 2004 to 2007 by 860 Italian GPs (mean age 64.0 years (SD 9.5); 61.5% males) and followed up for 5 years. Every year was observed a reduction for 9 out of 10 risky conditions. At the end of the study, the proportions of patients with systolic BP >=140 mm Hg, LDL cholesterol >=130 mg/dL and fasting blood glucose >=130 mg/dL decreased significantly from 56.2% to 39.7%, from 50.5% to 28.0% and from 42.7% to 38.0%, respectively. The percentage of obese people (BMI >=30 kg/m2)significantly reduced from 40.2% to 36.4%. Cigarette smokers and patients following unhealthy diet significantly decreased (from 21.5% to 15.7% and from 26.9% to 18.0% respectively), whereas the percentage of sedentary people did not decreased but actually significantly increased (from 26.1% to 28.1%). The prescription of antiplatelets, statins and ACE-inhibitors/ARBs significantly increased (respectively from 41.8 to 49.2%, from 41.4% to 49.3% and from 66.0% to 69.8%. Conclusions: our study demonstrates that an annual systematic review of the overall CV risk profile and a plan of preventive interventions for the next year shared by patients is a simple and effective method for the improvement of CV prevention in high risk subjects in the setting of the general practice.

# SC18.06

Risk&Prevention: a randomized, placebo-controlled trial in general practice on the effect of n-3 PUFA in subjects with multiple cardiovascular risk factors

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# Background

Despite good pharmacological and epidemiological hypotheses, evidence is still lacking on the preventive efficacy of n-3 polyunsaturated fatty acids (n-3 PUFA) in subjects with multiple cardiovascular (CV) risk factors or atherosclerotic diseases other than myocardial infarction (MI).

### Methods

This double-blind, placebo-controlled clinical trial enrolled a cohort of patients followed up by a network of 860 Italian general practitioners. Eligible patients were men and women with multiple CV risk factors or atherosclerotic disease but not MI. Patients were randomly allocated to n-3 PUFA (1 g daily) or placebo. The primary endpoint was time to death from CV causes or admission to hospital for CV reasons. Analysis was intention to treat. This study is registered in ClinicalTrials.gov NCT00317707.

#### Findings

Out of 12,513 patients included in the study, 6244 were randomly assigned to n-3 PUFA and 6269 to placebo. After a median of five years follow-up, the primary endpoint was recorded in 1478 patients (11.8%), 733 in the n-3 PUFA arm (11.7%) and 745 in the placebo arm (11.9%); hazard ratio (HR) 0.98; 95% CI 0.88-1.08, p=0.6437. The same neutral results were observed for the two components of the primary endpoint. CV deaths occurred in 142 patients (2.3%) in the n-3 PUFA arm and 137 (2.2%) in the placebo group (HR 1.03; 95% CI 0.82-1.30, p=0.799) and the patients admitted to hospital for CV reasons were: 620 (9.9%) in the n-3 PUFA group and 630 (10.1%) in the placebo (HR 0.98; 95% CI 0.87-1.09, p=0.680).

#### Interpretation

In a large general practice cohort already intensively monitored and treated for their background multiple CV risks, the addition of a daily treatment with n-3PUFA did not improve the overall mortality and morbidity outcomes.

# SC.19 - Practice Organisation 4

#### SC19.01

Expert patients of chronic diseases; is still a stigma in Saudi Arabia?

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#### Background:

Share decision-making now is an essential part of every consultation however its acceptance is still debatable. Thus we carried out this survey to record the views of general practitioners regarding the role prefer by patients in shared decision making living with chronic diseases especially Diabetes Mellitus, Hypertension, and Bronchial Asthma and assess the perspective about the barriers in shared decision making.

### Method:

This is a qualitative study based on semi-structured interview of general practitioners. It was conducted in 2010 from January to September during a process of training of general practitioners for consultation and communication skills. The purposive sample of 52-64 general practitioners has been selected from different six urban and rural areas of Saudi Arabia.

# Results:

Only a small numbers of patients (7%) classified as preferring roles as an active partner. Whereas, collaborative role opted only 12.7% and majority (78.5%) were happy to become passive. Majority (81.6%) were annoyed by the least interest of administration in involvement of patients followed by complaining of overburden (74.1%). Interestingly, 46.8% mentioned that patients even not accepting this idea to talk about their management because they are laymen and 59% pointed out that there is also a problem of awareness. Some doctors (34.1%) have also blamed illiteracy.

#### Conclusion:

The results suggested that the potential to create a cadre of expert patients - people require health professional positive attitude and also need to rectify the problems mentioned by general practitioners

#### SC19.02

Moving with the times: familiarity versus formality in Australian general practice

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Aims and rationale: Form of address between patients and GPs is an underexplored area which may influence productive dialogue within a consultation. This project aims to describe how Australian patients prefer to be addressed by their general practitioner, how patients prefer to address their GP, and the factors influencing these preferences.

**Methods:** Twenty consecutive patients of 13 randomly selected GPs (n=260) on the Gold Coast in Queensland were surveyed on preferences for use of names in general practice consultations and the factors influencing these preferences.

**Findings:** Ninety percent of patients prefer to be addressed by their first name. Factors predicting preference for GP addressing more formally include older age, overseas birth and higher education level.

Thirty five percent of patients prefer to call the GP by first name, 27% by title and last name, 21% by title only, and 10% by title and first name. Factors identified by patients influencing these preferences included length of time the patient had known the GP in 42%, age difference in 38%, gender difference in 7% and cultural background in 7%. Patient factors predicting preference for more formal address of the GP included male gender, unfamiliar GP and overseas birth.

**Discussion:** These findings allow Australian GPs to feel confident in addressing their patients informally. They indicate the diversity of patient preferences for addressing their GP and the underlying factors influencing these choices.

#### SC19.03

Evaluation of the implementation of a rapid streptococcal antigen test in a routine primary health care setting - From recommendations to practice

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Background and aim: Pharyngitis is a common reason for consultation in General Practice. Despite the development of diagnostic criteria it remains difficult to clinically diagnose the bacterial type. Therefore, current guidelines recommend the additional use of objective tests. In Austria, the Burgenländische Gebietskrankenkasse introduced a test as service for patients and regular payment position for GPs. It was the aim of this study to analyze this implementation process in General Practice and a possible change in antibiotic prescriptions.

Methods: The retrospective evaluation lasted from April 2006 to June 2009; in April 2007, rapid-streptococcal-antigen-tests (RSATs) were introduced. GPs were grouped into three clusters according to their use of RSATs. In addition, all antibiotic prescriptions within the evaluation period were analyzed and correlated to the three clusters before and after the implementation.

Results: The overall number of RSATs performed was 6,401. Half of the GPs utilized it regularly. After its introduction, the relative antibiotic prescription frequency was significantly reduced (17.1% vs. 16.4%, p=0.0001). The results for the subgroup analyses yielded a significant reduction for the regular user group only (16.0% vs. 15.0%, p=0.0001).

Conclusion: GPs using the RSAT regularly seem to apply the test appropriately in accordance with the epidemiology. The decrease of the relative antibiotic prescriptions of all GPs seems to be due to the regular user group of GPs. This could be interpreted as a consequence of the RSAT use. The results show a positive trend for an improvement in diagnostic quality and for an appropriate use of antibiotic prescriptions.

#### SC19.04

The impact of a generative environment on patient anxiety and wellbeing. A case-study of effects on patients and staff in an Irish General Practice

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There has been a paucity of research on the impact of the physical environment in primary healthcare facilities on patients and staff.

Aim - To explore changes in patient anxiety and patient and staff satisfaction, when a large GP practice moves from old premises to a restored and extended former convent building (30,000 sq feet). using generative space principles. Questionnaire Surveys, Setting an Urban General Practice in Waterford City Ireland.

Method - Patient Questionnaires assessed, anxiety (Spielberger State Trait Anxiety Inventory; STAI,) satisfaction with the environment and communication during the consultation. Staff Questionnaires assessed satisfaction with the environment and job satisfaction.

Results - There were a total of 800 Questionnaires pre-move and 800 Questionnaires post-move. Patients rated themselves on the STAI as significantly more anxious (12.72) in the waiting of the old practice compared to the waiting in the new practice (11.19). Also patients after the appointment in the old practice (11.6), rated themselves as more anxious than those (10.64) after the appointment in the new practice. Interestingly across both practices the appointment reduced anxiety levels; however those attending the new practice had lower anxiety scores in the waiting room and these scores significantly reduced after the appointment. In fact patients post appointment anxiety at the old practice was not significantly different to patients pre-anxiety at the new practice. Suggesting that the generative space layout in the new practice reduced patient anxiety to lower than that of patients even after their appointment in the old practice.

Overall patient satisfaction with the reception (7.93) versus (8.98) and waiting room (27.94) versus (30.9). As predicted, were higher in the generative space new practice, compared to the old practice.

In terms of staff's overall ratings, their work satisfaction scores in the new practice were significantly better than in the old premises (41.1) versus (47.3)

This large-scale study examining the effects of an Irish primary care environment on patients and staff shows that a generative environment is associated with improved reductions in anxiety and increases in patient and staff satisfaction.

# SC.20 - Clinical Research 08 -Children, Adolescents

#### SC20.01

Dietary habits and obesity in primary school pupils: a multicentre cross-sectional study in north Greece

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Purpose: To investigate the dietary habits and Body Mass Index (BMI) in primary school pupils, in order to detect the possible need for General Practitioners' (GPs') intervention in their community. Methods: Six Primary Health Care Centres (PHCCs) within the 3rd Health Region Authority (Macedonia) investigated into the dietary habits of children attending the primary schools in their areas. The primary education is compulsory in Greece and its duration is six years starting at the age of 6 years old. The director of each PHCC informed the principals of the nearby primary schools about the purposes of the study, requesting their permission and arranging the visit at the school campuses. GPs visited the school campus

facilitating the pupils to answer questions about their dietary habits, demographic questions and issues about internet use and leisure time. Children's weight and height were measured by the GPs in order to calculate Body Mass Index (BMI). The study was organised by the 3<sup>rd</sup> Health Region Authority. Approval from the Greek Ministry of Education was obtained for this study.

Results: 897 children (46.9% male), from 26 primary schools participated in the study. 17% (119/699) of the children were overweight, while 7.7% (54/699) were obese. 186 (20.7%) did not have any breakfast at home, while 813 (90.6%) usually eat a snack at the school breaks, of questionable quality for 275 (30.6%) children. 477 (53.2%) eat everyday at lunch time with their family. 420 (46.8%) eat fast food once or twice per week. Boys were overweight and obese in higher percentages than their female classmates (23.7% vs 11.1%, and 10.2% vs 5.3%, p<0.001, accordingly).

Conclusions: One out of four children between 6 and 11 years old was found to be over the normal BMI, while dietary habits that contribute to the development of obesity were described. GPs ought to develop an active role in developing school-based health and nutrition education interventions in order to emphasise on the importance of breakfast and Mediterranean diet.

#### SC20 02

Headache in young age: demographic and nosological characteristics in an outpatient headache clinic registry

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INTRODUCTION: Headache disorders are a common cause of medical consultation among adolescents and young adults. Proper diagnosis and management of headache in young age, depends on taking through history and comprehensive clinical examination. We aim to analyze characteristics of young patients attended in an outpatient headache clinic in a tertiary hospital, and incidence of their different headaches codified according to International Classification of Headache Disorders. II Edition (ICHD-II)

METHODS: Due to our health system organization, only patients older than 14 years were referred to this office, most of them by general practitioners. From January 2008 to December 2011, we prospectively gathered in each patient gender, complementary tests required, and previous symptomatic or prophylactic therapies. When a patient fulfilled criteria for more than one type of headache, all of them were diagnosed and classified. We measured adverse headache impact with six-item Headache Impact Test (HIT-6)

RESULTS: 1668 patients were attended during inclusion period. 208 (12.5%, 55 males, 153 females) were younger than 25 years. 201 (96.6%) had received at least one symptomatic treatment, but only 93 (44.7%) had previously used a preventative. 141 (67.8%) did not required ancillary tests. A total of 297 headaches were recorded in these 208 patients. Only 19 (6.4%) were secondary headaches, and most of them were codified in Group 8 (Headache attributed to a substance or its withdrawal). Regarding primary headaches, 215 (72.4% of all headaches) were in Group 1 (Migraine), 19 (6.4%) in Group 2 (Tension-type), 3 (1%) in Group 3 (Trigeminal autonomic), and 16 (5.4%) in Group 4 (Other primary headaches). One (0.3%) was classified as Group 13 of ICHD-II (Cranial neuralgias) and only 2 (0.7%) headaches corresponded to Group 14 (Unspecified or not elsewhere classified headaches). In 114 patients (54.8%) HIT-6 score showed a severe impact (>59) CONCLUSION: Most headaches in young age can be codified according to ICHD-II criteria. Migraine was the most frequent diagnosis. Headache was commonly associated with negative impact among young patients. We suggest preventatives to be more widely used by general practitioners in young age.

#### SC20.03

# Impact of divorce and loss of parental contact on health complaints among adolescents

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Aim: Parental divorce is a common event, and may influence the well-being of children and adolescents. The aim of this study was to investigate the relationship between divorce experience and loss of parental contact following such an event and its impact in several aspects of mental health among adolescents.

Method: The study is based on data from four cross-sectional surveys carried out in 1997, 2001, 2005 and 2009 among tertiary school students in Førde in the county of Sogn og Fjordane in Norway. We established three groups according to divorce experience, and calculated frequencies of divorce experiences according to survey year with 95 % confidence intervals. We used the group with no divorce-experience as reference-group in analyses of variance and in linear regression analyses.

Results: We found that an increasing number of children and adolescents experienced divorce during the survey years, but no sign of attenuated effects on emotional health were observed. Mental complaints were not attenuated as time since divorce increased, on contrary; a borderline significant association was found for increasing depressive complaints as years since divorce increased. A majority of those losing contact with parents, have no contact with their fathers. The study revealed a modest increase of health complaints if parental contact was preserved, but a conspicuous increase when the adolescents experienced loss of parental contact following the divorce. Interaction analyses showed no gender differences but significant differences in parental support concerning associations between divorce experiences and emotional and psychosomatic distress.

Conclusion: We may conclude that emotional distress after divorce is not attenuated as divorce prevalence increases, but that the deleterious effects of divorce on the wellbeing of adolescents seem to be confined to those experiencing a concomitant loss of parental contact. Efforts aiming at reducing parental hostility and improving mutual parental responsibility, care and support therefore seem important.

### SC20.04

# Is Pediatric Hypertension a real problem?

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Introduction: Pediatric Hypertension (PHT) is a poorly documented disease in our country, with no published data in our region where some of the primary health care centers don't have appropriate inflatable cuffs for pediatric ages. Thus, it became necessary to characterize the distribution of blood pressure (BP) and the prevalence of PHT and pre-PHT in a population sample of this district and its relationship to gender, age and anthropometric parameters.

Methods: Multicenter observational, transversal, descriptive and analytical study. Sample: convenience, population aged [3-18] years followed on a Pediatric Outpatient Consult between 18/10 and 17/12/2010. Variables: gender, age, weight, height, systolic and diastolic BP and type of consult. The Fourth Report NHBPEP criteria for the classification of BP was used. The percentiles of weight, height and Body Mass Index (BMI) were classified according to the Centers for Disease Control. Appropriate statistical tests were applied.

Results: 832 children and adolescents (57% male). Average age of 8.25  $\pm$  3.67 years, BMI percentile of 60.20  $\pm$  30.31. Prevalence of PHT and pre-PHT were 12.5% and 10.7%, respectively. 71.2% of hypertensive cases regarded isolated systolic hypertension whereas 16.3% concerned isolated diastolic hypertension. By type of consultation, the prevalence in the general pediatric consultation (similar to the Primary Care Consult) was 11.7% for PHT and 9.1% for pre-PHT.

Data from allergology consultations were excluded from analysis for presenting a different BP changes distribution (p = 0.009) when compared to the general pediatrics consultations. No strong

relation was found between pressure changes and gender or stature. We documented, for the pressure changes, a statistically significant relationship with age ( $p = 1.08 \times 10^{4}-12$ ) and weight percentile (p = 0.018).

Discussion: The prevalence of abnormal BP values in this sample was higher than the assumed values. The association between systolic BP values and weight percentiles is consistent with the literature.

These results are particularly important for the direct relationship between BP in children and in adults and the increase in pediatric BP levels in recent years. We highlight the importance of early diagnosis of this disease, routine measurements of BP and the use of appropriate measurement methods.

### SC20.05

Young people exposed to domestic violence: a qualitative research to their sexual and reproductive health.

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Background In at least 60% of partner violence cases, children are exposed to the violence. The (often) repeated exposure to violence in the home increases children's chance of developing psychological and behavioral problems. They run the same risk for long term negative consequences compared to children who are abused themselves. They also have a chance of one out of three to become either victim or abuser in their adult life. This is called intergenerational transmission. To date it is not fully known to which extent the violence affects the reproductive and sexual health of children exposed to domestic violence.

<u>Aim</u> To explore if domestic violence affects sexual and reproductive health in children, adolescents and young adults.

<u>Methods</u> Qualitative design. Semi-structured interviews are held with both children, adolescents and young adults exposed to domestic violence and mothers who are a victim of domestic violence. These interviews are tape-recorded and transcribed. Two researchers analyzed the interviews independently into codes and themes. They then discussed their findings until consensus was reached and the most important themes were identified.

Results 10 interviews were held with children exposed to domestic violence. 11 interviews were held with mothers of children exposed to domestic violence. The analysis of the interviews is currently in an ongoing process and will be finished around may 2012. Preliminary results show a high occurrence of sexual risk taking behavior in adolescents and young adults as well as dating violence and signs of intergenerational transmission.

# SC20.06

Prevalence of dental caries and oral health behaviours among a sample of portuguese adolescents

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Introduction: The moderate to high prevalence of oral diseases among adolescents continue to be a reality among our population and an important public health issue. The frequency of toothbrushing, use of dental floss and regular dental appointments are important primary preventive methods in oral health. The objectives of this study consisted in the determination of the decayed, missing and filled tooth index (DMFT index) and the characterization of oral health behaviours among a sample of adolescents.

Participants and methods: An observational cross-sectional study was conducted. We analyzed a sample of 156 adolescents of the

seventh and tenth grades of a local school. Data collection was accomplished through a self-administered questionnaire containing questions related with oral health behaviours and complemented with an intra-oral examination for the determination of the prevalence of dental caries and the DMFT index. Statistical analysis was accomplished using the *Statistical Package of the Social Sciences 18.0 version*. Prevalences were expressed in proportions and were compared by the Chi-square test.

Results: In the final sample we found a DMFT index of 4.05, which means that each student registered an average of 4 teeth decayed, missing due to dental carie or filled. The DMFT index obtained falls within the moderate level, being higher than the goals that were recommended by the World Health Organization. The prevalence of dental caries was 71.8%. In this sample, we found a mean value of decayed permanent teeth of  $2.92 \pm 2.86$ . Twenty-six point six percent of adolescents do not toothbrush at least twice a day, 82.1% do not use dental floss and 32.7% did not have a dental appointment in the last twelve months.

Conclusions: The oral health behaviours in the sample studied show the need for better oral health instructions and necessity to increase the levels of motivation for good oral hygiene habits. Indication for better oral health behaviours and visit a dentist two times a year should also be given during youth surveillance medical appointments in order to maintain good oral health standards.

## SC.21 - Research 09

#### SC21.01

Policy recommendations for improved medication adherence in Europe: the ABC project results

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Aim Patient nonadherence to prescribed medication is common: on average, 30-50% of prescribed medicines are not taken as prescribed. Nonadherence can have a negative impact on patient wellbeing and the economic impact on scarce health care resources is significant. Despite much research to understand the causes, consequences and solutions or policy responses to medication nonadherence, numerous gaps in knowledge remain and clear research-based evidence of how to reduce nonadherence on a large scale remains elusive. The ABC Project was designed to produce evidence-based guidance for improving patient adherence and subsequent better use of medicines by Europeans. The paper summarises the work undertaken under ABC Project, and provides recommendations for European policymakers.

**Methods** Research under ABC Project was conducted in several domains in order to:

- obtain European consensus on terminology used in the field of non-compliance (extensive literature review, and expert meeting)
- identify the determinants of non-compliance with short-term and long-term treatment (patient survey, and literature review)
- obtain insight into current practices of compliance management (healthcare practitioners survey, pharmaceutical industry survey, review of clinical guidelines, review of medical schools curricula)
- assess the effectiveness and cost-effectiveness of complianceenhancing interventions (literature reviews)
- develop policy recommendations for promoting patient compliance in European healthcare and help their implementation (Delphi study on experts, survey of national policymakers)

**Results** Results of the above-mentioned research were integrated into one cohesive set of policy recommendations, which may serve as guidance for relevant stakeholders.

**Conclusion** Evidence-based policy recommendations on improvement on patient adherence to medication in Europe are available now. All stakeholders are encouraged to take benefit of these recommendations, and implement them in their field of activity. This is particularly advisable for primary care workers, as non-adherent behaviour is typical for outpatient settings.

#### SC21 02

## Poor mental and physical health among Hungarian general practitioners

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**Background:** General practitioners (GPs) are involved in a large number of stressful patient-doctor relationships and hence may experience dissatisfaction and high levels of work strain that may adversely impact their mental health.

Aims: To explore the GPs' health maintenance behaviour, mood disorders and the prevalence of burnout.

**Methods:** Exploratory/descriptive, cross-sectional study with self-administered questionnaires among 675 GPs (mean (SD) age: 55 (10) years, 61% female). Depression and burnout were assessed by the short version of the Beck Depression Inventory (BDI) and the Maslach Burnout Inventory (MBI-HSS) (n:135), respectively. Socio-demographic information, blood chemistry, vital signs, health behaviour and medical history were also collected.

Results: 41% of GPs were overweight and 16% were obese. 13% of the GPs had hypertension, 48% had hyperlipidaemia, and 10% had elevated blood sugar level. 78% of the GPs had at least 1 chronic disease and 30% had more than 3 concurrent diseases. Mild symptoms of depression were detected among 6% of GPs, and 4% had severe depressive symptoms. BDI scores correlated with the length of working hours (r= 179, p= 038) and with work related stress (r=.32, p<.001), and inversely correlated with regular physical exercise (r=-.113, p=.004). Data on the prevalence of burnout revealed that 14% and 17% of the GPs reported intermediate and high degree of emotional exhaustion (EE), respectively. Intermediate and high degree of depersonalization (DP) was found in 13% and 14% of the GPs, respectively. Finally, 53% and 34% of the GPs experienced intermediate and low degree of personal accomplishment (PA), respectively. Depression significantly correlated with DP (r=.438; p<.001) and EE (r=.543; p<.001). A significant correlation was found between daily work load and EE (r=.225; p=0.01) as well as PA (r=.325; p<.001). Male gender inversely correlated with PA ( $\chi^2$ =-2.172, p=.044).

**Conclusion**: These data suggest poor mental and somatic health among Hungarian GPs. High prevalence of burnout and depression was associated with adverse work place characteristics such as stress and high work load and lack of regular physical exercise. Further research is required to explore further the risk and protective factors of poor mental health in particular the high prevalence of low degree of personal accomplishment.

#### SC21.03

Patients' and family doctors' preferences for generic drugs results of a questionnaire-based study

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Aims and background

Generic drugs are cheaper equivalents of brand-name drugs. In order to introduce generic drug to the market the drug must undergo a bioequivalence study instead of expensive clinical trials. This difference although economically justified is a reason of doubts risen by scientists all over the world. So far no evidence-based studies confirmed inferiority of generic drugs to brand-name products. In our study we wanted to compare opinions and beliefs of family doctors and primary care patients on generic drugs. Methods

This was a questionnaire-based study. Especially prepared questionnaire was distributed among randomly chosen primary care doctors and primary care patients of Lodz province in Poland. Doctors and patients were asked about their opinions on generic drugs, their effectiveness and beliefs related to generic drugs. The term "cheaper equivalent of brand-name drug" was used in the questionnaire instead of "generic drug", in order not to suggest proper answer in the question about knowledge of the term "generic drug".

#### Results

The study was conducted on total number of 170 primary care doctors (aged 48  $\pm$  10, 71% female) and 264 patients (aged 35  $\pm$  15, 62% female). Out of all primary care doctors 96,5% knew the term "generic drug", 1,2% did not know it and 2,3% did not respond to the question. Although 53.5% of doctors claimed that generic drugs are equally effective to brand-name drugs, 38.8% of them declared that generics were worse than brand-name drugs. In patients group 49,6% claimed that generic drugs are equally effective to brand-name drugs, 9,0% that they are worse and 0,3% that they are better, 38,6% responded "it is hard to say" and 2,5% did not respond to the question.

#### Conclusions

Our study reveals that although there is no evidence-based data on generics inferiority, almost 40% of studied doctors declare that generic drugs are worse than brand-name drugs. Only half of participating doctors and patients claimed that generics are equally effective to brand-name drugs. Because so far no evidence-based studies confirmed inferiority of generic drugs to brand-name products, more doctors and patients should be informed about equal effectiveness of those drugs.

#### SC21.04

Association between patient and family practitioner characteristics and first-time emergency admissions for cancer

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#### Background

Cancer survival in the UK remains relatively poor. Identification of patient and general practice (GP) characteristics associated with emergency (unplanned) hospitalisations may help improve cancer services and patient outcomes.

#### Methods

Patients with first emergency admissions for cancer (primary diagnosis) between 2007/08 to 2009/10 were identified from Hospital Episodes Statistics (HES). We modelled the associations between the odds of admissions being emergencies and various patient and GP characteristics using national datasets, including the Quality and Outcomes Framework (QOF).

#### Results

639,064 patients (139,351 emergency cases) had a first admission for cancer, from 7,957 GP practices. Admissions ranged from 0 to 109 emergencies per practice (median 15; inter quartile range 8 to 24). Of all admissions, emergencies ranged from 13.9% (patients aged 15 - 44 years) to 44.9% (patients aged 85 years and older, p<0.0001), with large variation by ethnicity (highest in Asians), deprivation, rurality and cancer type.

All included variables were statistically significant crude predictors of first emergency admissions for cancer. After adjustment, only practices' average deprivation scores and two QOF cancer indicators were not significant. Larger practice list size was protective (OR 0.38 per 10,000 patients; 95% CI 0.36-0.40) compared to having only one GP (OR 1.26 (1.17-1.35), all GPs aged 50 years and older (OR 1.11 (1.04-1.17), all female GPs (OR 1.22 (1.10-1.35), and no UK qualified GPs (OR 1.27(1.21-1.34). Conclusion

Many patient and practice factors were associated with higher odds of first emergency cancer admissions. Further research should investigate these complex inter-relationships and identify high risk patient groups.

#### SC21.05

Cardiorenal syndrome: serum creatinine and estimation of glomerular filtration rate in General Practice

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**Introduction**: In Italy mortality rate for heart failure (HF) is 10% and chronic renal failure (CRF) is an aggravating factor.

**Objectives**: evaluate General pratictioners (GP) levels of attention in cardiorenal syndrome management through: recording of routine serum creatinine (SC, mg / dl); estimation of glomerular filtration rate (GF), through standard formulas application; applying the Boston Criteria (BC) for the clinical diagnosis of HF.

**Materials and methods:** Among 16201 people assisted by 10 GPs were identified patients with HF through clinical-anamnestical criteria in 2004/06 and through BC in 2007/09. We use CS to value GF through application of CKD-EPI, MDRD2, Mayo-Clinic formulas assessing CRF in K-DOQI stages.

Results 386 patients were enrolled. SC value was registered at least once per year only in 4% of patients and never recorded in 16.5%. Patients was classified according to SC in normal (M <1.3, F <1.2), borderline (M <1.5, F <1.4) and high (M> 1.5, F> 1.4). Prevalence for year of abnormal SC ranged from 8.9% to 25.8%. CKD-EPI gives a lower FG value than MDRD2 and Mayo-Clinic one, according more severe K-DOQI stage. 35.4% of patients with normal SC value present a FG less than 60 ml/m, this percentage rise to 95.3% among borderline patients. 42% of patients staged I-II K-DOQI in 2004/05 evolved in a most severe stage at the end of the study.

**Conclusions**: GPs should use standard formulas instead of SC for renal damage evaluation, moreover BC should use instead of only subjective clinical judgment to stage HF.

#### SC21.06

## Smoking prevalence and readiness to quit in HIV+ patients in primary care

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Background: Among HIV+ subjects smoking contributes towards excess morbidity and mortality compared to the general population. Smoking cessation in this population has been shown to improve clinical outcomes as well as quality of life. Currently, there are no existing data about prevalence of smoking in the HIV+ population in European countries.

Methods: Consecutive patients with positive tested HIV status, smokers, and non-smokers, who are treated in primary care offices in Austria and Germany with a focus on HIV/AIDS treatment, were included. Nicotine dependence was assessed with the Fagerström Test for Nicotine dependency, and stages of change by a standardized readiness to quit questionnaire. Self-reported smoking status was objectified by measuring exhaled carbonmonoxide (CO) levels.

Results: Preliminary results of the first 100 subjects revealed a prevalence of smoking of 52%. CO-values among the smokers varied from 6 to 31 ppm (mean: 15.6). 47% of the smokers were substantially nicotine dependent, and 27% had moderate or low dependence, respectively. The following stage-of-change distribution for smoking cessation was observed: precontemplation: 14%; contemplation or preparation: 75%; action: 12%. In non-smokers the proportion of those who rated their quality of life as "very good" or "good" was significantly higher compared to smokers (89 vs. 69%, P=0.019).

Conclusions: Prevalence rates for smoking in HIV+ subjects are about 2 to 3 times higher than in the general population. Smokers, however, have a high level of readiness to quit. Primary care visits should be regarded as windows of opportunity to counsel towards smoking cessation especially in HIV+ subjects.

# SC.22 - Clinical Research 09 - Respiratory Problems

#### SC22.01

Accuracy of the clinical view for pneumonia. Results from the GRACE study

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Background. Knowledge on the accuracy of the physician's clinical assessment on the presence or absence of pneumonia is important to improve strategies to detect pneumonia in daily practice. We set out to determine the diagnostic accuracy of the clinical assessment based on signs and symptoms to detect pneumonia against a chest radiograph as reference standard in subjects presenting with cough in primary care.

Methods. In 2810 patients consulting for acute cough in 12 European countries, their general practitioner (GP) estimated whether pneumonia was present or not directly after history taking and physical examination. A chest radiograph was performed within one week and assessed by local radiologists blinded to other patient characteristics.

Results. 140 patients had pneumonia according to the chest radiograph (5%), of whom 41 (29%) where identified by the GP. Of those without pneumonia (n = 2670), the GP incorrectly estimated that pneumonia was present in 31 subjects (1%). Sensitivity, specificity, positive and negative predictive value of the clinical assessment were respectively 29%, 99%, 57% and 96%.

Conclusions. In suspected pneumonia by the GP, 57% of the patients showed radiographic pneumonia However, most cases of pneumonia were missed in primary care based on the clinical assessment. Additional diagnostic strategies are needed to improve the detection and thus therapy of primary care patients with pneumonia.

#### SC22.02

Prevalence and clinical manifestations of influenza in patients presenting with cough: results from the GRACE study

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Background. Knowledge on the prevalence and possible diagnostic criteria for influenza in patients presenting with lower respiratory tract infection (LRTI) would help to improve rational management, including prevention of unnecessary treatment with antibiotics.

Objective. To determine the prevalence, clinical manifestation and the added value of biomarkers (C-reactive protein (CRP)) and procalcitonin (PCT) beyond the clinical assessment for influenza in LRTI patients.

Methods. An international diagnostic study among 1565 adult patients attending their general practitioner with acute cough (≤28 days) recruited in 12 European countries during periods of increased influenza activity. History and physical examination findings were recorded and subsequently CRP and PCT measured

in venous blood. Influenza was considered present if influenza A or B polymerase chain reaction (PCR) of the nasopharyngeal swab was positive (reference standard). The accuracy of five existing diagnostic models for influenza was determined, using measures of discrimination (receiver operating characteristic curve (ROC area)) analysis and calibration. Subsequently, a set of clinical characteristics for influenza was determined with multivariable logistic regression. The added value of CRP and PCT results was quantified by ROC analysis.

Results. 198 patients had influenza (13%). The previously published diagnostic models showed moderate discrimination (ROC areas ranging from 0·53 (95% confidence interval (95% CI) 0·48-0·57) to 0·68 (95% CI 0·64-0·72) and poor calibration for identifying influenza in LRTI. The combination of shorter duration of complaints prior to consultation, NO influenza vaccination, absence of phlegm, myalgia and fever (temperature 37·8°C or higher, reported or measured during consultation), resulted in the highest ROC area of 0·77 (95% CI 0·74-0·80). Adding CRP and PCT did not increase the ROC area.

Conclusions. Influenza is not uncommon in LRTI patients. Previously reported clinical characteristics show diagnostic value in this population, but a proportion (9%) of influenza cases lack systemic characteristics. CRP and PCT have no additional diagnostic value.

#### SC22.03

Influence of different spirometry interpretation algorithms (SIA) on decision making among primary care physicians: A pilot study

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Spirometry is recommended for the diagnosis of asthma and COPD in international guidelines and it may be useful for distinguishing asthma from COPD. In many cases the only data required for clinical decision making are the Forced Expiratory Volume in one second (FEV1) and the Forced Vital Capacity (FVC). While there are many SIA promoted for adoption in primary care there are no studies describing how different SIA may influence interpretation of the same data among primary care physicians.

Method. Thirty seven primary care physicians participating in a spirometry interpretation session were invited to interpret nine spirograms presented twice in random sequence using two different SIA and touch pad technology (remote audience response devices) for anonymous data capture and recording. This strategy allowed participants to interpret the same spirograms using two different SIA (Can Fam Physician October 2011 57: 1148-1152, 1153-1156 .The decision nodes contained in each of the SIA represented the possible interpretation options. Participation was voluntary.

Results. Response rates for all the spirograms was above 90%. We observed some important differences in the interpretation of the same spirograms using the two SIA. When the FEV1/FVC ratio was greater than 0.70 one algorithm excluded asthma despite compelling evidence to the contrary; the second SIA correctly highlighted the possibility of asthma. The reliance of changes in FEV1 after bronchodilator challenge to distinguish asthma from COPD in one SIA led to consideration of asthma despite the presence of data that was also consistent with COPD; the latter SIA did not include a logic string leading to a post-bronchodilator FEV1/FVC so a definitive consideration of COPD could not be made. Since one of the SIA did not include a post-bronchodilator FEV1/FVC decision node, a reduction in FVC often prompted referral for further pulmonary function tests; in the second SIA an improvement in FVC after bronchodilator challenge prompted a response that was consistent with the overall data.

Conclusions: This pilot study suggests that different SIA may influence decision making and lead clinicians to interpret the same spirometry data differently. Further studies are needed to better understand the clinical implications of our findings.

#### SC22.04

Level of asthma control in a primary care setting by taking the Asthma Control Questionnaire (ACQ).

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The objective of this study was to evaluate the level of asthma control in a Dutch primary care setting.

#### Methods

We conducted a cross sectional survey among patients who were invited to participate in the Accurate trial (Trialregistration: NTR1756). All patients with a doctors' diagnosis of asthma, aged between 18 and 50 years old and a prescription of inhaled corticosteroids in the previous year were invited. Patients who did not want to participate were nevertheless requested to complete an Asthma Control Questionnaire (ACQ). Results of patients not willing to participate were added to baseline ACQs of participants. Asthma control categories were defined as strictly controlled with an ACQ ≤0.75; partly controlled with an ACQ between 0.75 and 1.50 and uncontrolled asthma with an ACQ ≥ 1.5.

#### Results

We obtained 776 ACQ's after inviting 2884 patients in 86 general practices. The ACQ ranged from 0.0 to 4.2; median ACQ was 0.7; mean 0.8. In this primary care asthma population 20% of the patients were uncontrolled; 23% partly controlled and 57% strictly controlled. Males were better controlled (ΔACQ -0.18; p 0.04); asthma control was not associated not with age (p 0.96).

#### Conclusion

In about one fifth of a western European primary care population asthma is uncontrolled. Notably, although the majority of patients with asthma have an adequate level of control, there is still room for improvement in almost a quarter of patients, as GINA guidelines recommend considering stepping up asthma medication when patients are partly controlled. These data suggest that asthma is suboptimally controlled by current primary care management.

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#### SC22.05

Asthma control status in participants and non-participants of a pragmatic trial in primary care.

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Netherlands, <sup>3</sup>Radboud University Nijmegen Medical Center, Nijmegen, Netherlands.

Background Pragmatic studies aim to include a representative sample of a study population.

Aim We aimed to evaluate whether the level of asthma control differed between participants and non-participants of a pragmatic trial in primary care.

Method We conducted a non-participant analysis of patients who were invited for the pragmatic Accurate trial (Trialregistration: NTR1756). We contacted all patients who were aged between 18 and 50 years old, with a doctor's diagnosis of asthma and a prescription of inhaled corticosteroids in the previous year from 86 participating general practices in the Amsterdam and Leiden region by mail. We asked patients who did not want to participate for their reasons and to fill out an Asthma Control Questionnaire (ACQ). Current asthma control in participants and non-participants was assessed by the ACQ and results were compared by Student's t-test.

Results We mailed 2884 patients, 409 participated in the trial and 367 amongst those not willing to participate filled out an ACQ. Patients not willing to participate had better asthma control (ACQ

0.57) than trial participants (ACQ 1.0). The difference in ACQ of -0.42 was significant (95% CI: -0.53 to -0.32, p=0,00). Main reasons not to participate were no asthma complaints (36%); lack of time (31%) and no interest (13%). Conclusion Patients who participated in this trial have worse asthma control than patients who decided not to participate. Our data indicate that current level of asthma control is amongst the reasons for patients whether or not to participate in a trial. This stresses the importance of preplanned subgroup analyses of trial outcome based on baseline asthma control categories.

#### SC22.06

Results of a strategy on interdisciplinary and longitudinal work in management of chronic obstructive pulmonary disease (COPD) in the influence area of an hospital in Girona

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#### Objective

To evaluate the changes incorporated by doctors and nurses in registration in primary care management of COPD after implementing the Clinical Practice Guideline (CPG) and other strategies for 2 years

MATERIALS AND METHODS

Epidemiological, prospective, longitudinal, multicenter study performed in 3 Primary Health Centers (PHC) and the Hospital of Santa Caterina from 2009 to 2011.

Descriptive analysis of frequencies, using the estimated prevalence by 95%. The variables were obtained from the computerized databases of the PHC and the hospital.

.- Criteria for inclusion:

over 40 years

diagnosed with COPD registered

stable residence in the described area

-. Exclusion criteria:

short residence time (less than 6 months)

relocation during the study

severe pathology in determining the evolution interventions in health

- a) professional training (on general knowledge and techniques)
- b) workshops,
- c) feedback on the evolution of the recorded data
- d) creation of a tobacco control unit
- e) team meetings
- f) results meetings.

#### RESULTS

- · At the end, slightly increased the prevalence of COPD registration and 3/4 of the patients had a spirometry performed.
- · The cessation reached 80% and the council on stop smoking was reported by 90% of patients.
- - The flu and pneumococcus vaccination were increased.
- · A low registration of smokers was detected: 14% CONCLUSIONS
- · This study let to know the status of COPD patients in the area, although infradiagnosis.
- · Has improved the correct diagnosis of COPD despite the low record of smokers
- · Efforts should be devoted to prevention, early detection and adequate management of COPD.

## SC.23 - Clinical Research 10 - Mix 6

#### SC23.01

The Comparison of Alcohol Cosumption Causing the Biomarker's Abnormality according to the Flushing Response in Korean Male Drinkers

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Purpose: This study was performed to identify the difference of alcohol consumption inducing the biomarker's abnormality depending on whether the flushing response exist. Method : The subject was 374 males (107 flushers, 267 non-flushers) who visited outpatient clinic of Dept. Family Medicine, Chungnam National University Hospital from January 1, 2010 to December 31, 2010. They were classified into flusher and non-flusher by the flushing response to alcohol drinking. Using ROC curve, the cut-off values of weekly drinking amount inducing biomarker %CDT (Carbohydrate Deficient Transferrin) , rGTP (gamma-Glutamyl Transpeptidase)'s abnormality were investigated. Alcohol drinking more than the cut-off value was selected as heavy alcohol drinking. The sensitivity, specificity, positive predictive value and negative predictive value of %CDT, rGTP were investigated for screening of heavy alcohol drinking. Results: The cut-off value of weekly drinking amount inducing %CDT's abnormality was 3.38 standard drinks (1 drink: 14g of alcohol) in flushers. Sensitivity and specificity of %CDT were 77.8%, 70.4% respectively in flushers. The cut-off value of weekly drinking amount inducing %CDT's abnormality was 11.25 standard drinks in non-flushers. Sensitivity and specificity of %CDT were 62.2%, 69.6% respectively in nonflushers. The cut-off value of weekly drinking amount inducing rGTP's abnormality was 3.38 standard drinks in flushers. Sensitivity and specificity of rGTP were 68.0%, 76.8% respectively in flushers. The cut-off value of weekly drinking amount inducing rGTP's abnormality was 8.75 standard drinks in non-flushers. Sensitivity and specificity of rGTP were 71.1%, 66.7% respectively in non-flushers. AUROC of %CDT for heavy drinking screening was 0.726 in flushers, and 0.684 in non-flushers. The AUROC of rGTP for heavy drinking screening was 0.738 in flushers, and 0.718 in non-flushers. Conclusions: The weekly drinking amounts inducing %CDT, rGTP's abnormality in flushers were lower than those of non-flushers.

## SC23.02

Statin therapy among middle aged patients in primary care settings - What determines better compliance?

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Background: Treating hyperlipidemia in primary care setting is a trivial issue of daily basic management. Guidelines that clearly postulate instructions for that matter are accepted worldwide. Nevertheless, it seems that even tough physicians are aware and act accordingly; the patients fail to comply. Compliance is "the extent to which a person's behavior in terms of taking medication(s) coincides with medical advice." Bandolier Review, delineated risk factors that "favors" poor compliance among patients treated with Statins. Cohort studies of patients prescribed Statins show 6-30% discontinuation rates at various endpoints in clinical trials but at clinical practice rates are higher.

Studies demonstrated a steep decline in lipid lowering medications therapy compliance in the first few months of treatment. The English medical literature lacks information concerning lipid lowering drug compliance among middle aged patients. "Real life" medication compliance in primary care is most meaningful because most studies published summarized results collected from hospital ambulatory clinics and specialist professional clinics in the community. Those settings hold some bias compared to

"pure" community medicine. With this regard we tried to estimate Statin compliance and influencing factors at our primary care.

Methods: 619 patients aged 41-65 years old who were taking either generic or new Statins, were followed up for 6 months to determine the proportion of filled prescriptions. Patients were treated either by generic Statins (Simvastatin, Pravastatin) or by non generic Statins (Atorvastatin, Fluvastatin, Rusovastatin). Statins were prescribed to achieve desired targets as stated in NCEP III guidelines. Univariate ANOVA analysis was used for continuous variables, and the Chi-squared test for non-parametric data. Logistic regression was used to predict compliance at different cut-off values. Study targets focused upon determining compliance rate for generic and new Statins and factors which influence compliance.

Results: On univariate analysis compliance was significantly better for those taking the new non generic Statins (p < 0.0127). Compliance was also better for diabetic patients (p <0.008) and "older" middle aged patients (p<0.001).

Conclusions: In middle aged hyperlipidemic patients, the non generic Statins are associated with improved compliance. The two other major factors are increasing age and diabetes mellitus.

#### SC23.03

## Relationship Between Alcohol-related Facial Flushing and Hyperhomocysteinemia

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Background: This study examined the relationship between alcohol consumption and hyperhomocysteinemia according to facial flushing caused by drinking.

Method: Among male patients aged 18 and older who visited the health promotion center in Daejeon from January 2008 to December 2010, 948 males (182 non-drinkers, 348 patients with facial flushing related with drinking, 418 patients without facial flushing) were selected as the subjects. After adjusting confounding factors such as age, BMI, high blood pressure, diabetes, smoking, triglycerides, high-density cholesterol and r-GTP, logistic regression was performed to analyze the risk of hyperhomocysteinemia of non-facial flushing group and facial flushing group on the basis of comparison with non-drinkers.

Results: After adjustment of confounding factors, the risk of hyperhomocysteinemia was significantly decreased in the group presenting weekly alcohol consumption of less than 8 drinks (1 drink = alcohol 14g) in the non-facial flushing group (below 4 drinks OR 0.25, 95% CI 0.09-0.69; 4 ~ 8 drinks OR 0.17, 95% CI 0.05-0.63). On the other hand, the risk of hyperhomocysteinemia was significantly decreased in the group presenting weekly alcohol consumption of less than 4 drinks in the facial flushing group (OR 95% CI 0.13-0.70). Although the risk hyperhomocysteinemia also was decreased in other drinking groups, it was not significant.

Conclusion: our findings suggest that drinking is related with the decrease in risk of hyperhomocysteinemia and that such effects are presented only in less amount of alcohol consumption in the facial flushing group.

#### SC23.04

The effects of education with printed sheet on lipid control in patients with dyslipidemia: Prospective case-control study

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Introduction: The most efficacious type and content of dyslipidemia education has not been established. The aim of the study is to evaluate the effects of education with printed sheet on lipid control in patients with dyslipidemia.

Methods: The 24 patients (aged 43-69 years) were recruited in the health promotion center of a university hospital. In control group (n=10), we educated patients without printed sheet. In study group (n=14), we educated with printed sheet. The lipid levels of all patients were compared with previous ones after a month. Patients were checked for total cholesterol (TC), triglyceride (TG), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), TC/HDL and nonHDL.

Results: There were not significant differences of TC, TG, HDL-C, LDL-C, TC/HDL and nonHDL between control and study groups before education. In study group, there were significant improvements in TC (231.1  $\pm$  36.7 vs. 203.3  $\pm$  25.9, p < 0.001), TG (215  $\pm$  99.9 vs. 157.8  $\pm$  88.1, p = 0.045), LDL-C (143.9  $\pm$ 43.2vs. 112.1  $\pm$ 31.5, p = 0.026), TC/HDL (5.0  $\pm$  1.0 vs. 4.4  $\pm$  1.0, p = 0.013) and nonHDL (183.2  $\pm$  32.9 vs. 154.8  $\pm$  27.2, p < 0.001) but not HDL-C (47.9  $\pm$  13.8 vs. 48.5  $\pm$  14.9, p = 0.950). In control group, there were not significant improvements in TC (230.5  $\pm$  34.2 vs. 224.1  $\pm$  27.3, p = 0.104), TG (214  $\pm$  79.9 vs. 198.5  $\pm$  73.2, p = 0.507), HDL-C (43.8  $\pm$  11.3vs. 41.3  $\pm$  10.2, p = 0.619), LDL-C (129.9  $\pm$  40.9vs. 128.2  $\pm$  20.9, p = 0.906) and nonHDL (156.4  $\pm$  36.4 vs. 146.2  $\pm$  29.2, p = 0.052) except TC/HDL (4.7  $\pm$  1.1 vs. 4.2  $\pm$  0.7, p = 0.040).

Conclusion: Education with printed sheet is more effective in lipid control than education without printed sheet. Education with printed sheet may be a useful tool to dyslipidemia treatment.

## SC23.05

## Motivation change of at Risk drinkers by the telephone counseling for 1 year

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Background: In many health problems such as smoking, chronic disease, there are many studies that telephone advise has positive effect on patient's health promotion This study examined the effects of telephone advice on the readiness to change in at-risk drinkers

Method: Family physicians gave 2 minute advice to 64 male at-risk drinkers by telephone(n=26) or in-person(n=38). 6 and 12 month later, the readiness to change was assessed. and The improvement in the readiness to change according to the delivery style was investigated. To Assess about the effects of telephone advise to RTCQ change Compared with direct interviews, confounding factor are adjusted for participant's Age, spouse, occupation, income, education, Religion, Heavy drinking, Family APGAR score, BEPSI score. and the dependent variable was set to the improvement in RTCQ. then The logistic regression analysis were performed.

Result: The readiness to change of 64 Participant consisted of 11(17.2%) precontem plators, 42(65.6%) contemplators, and 11(17.2%) in action before the advice. The behavior changed after advise significantly (P<0.001) in 1(1.6%), 10(15.6%), 53(82.8%), at 6 month and 3(4.7%), 14(21.9%), 47(73.4%) at 12 month respectively. also There was no statistically significant difference between telephone advise and in-person

advise. (after 6 months odds ratio 1.411, 95% CI 0.472; after 12 months odds ratio 0.629, 95% CI 0.223-1.773).

Conclusion: The results suggest that telephone advice by family physicians is effect ive at improving the readiness to change of atrisk drinkers, that the readiness to change lasted for 1 year. in addition there was no statistically significant difference between two groups.

## SC.24 - Clinical Research 11 - Mix 7

#### SC24.01

Evaluation of cognitive functions and early detection of dementia in family practice

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**Introduction:** Although mild cognitive impairment is frequent condition among elderly people and proven risk factor for dementia it has been very rarely recognized by primary care physician.

Up to 75% of elderly patients observe problems with cognitive function but do not mention it and physicians are not actively asking about it.

**Aim**: To explore the methodology to evaluate the cognitive functions among elderly GP patients and detect dementia already in GP practice.

Methods: Prospective cohort 1 year study has been performed from November 2010. until November 2011. in 8 GP practices in Zagreb region. Consecutive patients >65 patients coming to GP for whatever reason were asked to participate. Exclusion criteria: known dementia, psychosis or depressive episode during last 6 months, patients with impaired hearing or vision. 619 patients were included and 602 completed the study. After regular visit patients were tested with Mini Mental State Exam Test (MMSE) and Montreal Cognitive Assessment (MoCA) and asked for possible cognitive or memory problems recently. None of the patients cited the problem with cognition as the reason for visiting the physician. Patients were interviewed after 12 months

with the same testing procedure.

**Results:** At least some cognitive impairment has been found in 512 (85,05%) patients scored bellow expectation on MMSE and 558 (92,69%) bellow expectation for MoCA. 81 patients were diagnosed as MCI syndrome. After 12 months result on both tests have declined in 115 patients

(19,10%) and in 21 (3,49%) result on MMSE has been <19 indicating the presence of dementia. Those patients were send to neurologist who confirmed different types of dementia in all of them.

**Conclusion:** It is possible to evaluate and follow-up cognitive functioning among elderly patients already in GP practice by using short cognitive testing like MMSE and MoCA. Early cases of dementia can be detected even among patients who do not complain on their cognitive functioning.

### SC24.02

Changing guidelines for cardiovascular risk management: implications for the individual patient

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**Background:** The impact of changing guidelines on applicability to already identified patients has hardly been studied. The recently updated guideline on Cardiovascular Risk Management (2011) of the Dutch College for General Practice presents a different risk table for risk assessment than the previous guideline (2006). The new risk table has a wider age-range and assesses 10-year risk of not only fatal, but also non-fatal cardiovascular disease (CVD). We expect the 2011 risk table to distribute patients differently into low, medium, or high risk patients, leading to unknown practical implications.

**Objectives:** To assess the change in the distribution of patients into low, medium or high cardiovascular risk (leading to no, possible and certain treatment, respectively) between the 2011 and the 2006 cardiovascular risk table in the Netherlands.

**Methods:** 371 patients from 6 general practices, aged 40-65 years without CVD, using antihypertensive medication and/or lipid-lowering drugs. We estimated pre-treatment cardiovascular risk according the 2006 as well as to the 2011 risk table.

For this, we extracted age, sex, smoking status, pre-treatment levels of systolic blood pressure (SBD) and total cholesterol/HDL-cholesterol (TC/HDL) ratio, as well as history of diabetes and

rheumatoid arthritis before start of the treatment from the patients' records. If pre-treatment levels of SBD or TC/HDL were unknown, we imputed this missing data with the mean SBD and TC/HDL ratio from other participants (160 mmHg and 4.5, respectively).

**Results:** 298 patients (80%) are distributed the same according to both risk tables. 47 (17%) of the 2006 low risk patients move to medium risk and 5 (2%) move to high risk. 19 (25%) of the 2006 medium risk patients move to high risk and 2 (3%) move to low risk. 57% of the SBP and/or TC/HDL ratio levels were imputed.

**Conclusion:** In comparison with the 2006 risk table, the thresholds for possible treatment seem to be lower in the 2011 risk table, leading to a changed distribution of patients into low, medium or high risk. We think this is not due to missing values, since we used the same imputation for both risk tables. This certainly has implications for practice.

#### SC24 03

The influence of alexithymia, emotional intelligence and work organization on the Burnout syndrome in General Practice.

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Background: Psychological distress represents an emergent killer among General Practitioners, it can have negative effects on the well-being of the professionals and also on the quality of care they provide to patients.

One reaction to the chronic stress is the Burnout syndrome.

Little is known about the aetiology and the development of the Burnout syndrome in General Practitioners and about the role played by emotional intelligence, alexithymia and work organization.

Objective: In this study we analysed the associations between occupational burnout, alexithymia and emotional intelligence in a convenient sample of 115 General Practitioners.

The aim of this study was to investigate if the particular type of work organization of General Practice could influence the Burnout syndrome of the sample group.

Methods: Assessments of burnout, alexithymia and emotional intelligence was done by means of the Maslach Burnout Inventory, the Toronto Alexithymia Scale and the Trait Emotional Intelligence Questionnaire-Short form. Furthermore socio-demographic characteristics and the type of work organization were evaluated with a questionnaire.

Results: The results indicated that the 44.3% of the subjects showed high levels of emotional exhaustion and the majority of them medium-high levels of depersonalization and personal accomplishment.

Alexithymia, emotional intelligence and the particular form of work organization in General Practitioners were significantly associated with occupational burnout.

High abilities in expressing and regulating ones emotions, understanding oneself, controlling and managing one's own emotions and those of other people predicted personal accomplishment and reduced the tendency to be emotionally exhausted and depersonalized.

In addition the particular form of work organization adopted by General Practitioners (governed by the National Collective Agreement underwritten in 2005) influenced the emotional exhaustion of the sample ( $F=3,371,\,p<0,01$ ).

Conclusion: Our study highlights the importance of communicating to General Practitioners the personal and social aspects of General Practice, underlining the role of protective factors in the manifestation of burnout.

Our findings suggest that the possibility to establish a collaboration between General Practitioners and Psychologists may create substantial benefits for Health Service and for its patients.

#### SC24.04

How do general practitioners (GPs) perceive their patients' social deprivation? A quantitative study.

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#### Introduction

There's a strong link between social inequalities and health. We have more and more insight into the nature of this relationship, which embraces not only material deprivation, but also psychological mechanisms related to social and interpersonal problems. Defining our possible role as physicians to fight against the health consequences of these inequalities is a priority. Little is known about how GPs perceive patients' deprivation and how this affects their decisions. The main objective of this study is to describe which patients' and doctors' characteristics are linked to physician's perception of their patients' social status.

## Materials and methods

A survey, conducted between September 2010 and April 2011, included 2031 patients from 47 GPs in Western Switzerland. Deprivation, social distress, and health status were assessed. Patient's subjective social status, perceived by patients themselves and independently by GPs, was tested using the Cantril's

self-anchoring scale. Physicians were also questioned on their perception of patients' deprivation and its influence on health and care. We used a hierarchical model that included patient and physician level variables. The final analysis is under process and will be completed by June. However, we present some preliminary analyses below. Results About one tenth of patients visiting their primary-care physician were affected by restricted health care during the 12 previous months. Further analyses will evaluate which factors are associated with GPs subjective evaluation of their patients' social deprivation. Mixed model highlighted a large part of heterogeneity between doctors. It is likely that we will be able to draw up several profiles, i.e. some doctors think that their role includes taking care of social issues and that patients are willing to tackle these issues with

them, whereas others feel powerless when dealing with social problems. We should observe that these profiles correspond to different ways of evaluating patients' social status.

## Conclusion

Better knowledge of how GPs perceive their patients' social deprivation should help targeting effective medical training and actions to reduce the effect of social inequalities on health.

#### SC24.05

Comparative efficacy of two primary care interventions to assist withdrawal from long term benzodiazepine use: A clustered randomised clinical trial. Preliminary results.

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Long-term use of benzodiazepines (BZD) is not recommended because of their potential adverse effects, the risks of tolerance and dependence, and an increased risk of hip fractures, motor vehicle accidents, and memory impairment. Nevertheless they are widely prescribed in general population.

The objective of this study is to compare the effectiveness and safety of two stepped care interventions in primary care to discontinue long-term BZD use with that of routine care.

We present the methodology, the baseline data and preliminary results at 6 months.

#### **METHOD**

The Design is a three-arm cluster randomized controlled trial. General practitioners (GP) were randomly allocated to: a) structured interview followed by fortnightly follow-up visits (SIF) b) a structured interview plus written instructions (SIW) to self-reduce BZD dose, or c) routine care (RC).

A total of 528 patients were recruited, inclusion criteria were age 18 to 80 and taking BZD for at least 6 months. Eight patients per GP were included before GP randomisation.

#### **RESULTS**

Groups were homogenous at baseline characteristics. Median age was 64(55-72) years, 72,1%(324/519) were women and median BZD use was 53,5(24-112,5) months; BZD had been prescribed in 74,4%(381/512) patients by their GP. According to Hospital Depression and Anxiety (HAD) score, 13,3%(69/518) patients were depressed and 30,3%(156/515) were anxious. 29,6%(154/520) were dissatisfied with their sleep quality and 36,6%(188/514) had BZD dependence by Severity Dependence Scale score.

At six months, 38,2%(71/186) from SIF and 44,4%(71/160) from SIW groups had discontinued BZD compared with 14,1%(24/170) from RC group. In a multilevel analysis adjusted by the cluster effect, odds ratios for SIF and SIW were 3,73(IC95%=2,12-6,55) and 4,9(IC95%=2,75-8,69) respectively, there were no statistically significant effect of the cluster of the GP (Median Odds Ratio= 1,44 p-value=0,1456). There were no statistically significant differences in anxiety and depression score by groups, neither increased alcohol consumption nor dissatisfaction with sleep quality.

#### CONCLUSSION:

Baseline characteristics within groups are homogeneous. Both interventions are about four times more effective than RC to discontinue BZD use with no statistical differences between SIW and SIF groups. Interventions were safe as there were no increase in anxiety, depression, alcohol consumption or dissatisfaction with sleep quality.

## SC.25 - Research 10

#### SC25.01

Experiences of and attitudes towards medical errors - a comparative study on younger and experienced doctors working in primary health care

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Background and objectives: Tolerating uncertainty and coping with mistakes are important skills among general practitioners (GP). Our aim was to study the differences in the attitudes between young and experienced doctors working in primary health care towards uncertainty, fear of making mistakes, and how they have dealt with mistakes.

Methods: A survey was sent to a convenience sample of doctors working in primary care in Southern Finland. The questionnaire included demographic variables, questions on tolerance of uncertainty and mistakes, how they cope, which factors influence their ability to avoid mistakes.

Results: During the year 2011 165/244 (response rate 68%) persons, younger (experience ≤5 years) (n=85) and experienced doctors (experience >5 years) (n=80), responded. The younger doctors tolerated uncertainty more poorly than the experienced doctors, felt significantly more often than experienced doctors fear of making mistakes (70.2% vs. 48.1%, p=0.004), and admitted having made a mistake during the past year more often (83.5% vs. 68.8%, p=0.026). The younger doctors were less prone to apologize to the patient when a mistake had been made than the experienced doctors (44.7% vs. 65.0%, p=0.009). Most factors predisposing to making mistakes were experienced similarly in these doctor groups. The younger doctors found on-site consultations and electronic databases more useful in avoiding mistakes.

Conclusions: Tolerance of uncertainty and coping with mistakes seem to improve with accumulating experience. The younger doctors admit making a mistake more often than the experienced doctors, and use more often consultations of peers or senior colleagues when trying to avoid making mistakes.

#### SC25.02

Multiple intervention to optimise antibiotic prescription for respiratory tract infections - embedment within the practice accreditation of the Dutch College of General Practitioners

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### Background

Respiratory tract infections (RTIs), mostly viral and self-limiting, are nonetheless often treated with antibiotics. Despite low antibiotic use in the Netherlands, about 50% of prescriptions for RTIs are not according to the guidelines. A multiple intervention reduced antibiotic prescribing rates by 12%.

Aim

To determine effectiveness of the implementation of an intervention aimed at improving antibiotic use, by embedding the programme in the practice accreditation of the Dutch College of GPs.

#### Methods

88 primary care practices were randomised to 'improving antibiotic prescription for RTIs', or 'improving PPI use'.

Antibiotic intervention contained:

- registration of RTIs
- education: guidelines, literature, communication
- audit/feedback on prescribing data/behaviour
- improvement plan

#### Outcomes

Prescription of total and subgroups of antibiotics (pharmacy) and prescribing behaviour (registration), collected the year before and after the intervention.

#### Results

Baseline data show large variations in prescribing. Total prescription ranged from 140-550 prescriptions/1000 patients/year. Over-prescription was 44% (0%-89%) and prescription of 2<sup>nd</sup> choice antibiotics 22% (0%-72%).

The year after the intervention, prescription of RTI antibiotics (tetracyclins, amoxicillin, feneticilline, augmentin, macrolides) and of  $2^{\rm nd}$  choice antibiotics (augmentin, macrolides) decreased by respectively 12% and 14%, whereas in the PPI group a 3% decrease (p=0.03) and a 1% increase (p=0.04) was seen (n=50). Over-prescription decreased from 44% to 28% (p=0.02) and 1st choice prescription increased from 78% to 84% (p=0.05). Conclusions

The implementation of a multiple intervention in the practice accreditation effectively reduces prescription of antibiotics for RTIs and increases 1<sup>st</sup> choice prescription. For a nation-wide implementation, internet-based modules will be developed.

#### SC25.03

Location of warts and associated HPV type influence natural course and treatment response

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**Background**: Skin warts are caused by different human papillomavirus (HPV) types.

**Aim**: Within a randomised controlled trial in general practice, we examined whether associated HPV type influences natural course and treatment response.

**Methods:** Patients were allocated to either liquid-nitrogen cryotherapy, 40% salicylic acid self-application, or wait and see policy. To determine HPV type, we took swabs from all separate warts before treatment was started. HPV types were analyzed by a newly specifically developed broad spectrum HSL-PCR/MPG assay. At 13 weeks, we compared cure rates of separate warts per treatment arm for the different wart-associated HPV types, stratified for common- and plantar warts.

Results: In total, 271 common- and 291 plantar warts (from 215 patients aged 4 to 79) were included in the analysis at 13 weeks (loss to follow-up 3%). Cryotherapy was most effective for HPV 2/27/57-associated common warts: 68% (95% confidence interval 53-80) of warts cured compared to 18% (12-28) after salicylic acid and 3% (1-10) after wait and see. Salicylic acid was most effective for HPV 2/27/57-associated plantar warts: 25% (16-37) cured compared to 11% (5-21) after cryotherapy and 7% (3-16) after wait and see. For HPV 1-associated plantar warts we found 92% (76-98) cure with salicylic acid, compared to 65% (45-81), and 58% (42-73), respectively.

**Conclusions**: Location of warts and associated HPV type influence natural course and treatment response. With HPV testing, we have opened a new direction for evidence-based optimisation of wart treatment in primary care.

#### SC25.04

#### Users versus non-users of primary healthcare services

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Introduction: Access to healthcare is a human right that is expressed by the access to primary healthcare services and regular appointments to the family doctor. All family doctors have on their patient lists users who have never made a medical appointment. According to the scarce literature, that percentage is between 10% and 20%.

Objectives: Determine the proportion of individuals who never had an appointment with their family doctor of a local Family Health Unit (FHU) and to characterize the non-users related to gender, age, residence area and health system.

Methodology:

Study type: retrospective observational study.

Study population: Non-users of the medical appointment at the healthcare service.

Inclusion criteria: Users who have never had a scheduled, open or indirect contact medical appointment since the beginning of the computer recording at the FHU (November, 2006)

Variables: gender, age, residence area, year of enrollment in the list of the family doctor and health system.

Statistical analysis: Excel 07 and Statistical Program for the Social Sciences, version 18.0.

Results: We verified that 246 individuals (12.9%) had never requested any kind of contact with the family doctor. The largest proportion are the male gender (57.7%), verifying statistical significant differences between genders (p=0.001). The most prevalent age group is between 40 and 44 years old. Forty-nine point nine percent had a healthcare sub-system. There are statistical significant differences between the various healthcare sub-systems and non-users (p<0.001). After analyzing the residence area variable, we verified that 31.7% of non-users live in the urban area, 60.6% in the suburban area and 7.7% in the rural area. Four out of 54 users had their only contact with the family doctor during the open appointment.

Conclusions: One out of eight users listed do not attend the appointments at the FHU. Most live in the urban and suburban areas. With the main goal consisting in the development of an effective primary prevention, it becomes essential that the family doctor acknowledges all the individuals on his/her list. In the future, it is necessary to create managing mechanisms of user listings and develop strategies to recall non-users to the family doctor appointment.

#### SC25.05

Prevalence of ischemic stroke and associated risk factors in a sample of users of a Primary Healthcare Service

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#### Introduction:

The World Health Organization defines ischemic heart disease as the major cause of death worldwide followed by stroke and other cerebrovascular diseases. However, in Portugal, cerebrovascular diseases remain the leading cause of death in 2009 contributing for 13.61% of all deaths registered in the country.

Cerebrovascular diseases is associated with high morbidity and mortality and can be prevented by controlling modifiable risk factors such as hypertension, diabetes, dyslipidemia, smoking, waist circumference, among others.

#### Objective:

Determine the prevalence of ischemic stroke in the list of patients registered in a Family Health Unit (FHU) and associated risk factors: atrial fibrillation, hypertension, diabetes, dyslipidemia, waist circumference exceeding 94 cm in men and 80 cm in women.

Methodology:

Type of study: observational, descriptive, cross-sectional.

Population included: all patients registered in the FHU.

Sample: All users who had ischemic stroke coded and a medical appointment during the last 3 years.

Variables analyzed: gender, age, hypertension, diabetes, dyslipidemia, body mass index (BMI), atrial fibrillation and waist circumference.

Data Source: VitaCare ® software.

Data processing: Excel 2010 ® and SPSS ® v18.0.

Results:

Of the 13,903 patients registered at the FHU, we obtained a sample of 94 patients with ischemic stroke (51.06% female), corresponding to a prevalence of 0.7%, registering the same prevalence among men. The average age of ischemic stroke was 65 years (minimum 25, maximum 93 years).

Relative to risk factors, the prevalence of hypertension was 67.02%, 58.51% for dyslipidemia, 34.04% for diabetes and 9.57% for atrial fibrillation. Thirty-four point seventy-eight percent of men have a circumference waist over 94cm, while 62.50% of women have a circumference waist over 80cm. Obesity is prevalent in 25.53% of the sample.

The combination of the three most prevalent risk factors (hypertension, dyslipidemia and diabetes) was present in 18.8% patients.

Discussion:

Of all the parameters assessed, hypertension and dyslipidemia were the most prevalent risk factors, which explains the early institution of healthy daily lifestyles and effective drug therapies.

The Family Doctor plays an important role in the prevention, early diagnosis and treatment of cardiovascular risk factors.

#### SC25.06

Recruiting patients and collecting data for an observational study using computerised record pop-up prompts: the PROGRES study

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Background and Aim: Engagement of general practitioners (GPs) and recruitment of patients are ever present problems in primary care studies. This paper seeks to demonstrate that electronic prompts represent one method of easing the burden on GPs to recruit individual patients to studies and also provide the opportunity to collect research data during a normal consultation. At the Arthritis Research UK Primary Care Centre at Keele University, Staffordshire, UK we have been using this aid to recruitment to both observational studies and clinical trials for over seven years.

Methods: Older adults consulting for non-inflammatory musculoskeletal pain from five general practices in Cheshire were

recruited to a prospective cohort study (the PROG-RES study). Recruitment of patients was aided by a computer prompt during relevant consultations. When triggered by an appropriate Read code, a pop-up template appeared on the consultation screen prompting the GPs to record the answers to seven brief questions. Read codes are a hierarchy of morbidity symptoms and process codes that are used to label consultations in UK general practice. A self-complete questionnaire was mailed to patients who had completed templates by the Keele GP Research Network team and permission was sought to access their medical records. A feasibility study suggested that the potential number of activated templates in the practice within four months would be 636.

Results: The 44 GPs completed 650 electronic templates during the four month recruitment period. Almost 40% of recruitment was within four weeks and greater than 95% of recruitment was within 16 weeks. Practices A-D completed electronic templates at a similar rate (1.61-1.86 templates per 1000 patients), although practice E completed templates at a lower frequency (0.76) due to internal difficulties. Completion of individual items ranged from 98 to 83% and completion of all seven questions was recorded in 63% of patients; 4% of patients had three or fewer responses recorded.

Conclusion: Templates activated in the GP consultation can facilitate recruitment to observational studies in primary care. It is possible to collect high quality research data within a normal consultation. This may be a model for use in future studies in primary care.

# SC.26 - Clinical Research 12 - Care for the Elderly 1

#### SC26.01

Low blood pressure predicts increased mortality in very old age even without heart failure: the Leiden 85-plus Study

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### Objective

To determine whether low systolic blood pressure is predictive for increased mortality risk in nonagenarians without heart failure, defined by low levels of N-terminal pro-brain natriuretic peptide (NT-proBNP), as well as in nonagenarians with high levels of NT-proBNP.

#### Desian

The Leiden 85-plus Study is an observational population-based prospective follow-up study.

#### Setting

General population of the city of Leiden, the Netherlands.

#### **Participants**

Population based sample of participants aged 90 years (194 women and 73 men); no exclusion criteria were used.

### Main outcomes

Differences in mortality risks were compared between participants with low systolic blood pressure (≤150 mmHg) and high systolic blood pressure (>150 mmHg) within strata of low NT-proBNP (<284 pg/mL for women and <306 pg/mL for men = lowest tertile) vs. high NT-proBNP (middle and highest tertile) at age 90 years.

#### Results

During maximal follow-up of 7.2 years, 212 participants (79%) died. Among participants with low NT-proBNP, low systolic blood pressure gave a two-fold increased risk (HR 2.0, 95% CI 1.1 to 3.4) compared to participants with high systolic blood pressure. For participants with high NT-proBNP, low systolic blood pressure provided a 1.7 increased mortality risk (95% CI 1.2 to 2.3) compared to high systolic blood pressure.

#### Conclusion

Low systolic blood pressure is predictive for increased mortality risk in 90-year old persons, irrespective of the NT-proBNP level. Therefore, the absence or presence of heart failure as determined by NT-proBNP does not influence the prognostic value of low systolic blood pressure with regard to mortality in the oldest old.

#### SC26.02

Prognostic value of cardiovasular disease status in very old age: the Leiden 85-plus Study

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#### Background

To explore the prognosis of very old people depending on their cardiovascular disease (CVD) history.

#### Methods

Observational prospective cohort study including 570 participants aged 85 years from the general population with 5-year follow-up for morbidity, functional status and mortality.

At baseline participants were assigned to three groups: no CVD-history, 'minor' CVD (angina pectoris, transient ischemic attack, intermittent claudication and/or heart failure) or 'major' CVD (myocardial infarction (MI), stroke and/or arterial surgery). Follow-up data were collected on MI, stroke, functional status and cause-specific mortality. The composite endpoint included cardiovascular events (MI or stroke) and cardiovascular mortality.

#### Results

At baseline, 270 (47.4%) participants had no CVD-history, 128 (22.4%) minor CVD and 172 (30.2%) major CVD. Compared to the no CVD-history-group, the risk of the composite endpoint increased from 1.6 (95%CI 1.1-2.4) for the minor CVD-group to 2.7 (95%CI 2.0-3.9) for the major CVD-group. Similar trends were observed for cardiovascular and all-cause mortality risks. In a direct comparison, the major CVD-group had a nearly doubled risk of the composite endpoint (HR 1.8 (95%CI 1.2-2.7)), compared to the minor CVD-group. Both minor and major CVD were associated with an accelerated decline in cognitive function and accelerated increase of disability-score (all p<0.05), albeit most pronounced in participants with major CVD.

### Conclusion

Compared to the oldest old with a history of minor CVD, those with a history of major CVD (mainly MI or stroke) have a roughly doubled risk of poor outcomes, including cardiovascular events, functional decline and cardiovascular as well as all-cause mortality.

#### SC26.03

Regional implementation and evaluation of a new medical care model in residential homes for the elderly to improve quality of care - the MOVIT project

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Background: Inhabitants of Dutch residential homes for the elderly have become older and more care dependant while nursing staff has become fewer in number and lower in training level. The medical care in residential homes is usually provided by general practitioners (GPs) without specific training for this complicated group of patients. Various best practices have shown advantages of a new medical care model based on closer cooperation between care providers, a more proactive approach and using multidisciplinary care plans. Broad implementation has not been achieved yet.

**Objectives:** Regional implementation of MOVIT in 43 residential homes. Monitoring of care quality outcomes, satisfaction of patients, family and care providers and the progress of the implementation strategy

#### Methods:

MOVIT will be performed according to a well considered strategy; all relevant parties are actively consulted and involved. MOVIT is using evidence based implementation and care models, evaluates the effects of the intervention and the progress of the implementation process. There is also a great deal of art and craft entailed in the form of designing, informing, involving, educating, marketing and problem solving.

One of the strategies was forming local working groups (LWG). Each LWG defines it's own level of ambition and improvement targets. These LWG receive support and training from MOVIT.

Realising the implementation has meant involving 43 homes, GPs, nursing staff, pharmacists, and elderly care physicians, next to professional and financial organisations.

Monitoring is performed by interviewing a random sample of the 2600 residents using validated instruments and by questioning their informal care givers and the professional care providers at baseline and after at least 12 months.

#### Results:

42 of the 43 homes are included (98%), 20 LWGs have been formed and active. Finance has been achieved for GPs and nursing staff. Common multidisciplinary improvement themes have been defined, modules produced and training given to all involved professionals. In June 2012 we will present the results of the implementation and results of the baseline measurement.

**Conclusion:** MOVIT will generate and improve knowledge of the implementation process of a new model for the organisation of medical care in residential homes for elderly.

#### SC26.04

#### The Integrated Systematic Care for Older People (ISCOPE)study

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#### **Background**

The number of older people with a combination of somatic, functional, mental or social problems is rising. The problems these older people are struggling with are not always known to care-providers. Although a pro-active way of working by GPs is advocated, the feasibility and cost-effectiveness is yet unknown.

#### Aim of this study

The introduction of a structural monitoring system to detect older people of ≥75 years with a combination of functional, somatic, mental or social problems (complex problems). For those with complex problems a care plan is executed.

#### Methods

The ISCOPE-study is a cluster randomised trial with the aim to measure the (cost)effectiveness of a screening questionnaire to identify older people with complex problems, followed by a care plan. All older persons of ≥75 years in 60 general practices were screened using a simple mailed questionnaire. The questionnaire contained 4 domains: a functional, somatic, mental and social domain. The results of the questionnaire were fed back to the 30 general practices in the intervention group. For the older persons with problems on 3 or 4 domains these general practitioners (GPs) made a care plan using a functional geriatric approach. Depending on the kind of problems, the care plan incorporated indicated diagnostic strategies, interventions, medication review, referral to home care, contacting social work or bringing together the caregivers involved. The GP and practice nurses had received a training to implement this proactive way of working. The GPs in the control group did not receive the results of the screening and continued care as usual.

#### **Outcome measures**

Competence to perform ADL independently, quality of life, satisfaction with delivered care, process measures, indicators for proactive, coherent care.

#### Results

The questionnaire was sent to 11,407 persons. The response rate was 63.2 % (n=7212, mean age 81, 61% female). Twenty-six percent (n=1,898) of the respondents had problems on 3 or 4 domains. For 270 randomly chosen persons with complex

problems in 30 GP practices a care plan was made. Some 600 participants with complex problems were followed in usual care. Details of the screening procedure and outcomes of the ISCOPE strategy will be presented.

#### SC26.05

Prediction of Adverse Health Outcomes in Older People Using a Frailty Index Based on Routine Primary Care Data

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**Objectives:** To investigate if a frailty index based on the routine healthcare data of general practitioners can predict the risk of adverse health outcomes in community-dwelling older people. Design: Retrospective cohort study with a two-year follow-up period.

**Setting:** Urban primary care center that manages 10,500 patients. **Participants:** All patients in the center aged 60 years and older: 1679 patients, 987 females (59 %), median age 73 years (interquartile range 65-81).

Measurements: For each patient, a baseline frailty index score was computed as the number of health deficits present divided by the total number of deficits on the frailty index list (50). Adverse health outcomes were defined as the first registered event of an Emergency Department or after-hours GP visit, nursing home admittance or death.

Results: In total, 508 outcome events occurred within the sample population of 1679 patients. Kaplan-Meier survival curves were constructed according to frailty index tertiles. The tertiles were able to discriminate between patients with low, intermediate and high risk for adverse health outcomes (p-value < .001). With adjustments for age and chronic medication use, a one deficit increase in the frailty index score was associated with an increased hazard for adverse health outcomes (hazard ratio 1.126, 95% confidence interval 1.076-1.179). Considering age and medication along with the frailty index resulted in a moderate predictive ability for adverse health outcomes (c-statistic 0.701, 95% confidence interval 0.679-0.723).

**Conclusion:** A frailty index based on ICPC-encoded routine healthcare data does predict the risk of adverse health outcomes in an elderly population. Further validation and refinement is needed to assess the exact clinical relevance of the frailty index in general practice.

#### SC26.06

Nursing home residents' self-perceived capabilities to be physically active

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Background: Physical activity is a key for health promotion and prevention of the elderly. Especially nursing home residents are physically active in a limited way due to their multimorbidity. Hence, the promotion of nursing home residents' physical activity is difficult for the residents' general practitioners. Thus, the aim of this study was to explore the nursing home residents self-perceived capabilities to be physically active.

Methods: A mixed-methods design. We conducted a secondary analysis of a qualitative and a quantitative study and triangulated the results. In the qualitative study 30 nursing home residents were qualitatively interviewed about sleep and sleep disorders. Physical activity played an important role in the interviews. All text-segments concerning physical activity were secondary qualitatively

analysed. In the quantitative study 210 randomly chosen nursing home residents were interviewed by a questionnaire and their physical abilities were tested. Self-efficacy was measured by a short form of the Self-Efficacy Scale. The secondary analyses of both studies were contrasted and step-by-step related.

Results: The interviewed nursing home residents wanted to be physically active. However, they missed the opportunity of being physically active. Walking was the residents' leitmotif regarding physical activity. Hence, especially the residents not able to walk anymore were not aware of their own capabilities to be physically active. Accordingly, significantly more residents able to walk than residents only able to sit stated that they took themselves measures to be physically active. With the quantitative data we could prove that nursing home residents did not differ in their self-efficacy from the general population (3.02 vs. 2.94), nor did residents able to walk and only able to sit differ significantly.

Conclusion: There seems to be a lack of nursing home residents' self-awareness of their own capabilities to be physically active. Thus, nursing home residents' general practitioners should encourage their patients to be physically active and propose their patients concrete physical activities they can do.

## SC.27 - Clinical Research 13 - Mix 8

#### SC27.01

Paediatric respiratory illness in Irish General Practice, and the association with second-hand smoke

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In infancy respiratory illnesses can cause significant morbidity and mortality. In Ireland 5.8% of three-year-olds have a diagnosis of asthma. Since environmental factors are implicated in the development of respiratory conditions, exposure to risk factors in infancy can have an important influence throughout childhood and into adult life. If the main caregiver smokes, exposure in infancy can be considerable.

Growing Up in Ireland (GUI) is a national longitudinal cohort study of Irish children currently in progress, the aims of which include identifying the adverse effects that lead to ill health and other negative outcomes. Using data from the GUI study, this research aims to examine infants presenting to health professionals with respiratory illnesses and the association with second-hand smoke. The infant cohort in GUI is comprised of 11,134 nine-month-olds. Caregivers were interviewed, with the main caregiver defined as the person who spent the most time with the infant (11,096 of which were mothers). Questions were asked relating to smoking status, and whether or not the infant had been taken to a General or health professional due conditions/symptoms. The data was statistically reweighted to ensure it was representative of all nine-month-olds in Ireland.

In GUI, 46.9% (5227) of nine-month-olds were taken to a General Practitioner or other health professional due to snuffles/common cold. 32.1% (3576) were seen due to chest infection and 8.9% (990) due to wheeze/asthma. The odds ratio for an infant of mother currently smoking being taken to health professional, when compared with an infant of non-smoking mother, was statistically significant for wheezing/asthma, chest infections, and common cold/snuffles. There was no significant association with secondary caregiver smoking.

nfants taken to a health professional in first nine months of life:			
Mothers Smoking	Daily	Occasionally	Not at all
Asthma / wheezing	12.5% **	8.1%	8.1%
Snuffles / common cold	53.1% **	44.6%	45.7%
Chest infection	38.1% **	34.5%	30.5%

#### \*\* P value < 001

Respiratory illness is the most common presentation for infants attending General Practices in Ireland. Maternal smoking was significantly associated with respiratory symptoms in nine-montholds.

#### SC27.02

Is hypertension under control? A cross-sectional study to evaluate control rates and awareness of hypertensive patients in Ankara

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Along with other non-communicable diseases, prevalance of hypertension has been increased dramatically in recent years. Hypertensive population in the world is expected to be 29% by 2025. The prevalence of hypertension in Turkey, according to three major studies, has been 33,7% (TEKHARF study), 31,8% (PATENT study) and 41,7% (METSAR study). According to the National Burden of Disease- Cost-Effectiveness Study by the MoH, hypertension is responsible for 3% of all deaths in Turkey. Despite this reflection the control of the disease is disappointing. Hypertension has also a unique place in primary care, constituting a huge percentage of admissions and a major challenge to provide regular treatment and control. Our study aims to explore how much our patients are aware of hypertension, define their knowledge gaps, and determine level of control of their hypertension. Over 500 hypertensive patients aged 18-85 were planned to be included in the study. A 39-item questionnaire survey was given to each patient. Blood pressure was measured 4 times daily for 3 consecutive days. We have some preliminary results with 150 patients (final results will be presented at the conference). 114 (76 %) women and 36 (24%) men were included in the study until now. 86 patients were considered as under control. 10 of these have never visited a physician, 44 had irregular visits, 10 had once a month visit. Being under a regular doctor control had a significant relation with a controlled blood pressure (p=0,029). 74 of these 80 patients that are under control say that they use their medicine regularly whereas the rest 6 of them had irregular use. Regular use of medicine and a controlled blood pressure have a significant positive relation (p=0,02). The preliminary results of our study show that a regular doctor visit and a regular drug use would lead to a better controlled hypertension, which would eventually lead to less morbidity and mortality as well as decreased health care costs. Primary care physician has an invaluable role to provide this service and have a close followup of the hypertensive patients.

#### SC27.03

The epidemiology of intermenstrual and postcoital bleeding in the perimenopausal years

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Objective

To obtain estimates of the prevalence, incidence and rate of spontaneous resolution of intermenstrual and postcoital bleeding in naturally menstruating perimenopausal women and to explore the association with uterine malignancy.

Design

Two year prospective cohort study.

Setting

Seven general practices with 67,100 registered patients.

Population

All women aged 40 to 54 years on the practices age-sex registers. Methods

Baseline postal questionnaire with follow-up questionnaires sent to naturally menstruating respondents at 6, 12, 18 and 24 months. A review of medical records was undertaken after a further year.

Main outcome measures

Prevalence, incidence and rate of spontaneous resolution of intermenstrual and postcoital bleeding in naturally menstruating women.

Results

7121 baseline questionnaires were sent out with an initial response rate of 63%. 2051 naturally menstruating women were recruited for the prospective cohort study. An estimated 18% of naturally menstruating perimenopausal women report intermenstrual bleeding and 9% postcoital bleeding in the previous six months. The prevalence of frequent and persistent intermenstrual bleeding is an estimated 5% and 8% respectively,

and of frequent and persistent postcoital bleeding 2% and 2%. Incidence rates and rates of resolution are consistent with the notion that these symptoms are common amongst naturally menstruating women before the menopause. During the follow-up period of a year or more in those women who consented to medical record review, only one woman who reported intermenstrual or postcoital bleeding developed uterine cancer. Conclusion

Epidemiological data from populations registered with primary care has the potential to provide information to women to allow informed choice of a no treatment option. The initial results presented here imply that the warning symptoms of intermenstrual and postcoital bleeding are poorly predictive of cancer in a community population around the time of the menopause. This suggests that in the perimenopausal years primary care clinicians should refrain from investigating for cancer and manage the presenting problems. Investigation should be reserved for those in whom treatment has failed.

#### SC27.04

Baseline characteristics of men diagnosed with benign prostatic hyperplasia (BPH) following spontaneous reporting of lower urinary tract symptoms (LUTS) to their general practitioner (GP): an analysis of data from the D-IMPACT (Diagnosis IMprovement in PrimAry Care Trial) study

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**Background**: D-IMPACT was a prospective epidemiological study to identify the optimal subset of simple tests applied in primary care to diagnose BPH in men who spontaneously present with LUTS. The prevalence of BPH among the study population was 66%. In men diagnosed with BPH, the presence of risk factors for disease progression is an important consideration when deciding on the most appropriate treatment.

**Objectives**: To describe clinical characteristics of men in D-IMPACT who were diagnosed with BPH after spontaneously presenting to their GP with LUTS, and to establish the prevalence of independent risk factors for BPH progression (PSA >1.5 ng/mL, prostate volume ≥30 cc) in these patients.

Methods: Men aged ≥50 years who spontaneously attended their regular GP office with LUTS were eligible for inclusion in D-IMPACT if they had not previously undergone BPH diagnostic tests or received treatment for BPH. Subjects were assessed on three occasions, twice by their regular GP and once by a urologist. During the study, patients completed the IPSS, had a PSA measurement, had prostate volume assessed by digital rectal examination (DRE) and abdominal ultrasound, and underwent uroflowmetry.

Results: Of the 666 patients included in the D-IMPACT per protocol analysis, 440 (66%) had a diagnosis of BPH confirmed by an urologist. Baseline clinical characteristics are shown in the table. Among these men 60.9% had moderate symptoms, 19.1% had severe symptoms, 46% had a PSA >1.5 ng/mL, and 76% had a prostate volume ≥30 cc by DRE. Overall, 38.2% of the men diagnosed with BPH were at risk of BPH progression (PSA >1.5 ng/mL and prostate volume ≥30 cc).

**Conclusions**: BPH accounts for the majority of men who spontaneously attend a GP clinic with LUTS. A substantial proportion of such men will have risk factors for BPH progression, an important consideration when deciding on the most appropriate medical therapy.

Characteristic		BPH patients (n=440)
IPSS (categorical)	Mild symptoms (0-7)	88 (20.0%)
	Moderate symptoms (8-19)	268 (60.9%)
	Severe symptoms (20- 35)	84 (19.1%)
PSA, ng/mL	Mean (SD)	2.14 (2.41)
PSA (categorical)	≤1.5 ng/mL	236 (53.6%)
	>1.5 ng/mL	204 (46.4%)
Prostate size (DRE performed by GP)	Small (<30 cc)	106 (24.1%)
	Medium (30-60 cc)	303 (68.9%)
	Large (>60 cc)	31 (7.1%)
Prostate size, cc (abdominal ultrasound performed by a urologist)	Mean (SD)	41.8 (18.6)

#### SC27.05

Prevalence, Clinical Importance and Evaluation Complications of the Masked Hypertension

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Background: In recent years, hypertension studies revealed a new group of patients, where diagnosis is quite hard. These patients' blood pressures are measured totally normal in hospitals or doctor's office, however, hypertensive values are obtained at follow-up of the home or ambulatory blood pressure (BP) measurements. This new concept is defined as masked hypertension (MH). The frequency of this group of patients is not known in our country Aim and Purpose: The study aims to measure prevalence, clinical significance and complications of masked hypertension.

Design and Methods: Patients, aged 19-65, whose BP measured as normal (systolic/diastolic below 140/90 mmHq) in outpatient clinic were included in this study. Exclusion criteria were; outpatient measurement of BP in those with high (> 140/90mmHg), a history of hypertension, antihypertensive medication use, those below the age of 19 and over 65 years, the diseases which may affect study-related tests (such as coronary artery disease, arrhythmias, heart failure, symptomatic prostatic hypertrophy, migraine and panic disorder) and patients who take medicines which have anti-hypertensive effect. The patients with average blood pressure values were higher than 125/76 mmHg in home measurement, was performed 24-hour ambulatory blood pressure monitorization (ABPM). By the outcome of the 24-hour ABPM, patients with at least a high value at mean daytime and nighttime blood pressure was diagnosed as MH. Target organ damage in patients diagnosed with MH was further investigated.

Results: Masked hypertension was identified in 14 (8.7%) of 161 patients. Target organ damage was evaluated in patients with MH. There were left ventricular hypertrophy in 2 (14.2%) patients, carotid intima-media thickness in 2 (14.2%) patients, retinopathy in 1 (7.1%) patient, and micro albuminuria in 1 (7.1%) patient. A statistically significant relationship was found between MH and alcohol use (P = 0.001), and body mass index (P = 0.001).

Conclusions: In many countries, epidemiological studies for last ten years showed that frequency of MH ranging between 6-23%. It is emphasized that undiagnosed hypertension in this patient group might become permanent, and cause serious target organ damage such as left ventricular hypertrophy, micro albuminuria, and development of atherosclerosis in long-term follow-up.

#### SC27.06

#### And I am obese now! Help me doc, how did this happen?

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Background: Family physicians have an important role at the management of preventable diseases. Obesity is a leading preventable cause of death worldwide. At least 300 million adults are obese over the world, whereas Turkey has an 8,5 million obese. Being overweight or obese has a serious impact on health. Treatment of obesity needs a comprehensive approach. Biopsychosocial approach of family physicians is invaluable in obesity management. The approach would include diet and nutrition, effective physical activity and changing behaviours, besides psychological support. But do we really understand what lies behind success or failure of our approach? There is a limited number of studies investigating why and how people become obese and what is the best method of approach towards an obese patient for management of his/her weight status. We planned a qualitative study with obese patients in our setting, in order to find answers to "why", "how" and "when" our patients became obese. Design and method: We used grounded theory approach, and conducted in-depth, semi-structured, face to face interviews with 30 participants (BMI>30). Interviews were audio-recorded and transcribed, and qualitatively analyzed afterwards.

Results: 27 women and 3 men accepted to join our study. Analysis of indepth interviews emerged 5 major themes which were the different perception of obesity among individuals; awareness of obesity; loss of self-confidence; belief in treatment and effects on quality of life. There are several factors affecting management of obesity among our patients. When family or friends motivate, patients seem to maintain their belief in treatment for a longer time. They have tendency to blame themselves for the unsuccessful story of weight loss. Participants emphasize the importance of motivation, determinatedness and putting a target in case of success. At the end they hope, they will gain their self-confidence again and their life will change in positive way.

Conclusions: Each patient has a different need and different expectation while controlling weight. As a part of biopsychosocial approach the family physician needs to understand the factors that bring the patient to current condition and see which approach would be the best for individual patient for weight management.

## SC.28 - Research 11

#### SC28.01

Relationship between visceral fat and neck circumference in patients with metabolic syndrome

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People's environment, behavior and lifestyle are dramatically changing. Depending on these changes, there is a dramatic increase in obesity and type 2 diabetes. The metabolic syndrome is a combination of multi-factorial risk factors, which affects more people because of increased incidence of obesity and diabetes.

The metabolic syndrome is one of the major health problems for the 21st century.

In this study, we compared neck circumferences measurements with some of the metabolic and anthropometric measurements in patients presenting with complains of weight, and aimed to show the correlation between visceral fat rates and neck measurements especially in patients with metabolic syndrome. 179 patients with complains of weight were included from 01.02.2009 to 01.02.2011, in Baskent University Umitkoy Polyclinic, diabetes and obesity clinic. This is a retrospective case - control study.

Research data were transferred to the statistic program SPSS version 16.0. The data control and analysis made with the same program. Pearson Chi-square test used for the analysis of hypothesis, and Chi-square test used for levels of significance of the data. Metabolic Sendrom was identified based on criteria of the National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III).

Of the 179 patients, 77% (n=137) were women, 23% (n=42) were men (W: M ratio=3,26). The mean age was  $37\pm13.15$ . 40 of our patients (22.3%) were diagnosed the metabolic syndrome. The mean neck circumference was  $35.15\pm3.48$  cm in those without metabolic syndrome, and  $38.40\pm4.13$  cm in those with metabolic syndrome (p=0.000). Statistically significant positive correlation is demonstrated between neck circumference measurements and visceral fat rates in patients with metabolic syndrome (r=0.71, p=0.01) (Table 1).

Our study revealed that, neck circumference measurement is a valuable and indicating statistically significant positive correlation measurement such as the waist circumference measurement which is one of the NCEP ATP III criteria, in metabolic syndrome.

Correlation between metabolic and anthropometric measurements in patients with metabolic syndrome							
Pearson Correlation (r)	Neck circumfere nce	Waist circumfere nce	Hip circumf erence	Viscer al fat	Abdomi nal fat	HD L	Triglyceri de
Neck circumference	1	,27	,27	,71**	,40**	,01	,14
Waist circumference		1	,68**	,56**	,48**	- ,12	,01
Hip circumference			1	,54**	,41**	- ,28	,08
Visceral fat				1	-,17	- ,07	-,02
Abdominal fat					1	- ,20	,04
HDL						1	-,21
Triglyceride							1
** Correlation is significant at the 0.01 level	* Correlation is significant at the 0.05 level						

#### SC28.02

Cross-sectional associations between cardiovascular disease and osteoarthritis comorbidity and physical health in general practice populations: Comorbidity Cohort (2C) study

**J. A. Prior**, K. P. Jordan, U. T. Kadam; Arthritis Research UK Primary Care Centre, Keele University, United Kingdom.

Background: Increasingly ageing European populations means more patients are experiencing both cardiovascular disease (CVD) and osteoarthritis (OA) at the same time (comorbidity). A cohort study was designed to investigate the impact of combined CVD and OA comorbidity on the physical health of general practice populations.

Methods: The Comorbidity Cohort (2C) study was conducted in the UK general practice population aged 40 years and over. A baseline survey was mailed to patients from ten general practices, who had consulted for CVD (severity defined as hypertension, ischaemic heart disease (IHD) or heart failure (HF)) or OA in the three years before baseline. The study population were categorised into 8 disease cohorts, patients with: 1) no CVD or OA, 2) hypertension but no OA, 3) IHD but no OA, 4) HF but no OA, 5) OA but no CVD, 6) hypertension & OA, 7) IHD & OA or 8) HF & OA. Physical health was measured using the Physical Component Summary (PCS) score from the Short-Form-12 (SF-12) survey. Cross-sectional associations between cohorts and physical health were assessed using linear regression analysis, adjusting for age, gender and deprivation.

Results: 5,176 patients responded to the baseline survey and completed the SF-12. In comparison to the patients with no CVD or OA, PCS scores decreased (worsening physical health) across all cohorts. For cohorts with individual disease, adjusted mean differences in PCS scores compared to the no CVD or OA group ranged from; -3.63 (95%CI -4.7,-2.5) for those with hypertension but no OA, -8.23 (-9.2,-7.2) for those with IHD but no OA, -14.13 (-16.1,-12.1) for those with HF but no OA to -8.63 (-9.7,-7.6) for those with OA but no CVD. In the comorbid cohorts this ranged

from; -11.07 (-12.1,-10.0) for hypertension & OA, -13.90 (-15.4,-12.4) for IHD & OA to -16.80 (-20.3,-13.3) for HF & OA.

Conclusions: Increasing severity of CVD was associated with poorer physical health. The comorbid addition of OA increased the strength of association between CVD severity and poor physical health. Disease severity and comorbidity are both important physical health influences, and management and treatment models need to be developed to address these.

#### SC28.03

Comparing the associations within and between chronic disease spectrums and physical health: A systematic review

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Background: With an increasing prevalence of chronic disease comorbidity in ageing European populations, understanding how interactions between chronic diseases affect patients' health is important. However, to understand the impact of such comorbidity on physical health we must first understand the impact of individual chronic diseases. Taking cardiovascular disease (CVD) and musculoskeletal (MSK) disorders as the examples, we undertook a systematic review of available literature on their impact on physical health. Our aim was to examine how conditions within the same chronic disease severity spectrum and between different chronic disease severity spectrums influence physical health.

Methods: Articles investigating the association between hypertension, ischaemic heart disease (IHD) or heart failure (HF) (CVD "spectrum") with physical health were identified. Similarly, articles investigating the association between lower back pain (LBP), osteoarthritis (OA) or rheumatoid arthritis (RA) (MSK spectrum) with physical health were identified. Three medical literature databases (Medline, EMBASE & CINHAL) were searched and articles were included if the two reviewers agreed that these had; 1) assessed the impact of one of the CVD or MSK conditions on physical health, 2) assessed physical health using the Physical Component Summary (PCS) score from either the Short-Form-12 or Short-Form-36 surveys and 3) had used a general or primary care population sample. PCS scores were then converted to a country-specific z-score.

Results: From 196 abstracts, 115 were reviewed in full with a final selection of 33 articles from 18 different countries. Across the CVD spectrum; 21 hypertension, 16 IHD and 15 HF samples were identified. Median CVD z-scores decreased (worsening physical health) with increased disease severity (hypertension (-0.72), IHD (-1.39) and HF (-1.79)). Across the MSK spectrum; 9 LBP, 12 OA & 7 RA samples were identified. The same trend of decreasing z-scores with increased disease severity was observed in the MSK spectrum (LBP (-1.46), OA (-1.68) & RA (-1.74)). A meta-analysis will provide additional results.

Discussion: Increasing disease severity across both chronic disease spectrums was associated with worsening physical health. Understanding individual disease severity and associated physical health within a spectrum provides the basis for future studies on the disease interaction in patients with comorbidity.

#### SC28.04

Patient preferences of general practice services: a discrete choice experiment

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Public is becoming more knowledgeable and informed about health care and consequently is expecting more from the services provided. To meet these increased demands, policy makers are looking at ways of delivering health care services more efficiently and effectively, and including patients' preferences in planning. This study investigates patients' preferences of general practice clinics using a discrete choice experiment (DCE) survey

questionnaire. The DCE questionnaire presents a series of choices involving alternative services on offer, described by their particular characteristics at a range of levels. Based on the assumption that, in each question, respondents choose the service that they value most, the DCE method allows to: identify the characteristics of the health care service that respondents value; the relative values that they attach to these; and the trade-offs between them (e.g. how long patients are willing to wait to receive appropriate care). A DCE questionnaire was tested with 57 respondents in order to value patients' preferences for general practice services in London. Respondents valued: having a very good likelihood of receiving appropriate care; having access to an appointment within the next two days; being listened to and receiving satisfactory responses to questions; short waiting times in the clinic; and short travelling times to the clinic. Findings from the study informed a DCE questionnaire that will be used in larger DCE study within the European Union Cross Border Care Collaboration (EUCBCC) project. Results will provide policy implications for participating general practice clinics, and for the wider EU policy community. <u>Acknowledgments</u>

The research leading to these results has received funding from the European Commission Seventh Framework programme (FP7-2007-2013) under Grant Agreement 242058, grant acronym EUCBCC, ECAB project. The findings reflect only the author's views and the Community is not liable for any use that may be made of the information contained [therein].

#### SC28.05

Developement and results of a general practice researchnetwork in Austria

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In order to collect data from each patient - encounter of the participating practices we developed a computer program, which can be integrated into different types of practice software used. The results of encounter gathered during the consultations were named according to a list of 498 specific concepts. For this list we used mainly the Braun Kasugraphie (a classifying nomenclatur for frequent health disorders ) and additionally the ICPC 2 . We divided it into 17 main chapters similar to the ICPC2 and coded each health disorder according to the ICPC2 and the ICD 10 . Each result of encounter, which was identified and managed received one or more procedure codes. Physicians who work in the network can analyse their data at any time using the integrated statistic tool of the program.

We entered the data of all participating physicians into one common database.

Our analysis consists of: illness-frequencies (case distribution), frequencies of encounters according to the results of encounter, frequencies of home visits, reasons for home visits, referral rates and reasons for referral. The data were analysed as one unit and according to different age-groups.

The reason for developing this research network and the used computer program is to create a database which can be used to demonstrate "what is going on in general practice in Austria "and to answer specific questions, which arise during everyday general practice work.

## SC.29 - Clinical Research 14 - Mix 9

#### SC29.01

Analysis of factors affecting the success of eradication of Helicobacter pylori infection

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Introduction: Helicobacter pylori is a WHO class I carcinogen also associated with nonmalignant gastrointestinal diseases. However, with the rising prevalence of antimicrobial resistance, the treatment success of standard triple therapy has recently declined to unacceptable levels in most countries.

Aim: The aim of our study was to evaluate factors that may affect the success rate of eradication of Helicobacter pylori infection

Material and methods: This is the cross sectional retrospective study. The sample included 52 patient, diagnosed with Helicobacter pylori infection from march 2010. to december 2010. Same combination of antibiotics, Amoxicillin and Claritromicin and one of the proton pump inhibitors were administrated to all patients, for one week. Based on tests performed after complete treatment, patients were divided into two groups: first group included 15 patients in whom eradication was achieved, and the second group 37 patients in whom treatment was not successful.

Results: The average age of patients in the first group was  $51 \pm 12$  years, and in second  $50 \pm 13$  years. The most common symptom in first group was pain 86.7% and in the second group was bloating- 91,1%. The biggest difference between the two groups of patients was duration of symptoms. In the first group, 80% of patients had symptoms for less than a year, while in the second group even 78.3% of patients had symptoms for more than a year, and 43.2% for many years (p<0.01).

Conclusion: Our study shows that duration of symptoms is parameter that had the biggest influence on the outcome of therapy. Therefore, in patients with symptoms lasting longer than one year, the combination of different antibiotics and their longer usage, lasting from 10-14 days, as opposed the standard recommended 7 days, should be the first line therapy.

#### SC29.02

#### Eating habits of pregnant women: How healthy they feed?

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Background: The needs of an unborn baby's physical and mental development are fully met by the mother. There is a significant relationship between sufficient and balanced nutrition of pregnant women and the unborn baby's health status.

Aim and Purpose: To investigate the levels of awareness and dietary habits of pregnant women admitted to our hospital for routine controls for pregnancy.

Design and Methods: This cross-sectional study, designed by the family medicine department, was conducted between March-November 2011. A questionnaire was prepared for pregnant women to assess pregnancy-related information, ideas about breastfeeding, nutrition habits and attitudes about the frequency of food consumption. The survey is conducted with pregnants who accepted to join the study.

Results: 314 pregnant women were included in the study. 87 (27.7%) were in 1st, 113 (36%) were in 2nd, 114 (36.3%) were in 3rd trimester. Weights of pregnant women increased an average of  $5.8 \pm 5.9$  kg according to their weights before pregnancy. Weights of 10 pregnant in the 1st trimester and weights of 16 pregnant in the 2nd trimester were less than the pre-pregnancy weight. It's found that, fruit and vegetables consumption are increased in the first trimester, cheese, oil seeds, eggs, vegetables, fruits, bread consumption are increased in the second trimester, cheese, oil seeds, eggs, vegetables, fruits consumption are increased in the third trimester. Only 20 of pregnant women admitted to a dietician.

Conclusion: It is important to learn quality and format of a regular diet during pregnancy, in order to provide guidance to women in this important period of their lives. Inadequate and unbalanced nutrition of the mother during pregnancy causes some problems; such as prematurity, low birth weight, poor physical and mental development of baby and stillbirths

#### SC29 03

Religiosity-spirituality as potential psychosocial contributors to cardiometabolic well-being among inhabitants of rural Crete, Greece: preliminary data

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#### Aim

To report findings from a preliminary data analysis of the second follow-up study in Crete (Spili III) that aims to explore cardiometabolic burden and the psychosocial status of a rural population group.

## Study population and Methods

Data from the first 60 examined subjects (30 males, 30 females) that participated in the Spili cohort that represent the 21% from the target population (n=285) are reported. They include: anthropometric measurements, markers of inflammation, and ultrasound measurement of carotid intimae media thickness. The item 3 of the Royal Free Interview Questionnaire for Spiritual and Religious Beliefs was used to assess views of religiosity and spirituality among the study participants. Answers with a score from 0-5 were considered as negative or almost negative (low level of beliefs) and from 6-10 as almost positive or positive (high level of beliefs).

#### Results

The mean age for females was 65.5 years (SD: 16.9) and for males 63.9 years (SD: 17.1). A BMI mean value of 29.3 kg/m² (SD: 4.6) has been found. An abnormal value of serum cortisol was recorded in 48.2% (14/29) of the examined subjects with low religiosity/spirituality compared to 6.4% (2/31) of those with high religiosity/spirituality (p=0.0002). Additionally, 31% (9/29) of the group with low religiosity/spirituality were diabetics compared to 3.2% (1/31) of the group with high level of religious and spiritual beliefs (p=0.003).

#### Conclusion

Although this report represents a preliminary analysis of a small proportion of targeted cohort, our data indicate that a positive correlation between biological determinants of cardiovascular disease and religiosity/spirituality is likely to occur without ignoring the need for further research.

### SC29.04

The association between diagnosed hypertension and temperament: The Temperament Evaluation of Memphis, Pisa, Paris and San Diego Autoquestionnaire in primary care settings

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Temperament may be a contributing factor to medical illnesses. Its assessment with questionnaires may provide important information to risk evaluation at the primary care practice.

Purpose: The goal of our study was to explore affective temperaments (hyperthymic, depressive, cyclothymic, irritable and anxious), anxiety and depression in a hypertensive population in primary care and to determine their impact on the quality of therapy.

Methods: Consecutive hypertensive patients (taking antihypertensive medication) and normotensive patients were enrolled in 27 primary care practices in Hungary. The Temperament Evaluation of Memphis, Pisa, Paris and San Diego Autoqestionnaire (TEMPS-A), Hamilton Anxiety Scale and Beck Depression Inventory were used. Medical data was provided by GPs, autoquestionnaires were completed by the patients.

Results: The data of 182 hypertensive (78 males, 104 females; age ( $\pm$ SD): 62  $\pm$  14 years) and 76 normotensive patients (24 males and 52 females, 51  $\pm$  15 years) were analysed. Hypertensive patients scored higher in both Beck Depression Inventory and Hamilton Anxiety Scale (p<0.001 for each). The score for irritable temperament was also higher (p=0,053) in hypertensive subjects compared to normotensive ones. The prevalence of depressive, hyperthymic, cyclothymic and anxious temperaments did not differ between hypertensive and normotensive subjects.

Conclusions: The higher scores on the Beck Depression Inventory and Hamilton Anxiety Scale in hypertensive population suggest that these instruments may be useful tools for screening patients to assess hypertension risk in primary care. The high prevalence of irritable temperament in hypertension suggests a possible association between behaviour and cardiovascular risk.

#### SC29.05

#### Thyroid dysfunction, cognition and mood in the elderly

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Introduction: The worldwide increasing aging population, due to a higher life-expectancy, poses important challenges regarding the management of its comorbidities. Mental impairment and mood disorders are high prevalent in this specific population and thyroid dysfunction has been described as one putative cause, although the published results are still controversial. This work aims to estimate the prevalence of thyroid dysfunction in an elderly population of primary care patients and to analyze the possible association between the levels of the thyroid-stimulating hormone (TSH) and the cognitive function and mood.

Methods: We performed a cross-sectional evaluation of a random sample of a Portuguese primary care center population with 65 years of age or older. The sociodemographic and clinical characteristics of patients were assessed with a questionnaire. Cognitive function and mood disorders were evaluated by applying the Mini-Mental State Examination (MMSE) and the Hospital Anxiety and Depression Scale (HADS), respectively. The thyroid function was analyzed using the assay of TSH and free-thyroxine (TT4) in a fasting peripheral blood sample. The Chi-square, Mann-Whitney and Kruskal-Wallis tests were used to estimate the association among the study variables.

Results: A total of 263 patients were engaged in the study (52.5% females), with a mean age of 72.1 years (SD: +/-5.3). The prevalence of dementia was 21.7% (n=57) with no differences regarding gender (59.6% women; p=0.22). Signs of anxiety disorder were found in 22.8% of patients (82.8% women; p<0.001) and of depressive disorder in 16.2% (71.4% women; p=0.01). Almost 9% of patients (n=23) had thyroid dysfunction: 4 patients had hypothyroidism (1.5%), 14 had subclinical hypothyroidism (5.3%), 3 had hyperthyroidism (1.1%) and 2 had subclinical hyperthyroidism (0.8%). The mean TSH value was higher in anxiety patients (2.32 vs. 1.80; p=0.04). No statiscally significant differences were found between TSH values and cognitive dysfunction and depression.

Conclusion: The prevalence of thyroid dysfunction was similar to that described in the literature. There was an association between anxiety and thyroid dysfunction despite the absence of association with cognitive impairment and depression.

#### SC29.06

### A hereditary factor in chronic chilblains

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#### Background

Chronic chilblains are cold induced, painful or itching, red-blue lesions on the fingers, feet, ears, or thighs. The condition occurs throughout the world, more commonly in women than men. The average Dutch general practitioner reports four new cases a year (Continuous Morbidity Registration Nijmegen, The Netherlands; unpublished data). If patients consult a doctor at all, it will be their general practitioner <sup>1</sup>. In our 2004-2005 study on the patient's perspective we found indications that a hereditary factor plays a role in chronic chilblains <sup>2</sup>.

#### Methods

We use a Case-control family design with pedigree data of 30 case-probands and 30 control-probands to answer our research question: 'is there a hereditary factor in chronic chilblains'.

Study population consists of 30 random selected cases from our file containing patients with at least one verified episode of chronic chilblains and 30 matched controls. We recruit relatives of cases and controls by interviewing the index case or control. A pedigree is constructed for each case and control. The relatives receive a survey form to be completed. If a relative reports actual symptoms of chronic chilblains the diagnosis is verified during a face to face contact. Data are analysed to determine the absolute risk difference between relatives of case probands an control probands.

#### Results

Study results will be available in february 2012. We look forward to report them on the Wonca 2012 conference.

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## SC.30 - Research 12 - Training 5

#### SC30.01

Professional misconduct in GP/FM vocational training in the Czech Republic

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#### Aim:

The goal of this paper is to present the results of an empirical study on the forms and the key patterns of misconduct among GP trainees in the Czech Republic. In addition, this paper will analyze the potential consequences of this behaviour and identify measures that could be taken to prevent it.

Background:

GP training in the Czech Republic is based on strictly defined requirements, including 16 compulsory clinical rotations in prescribed specialities, and allows trainees and their supervisors only very limited adjustments to the particular educational needs of individual trainees. At the same time, the system of training lacks the funding needed to support these educational requirements, putting excessive financial burdens on the trainees. Further, supervisors often lack the resources or incentives needed to fulfil their role. These conflicting pressures frequently force trainees and supervisors towards misconduct.

#### Methods:

A quantitative study among newly qualified GPs (N=227) was conducted in 2011, using CASI (Computer Assisted Self-Interviewing) with a response rate of 55% (altogether 124 individuals filled-in the questionnaire). This quantitative research

represents the attitudes, the typical patterns, and the strategies employed by trainees and supervisors to meet the requirements of the target group. It was produced after the qualitative study among GP trainees (N=11) and supervisors (N=10) on this issue was completed.

Results:

The following types of misconduct were identified: knowing the final exam test questions in advance (72%); shortening of the working time of the clinical rotation (65%); reduction of required content (56%); asking for (17%) or offer of (11%) clinical rotation confirmation without attending the clinical practice.

The most frequently reported justifications of misconduct are: frequent curriculum changes (92%); financial constraints (89%); unreasonable requirements (79%); and lack of engagement of the supervisor (75%).

Conclusion:

A high rate of diverse misconduct among GP-trainees was found in the Czech Republic. Interestingly, the misconduct of trainees corresponds closely with the complementary misconduct among their clinical supervisors. Such misconduct can significantly influence the educational environment, professional integrity, and the ethical standards of a young generation of GPs. This situation urgently requires further attention, supported by larger and more thorough analyses.

#### SC30.02

Assessment of evidence based clinical performance by GP trainees; development of a new instrument.

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**Background:** In the Netherlands, vocational training for general practice (GP) trainees takes three years, during which they learn to treat patients in accordance to the best available evidence. Trainees are trained in evidence based medicine (EBM), with a focus on the clinical practice guidelines of the Dutch College of General Practice (NHG). The development of clinical knowledge among trainees is monitored by regular nationwide theoretical tests. So far, the impact of EBM training on performance in clinical practice has not been assessed.

**Aim:** To develop an instrument to assess the extent of evidence based practice among GP trainees.

**Methods:** We extracted key indicators from NHG clinical practice guidelines on 19 topics, 11 therapeutical and 8 diagnostical. after discussion with academic GPs involved in these guidelines. Based on these indicators we constructed a scoring system to measure the evidence based practice of GP trainees on an individual patient level: -1 = not according to guideline, 0= unclear, 1= in accordance with guideline. To test this instrument, third-year GP trainees from Utrecht University were asked to keep logs during eight days in which they collected clinical data of all consultations.

Results: 33 GP trainees collected data of 2980 patients with 3222 different complaints. Of these data, 20% (n=608) covered clinical topics that could be assessed using the instrument, with more therapeutical issues than diagnostical issues (76% versus 24%). Of these consultations 70% provided enough information (n=442) for assessment. First results demonstrate that the clinical performance of GP trainees is in line with the guideline in 67%, not in line in 5% and unclear in 28%. Guideline adherence is the same in therapeutical and diagnostical topics (77% vs. 75%).

**Conclusion**: Assessment of evidence based practice of GP trainees seems feasible, using an instrument based on indicators from clinical practice guidelines. If the instrument is extended to the most frequent clinical problems in general practice, nearly 40% of clinical consultations by GP trainees can be assessed.

#### SC30.03

#### Changing practices following e-learning training

I. Cibois-Honnorat, **J. L. Bensoussan**; MGForm, Mirabeau, France.

Since the introduction of Continuing Professional Development (CPD) in France, different methods of training have been developed; in addition to training seminars, groups and practice communities, individual training on the Internet (e-learning) has been proposed.

Although poorly developed in European countries, a meta-analysis of 2008, however, showed positive results of such training.

OBJECTIVES: To assess the impact of individual e-learning on changing the practices of General Practitioners (GPs)

METHOD: Telephone interviews in groups (90 GPs interviewed), following e-training on screening for fracture risk factors RESULTS:

Pros: Better structuring of patient records, introduction of alarms or spreadsheets.

Modification of the examination, screening

Empirical work is replaced by something more systematic.

"Active" behavior change, seems to have more impact in the office than a training seminar;

Participants are constantly active in the Internet program, unlike programs in physical meetings, where some moments are "passive"

The program is popular with doctors who are based far away from meeting places.

Cons: Reported results, no physical meeting

CONCLUSION:

E-learning is not suitable for all subjects, nor for all physicians. Working in the surgery, in direct contact with the patient, seems to have a direct impact on changes in screening practices

These training sessions influence the choice of future training, based on real needs rather than by affinity, which seems to corroborate the results of the meta-analysis in 2008 which concluded that

Internet-based learning is associated with significant positive effects, and probably of similar efficacy to traditional methods.

Key message: training via the Internet seem to have a powerful impact on changing practices

### SC30.04

## Health literacy objective structured clinical examination (OSCE) for family medicine residents

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#### Background:

Patients with low health literacy have less knowledge about their health conditions, higher hospitalization rates/health care costs and worse health status. Low income, age over 65, English as a second language, being Latino or African American often predict low health literacy. Physicians in training are known to be poor judges of patient's health literacy and frequently insert medical jargon when educating patients. Clinicians often overwhelm patients with too much information while patients want to know what they should do upon discharge. One way to improve patients' health literacy is to ensure residents are trained to identify patients with limited health literacy and improve communication method.

Objectives: develop an Objective Structured Clinical Exam (OSCE) using trained standardized patients to test FM training physicians' abilities to: Administer and document the results of the Newest Vital Sign in both English & Spanish. Use teach back method when giving patient instructions. Utilize ASK ME method during a typical patient encounter. Appropriately use an interpreter for patient education/instruction

Design: pilot OSCE was developed with FM residents (n=7) to identify need for Health literacy didactics and to specify topics of deficiency to be addressed in training modules.

Setting: UT Southwestern FM Residency Clinic

Population - Mostly underserved; 51 % Hispanic; 23% African American; 30% require an interpreter; 46 % found to have low health literacy.

Subjects: FM residents and lay health promoters as standardized patients

Instrument: pretest,OSCE,post-test, survey Preliminary results:

In the pretest, < 30% of the physicians could correctly define health literacy.

Pilot OSCE results reflect that although physicians in training tended to score above 50% as a group, individual performance was quite variable suggesting disparity among these providers in terms of knowledge, recognition, and skill set related to low health literacy patients.

Future plans:The results of the pilot OSCE were used to design didactics for physicians in training to work more effectively with low health literacy patients. Upon completion of didactic modules, providers participated in an OSCE (n=24). Early data analysis is underway along with manuscript. Health literacy training modules will be assembled and disseminated for incorporation into Family Medicine physician training programs.

#### SC30.05

## EBMG Quick References - cookbook medicine or useful tool for busy clinicians?

J. Jousimaa, H. Alenius, M. Teikari, I. Kunnamo; Duodecim Medical Publications Ltd., Helsinki, Finland.

If guidelines are intended to influence the clinicians' decisions at the point of care, they must be very clear and quickly retrievable. The Evidence-Based Medicine Guidelines (EBMG) by Duodecim Medical Society Finland have been in use since 1989 to fill the gap between theory and practice. Medical editors and over 400 authors continuously update the guideline collection.

However, as time has passed and new information has been added, the guidelines have a tendency to expand from their original concise size. To solve this problem, a new ultra-short format EBMG Quick Reference has been introduced to return to the original idea of very concise "cookbook" guidelines. The Quick Reference Guidelines have been in experimental use since autumn 2010 and they will be widely opened to public in January 2012. In January 2012, the Quick reference collection contains approx. 85 references while the full EBMG contains close to 1000 guidelines. In this presentation, the pros and cons of this approach are discussed from the point of view of guideline producers and focus group of users. Automatically collected user data and feedback are presented.

#### SC30.06

Empathy and Boundary Management in clinical encounters: the communicative behavior of oncologists and family physicians delivering bad news

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Context: Advanced cancer engenders complex dialogues between physicians and patients. Patient centeredness and empathy are both important and potentially difficult. Previous studies show that self-disclosure is frequent and empathy infrequent in primary care encounters. Objective: to examine physicians" communication patterns in first visits of undetected standardized patients (SPs) portraying stage IV lung cancer. Methods: Design: Qualitative, grounded theory informed thematic analysis to describe the emergent physician communication categories in an existing dataset. Setting: Community-based family physician and oncologist practices. Participants: 23 oncologists and 23 family physicians; SPs successfully audio-recorded 19 oncologists and 20 family physicians, 34 undetected visits were used in this study. Outcome measures--Analysis and text management: A thematic analysis of transcripts, using an iterative process to create a coding system. Two team researchers, randomly paired, coded each transcript until saturation; Team members then reviewed all coded elements in context, using sequence analysis to examine physician categories and their relationship to each other.

Results: Emergent categories distinguished Acknowledgement and Affirmation from Empathy. Transparency and Projection were also distinguished from Self-disclosure. 31 of 34 (91%) of the encounters had a (focused kind of?) physician Self-disclosure, or Transparency. 24 (71%) of the encounters included an empathic response, although only 1 in 5 empathic cues from patients earned an empathic response. Exploratory analyses showed that Not Helpful Self-Disclosure, Helpful and Not Helpful Transparencies, Projection, and Empathy correlate with each other. These categories can be arrayed along a Patient-centered Care continuum from Respect (Empathy, Acknowledgement, and Affirmation) to Distraction (Transparency, Self-Disclosure) to Intrusion (Projection). **Conclusions**: In encounters where physicians deliver bad news, most include physician Selfdisclosure but few in this study were helpful to the patient. Physicians' opinions about the patient's previous physicians were surprisingly frequent but typically unhelpful to patients, with patients' responses often making their discomfort clear. Altogether, distracting, physician-centered statements are common. The anxiety of the situation may fuel boundary turbulence. Sensitive patient-centered physicians who use empathic statements and helpful transparency are also likely to use projection and unhelpful transparency. Training in boundary management and empathy should be an important aspect of physician-patient communication.

# SC.31 - Clinical Research 15 - Care for the Elderly 2

SC31.01

Academic definition of multimorbidity a systematic review of literature

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Background: Multimorbidity is a new concept close to co-morbidity with a global vision in addition. This concept is deeply in touch with the GPs core competencies as described by WONCA, and especially with the holistic modelling core competency. It could also help to detect frail patients in primary care before decompensating. However, as often for new concepts, its definition and subsequent operationalization are still unclear.

Research question : what is the academic definition of multimorbidity according to literature?

Method: Systematic qualitative review of literature with nine national teams from EGPRN (European general practitioner research network). The only keyword was multimorbidity. Searched databases were Pubmed, Embase and Cochrane. For inclusion multimorbidity's criteria should be described in the article. All articles were quadruple screened. Two independent teams of two researchers did data extraction. first in an open way then a thematic analysis was done and at last a selective coding was performed in intention to make a definition.

Results: 416 abstracts selected, 52 articles included. 1631 criterias of definition were found. The research group described 10 axial codes. The selective coding achieved the following definition: Multimorbidity is defined as any combination of acute or chronic diseases with or without associated or non-associated biopsychosocial factors or risk factors. These factors may also function as modifiers, alongside the social network, the health care consumption and the coping strategies of the patient. It may modify the health outcomes and lead to an increased disability, a decreased quality of life or frailty.

Conclusion: Multimorbidity is now well defined in an academic way. The research group will now search what added value GP could have for multimorbidity and what parts of that academic definition are useful in general practice.

#### SC31.02

Does a proactive and structured care program for frail older patients meet the needs and expectations of general practitioners and practice nurses? A mixed-method study

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#### Purpose:

One of today's most difficult challenges for primary health care workers is how to deliver optimal health care to the rising number of frail older people. A change towards a proactive, structured and integrated approach is needed to preserve physical functioning and improve quality of life in this population. To enable these goals a nurse-led multidisciplinary intervention program (U-CARE) in primary care is developed. This program is currently tested in a three-armed cluster randomized trial among 3000 elderly from 57 general practices. To understand and replicate U-CARE it is important to evaluate not only on the level of patient outcome but also on the level of the providers of the intervention. The aim of this study is to evaluate U-CARE on the level of general practitioners (GPs) and practices nurses (PNs) to enhance the implementation of U-CARE in clinical practice, once the effectiveness is established.

#### Design & method:

A mixed-method study was conducted. Questionnaires were sent one month prior to the start of U-CARE in the general practice and five months later. The pre-questionnaire assessed limitations, barriers and needs of 32 GPs and 21 PNs to provide structured care and the expectations of the U-CARE program. The post-questionnaire measured the experiences with the U-CARE program. Focus group meetings were set up after twelve months; one with GPs and one with PNs.

#### Results & Conclusions:

Overall, most GPs and PNs indicated that U-CARE enables them to provide structured care (89% GPs, 78% PNs), will improve patient satisfaction (89% GPs, 79% PNs) with care and is a surplus value for the coordination of care (70% GPs). However, the effect on quality of life is doubtful. During the focus group the GPs highlighted the added value of the PN, less home visits are need. The PNs indicated that their role had changed and good collaboration with the GP is needed to perform structured care.

## SC31.03 Mood and cognition in the elderly

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Introduction: Depression and dementia are the most common psychiatric disorders in the elderly. It remains unclear if both pathologies are associated and whether depression is a precedent, consequence or risk factor for dementia. If depression was associated with the development of dementia, its treatment could prevent or delay the process of cognitive decline. This work aims to determine the association between mood disorders and cognitive function in the elderly.

Methods: Cross-sectional study of a random sample of individuals aged 65 years or older. It was used a questionnaire on sociodemographic and clinical characteristics of patients. Cognitive function was assessed by applying the Mini-Mental State Examination (MMSE) and, to analyze the levels of anxiety and/or depression of the subjects, the Hospital Anxiety and Depression Scale (HADS) was used. We used the Chi-square, t-Student, Mann-Whitney and Kruskal-Wallis tests to determine the association between variables. A multiple linear regression model was developed to analyze the relationship between MMSE and mood scores, considering the age and education as potential confounders.

Results: There were 263 patients (52.5% females), mean age 72.1 years ( $\pm$  5.3). Of the whole sample, 58 patients (22.8%) had anxiety symptoms (82.8% women; p<0.001) and 42 (16.2%) had depressive symptoms (71.4% women; p=0.01). Approximately 22% of the subjects involved had a MMSE score suggestive of dementia (59.6% women; p=0.22). Dementia prevalence was higher in patients with anxiety (31% vs. 18.9%; p=0.04) and depressive symptoms (35.7% vs. 18.9%; p=0.015). For the cognitive functions assessed with the MMSE, subjects with depressive symptoms had lower scores on items related to temporal orientation (3.48 vs. 4.12; p=0.001), attention and calculation (2.62 vs. 3.87; p=0.001) and recall (1.40 vs. 1.79; p=0.025). These differences were present, regardless of patients' age and education level.

Conclusion: Elderly patients with mood disorder had a higher prevalence of dementia. Depression originated more evident changes in cognitive functions of temporal orientation, attention and calculation, and recall. This work reveals the association of, not only depression, but also anxiety with dementia, more research being needed to clarify this relationship.

#### SC31.04

Study FPDM (Depression and multimorbidity in family medicine): Systematic review of the literature: what validated tools are used for depression diagnosis and screening in general practice?

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Background: Tools for depression screening and diagnosis in primary care are available for several years, but their validity in practice is unclear. The objective of this study was to identify the tools validated against reference test.

Method: Systematic review of literature with ten national teams of the EGPRN. The search query contained the following keywords: "depression definition" or "depression criteria" or "depression diagnosis" or "depressive disorders" or "depressive syndrome" and "tools" or "scales" or "questionnaires" and "primary care "or" family practice "or" general practice ". Databases: Pubmed, Embase, Cochrane. The abstracts have been included by two teams of two researchers each (French and EGPRN). Only tools validated against a reference test were selected. The numerical data (PPV, NPV, Se, Sp, likelihood ratio ...) of each tool were extracted.

Results: 615 abstracts extracts; abstracts included 59, 31 screening and 7 diagnostic tools included. The characteristics of the tools and all of their validity data were collected.

Conclusion: This systematic review of the literature has to find and identify validated tools used in the screening and diagnosis of depression in primary care. Research teams and general practitioners can choose according to their needs from the list of validated tools.

#### SC31.05

## Experience with the living will document in the Region of Murcia (Spain)

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Objetives: to evaluate the opinion and knowledge about the Living Will (LW) of the patients in an urban health centre. The LW is an advance directive, prepared when an individual is alive, competent and able to make decisions, regarding his specific instructions about cares to receive if he could not communicate when he needs them.

Material and Method: transversal, descriptive study in urban health centre. 228 patients over 18 years were randomly selected among those visiting 4 of the doctors from September to November 2010. 33 patients refused to participate. Data (age, gender, civil and working status, chronic diseases, knowledge of LW, informer, opinion about LW, and Life Support Preferences Questionnaire validated for Spain :LSPQ-e)were recorded and statistically analysed with SPSS.

Results: Age: 18-50: 85 (43.6%), 51-70: 82 (42%), >70: 28

(14.4%)

Partner: 143 (73.4%). Active workers: 105 (53.8%) Chronic diseases: 98 (50.3%)

Knowledge about LW: 49 (25.1%), informed by heath workers: 7

(14.3%).

LW are useful: Yes 175(89.7%)-No 7 (3.6%), undecided (Ud):13 (6.7%).

LSPQ-e:

a- Cerebral hemorrhage, subsequent coma, and heart attack: CPR? Yes 34 (17.5%)-No 119(61%)-Ud 42 (21.5%).

b- Old, single, coma, Pneumonia: Antibiotic? Yes 39 (20%)-No 114 (58.5%)-Ud 42 (21.5%).

- c- Inoperable cancer: chemotherapy? Yes 110 (56.4%)-No 73(37.4%)-Ud 12 (6.2%).
- d- Severe Alzheimer's disease, Diabetes M., osteomyelitis. Amputation? Yes 90 (46.1%)-No 6 (3.1%)-Ud 98(50.8%).
- e- Chronic pain after hip-surgery, anorexia: Nasogastric intubation? Yes 111(56.9%)-No 64(32.8%)-Ud 20 (10.3%).
- f- Young relative, brain-damage, renal failure: Dialysis? Yes 111(56.9%)-No 64(32.8%)-Ud 36(18.5%).

Results: Only 33% know about LW, and only 15% of them have been informed by a health worker. The patients want to be treated if there is some life expectancy, despite a bad quality life. If bad quality life and low life expectancy, they choose to not be treated. Bias: the patients who do not come to doctor (active workers or immobilized) are not represented here.

Conclusions: the patients consider the LW helpful, but they believe that doctors should inform them about it more often.

## **ART**

## AR.01 - Art 1

#### AR01.01

The relationship between Music and Medicine from historical perspective

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Music is not only an art but also a concept, that takes place in every period of human life and has healing effects on mind and body. Many civilizations discovered the effects of music on health according to their social, culturel level and used music, rhythm and dance in many subjects. Egyptians used music during birth. In ancient Rome, Celsius, Aretus and Asclepiades music was used to cure psychiatric diseases. Throughout the history of famous Islam scholars such as Al Razi (854-932), Al-Farabi (870-950) and Ibni Sina (Avicenna) (980-1037) used music for the treatment of psychosomatic diseases. The lute was invented by Al-Farabi, who studied the effects of music on human body and soul.

The famous world traveller Evliya Celebi (1611) narrated the treatment with music in the "Book of Travels". The Deceased and Blessed Bayezid Veli appointed ten vocalists and instrumentalists to the hospital. This group included vocalists, flutist, violinist, flageoletist, gipsy dancer, player of dulcimer and lute. The group was coming three times a week and giving short concerts to the lunatics and patients. They were relaxed and pleased by the sound of orchestra with order of God.

The relationship between musical modes and various diseases was classified in the book titled "T'adil Emzice" written by Şuuri Hasan Efendi (1683), one of the Ottoman poet-physicians. The relationship is as follows:

Rast Mode: Useful for eclampsia and paralysis.

Isfahan mode: Clears the mind, increases the intelligence and refreshes the memories.

Zirefgent Mode: Useful for curing back, joint, shoulder pains.

Rehavi Mode: Beneficial for headache.

Neva Mode: Good for Irk'un nisa (gynecological disease).

Zengule Mode: Remedy for heart diseases.

Hicaz Mode: Good for urinal disorders, stimulant for sexual desire. Ussak Mode: Remedy for heart, liver, malaria, stomach diseases. Music has started to be used in hospitals in the first half of 20th century. A pubmed research with keywords "music therapy" has a rocult of 3408 articles. Many socies of studies still continue to

result of 3408 articles. Many series of studies still continue to discover the effects of music on people affected by different diseases. The music is always an essential part of our life if we are ill or not.

## AR01.02

Unearthing repressed artistic impulses in management of psychological distress - a case series

## K. Tully;

London Deanery, London, United Kingdom.

#### Background

For many years, it has been my firm belief that suppressed creative energy often manifests in low mood and anxiety. I have found in my own life that engagement in artistic projects has helped me to overcome stress. I have also researched the literature on this matter and found many sources supporting this view. These references are discussed in further detail in my presentation.

## Aims and Methods

On the basis of this knowledge, I often ask patients about their extracurricular activities, enquiring about creative interests in particular, in my role as a GP Registrar. As part of the development of my training portfolio, I kept a detailed account of three cases where this viewpoint appeared particularly pertinent. In this presentation, I describe the these cases in detail- a 22 year-old law student who overcomes symptoms of anxiety through re-

engagement with her interest in design, a 50-yr old mother of three who incorporates joining a painting group as part of a holistic approach to medically unexplained symptoms and a 68-yr old recently widowed lady with Parkinson's Disease who finds new meaning and a means of dealing with her illness and grief through attendance at a pottery class.

### **Outcomes and conclusions**

This project has proven to be one of the most interesting and informative facets of my training to date. It has reaffirmed for me the importance of engaging with creative and artistic impulses, both for patients and in my own life and practice. I have undertaken to maintain a casebook of examples and to use this as a resource for education and training of junior and other doctors. I have also enrolled in 6-month evening art portfolio preparation course to apply for a 2 year part-time Masters in Art Therapy. I firmly believe that these measures will make me both a better physician and contented individual.

a poor community in the city of Diadema, in São Paulo, Brazil. Three community events were held. To provide greater proportions of health promotion and community-provider interaction, the events were held in the local primary care center called Basic Health Unit. The events carried were the Children's day, which aimed to interactions with children by painting t-shirts and discussing oral health, the Third Age Bingo Day, which included diabetes and hypertension screenings and the Breathing Water and Sound Program, for adults, with meditation, breathing exercises and stress-handling conversations. Discussion: The community showed great pleasure to participate on the activities developed. Small leisure additions to prevention strategies enhance their contribution to health promotion, by helping on the development stronger ties between the community and healthcare professionals and making screening and counseling more interesting and enjoyable. Our experience highlights the importance of the art of general practice on the creation of such strategies.

#### AR01.03

## Forum theatre as a method to implement ethical aspects in palliative care

#### R. Dijkstra;

Dutch College of General Practitioners, Utrecht, Netherlands.

Title: Forum theatre as a method to implement ethical aspects in palliative care

Background

Traditional educational methods are not very useful in developing a professional attitude in ethical questions. The Dutch college of General Practitioners developed a position paper on palliative care that stressed on the availability of the GP for his own palliative patients in out of office hours. Forum theatre is a way to explore issues by acting out real-life situations and trying to change the outcome.

Methods

The Dutch "wooden leg theatre company" developed programmes that explored ethical issues from the position paper on palliative care. Questionnaires of GP(trainees)s that visited the programme were made to assess the willingness of participants to change their behaviour.

Results

From participants of the workshops 45% stated that they would improve their availability for palliative patients, 21% planned to give their mobile Phone number to patients or their relatives in the last phase of the disease, 65% planned to improve the information of the out of office medical services and 26% of the participants expressed to start with being personally available for patients in the palliative phase in out of office hours.

Conclusion

There is no proof that Forum theatre has better outcomes on attitude than traditional medical education, but the First experiences are promising. Plans are made to present a programme nationwide.

#### AR01.04

## Leisure as a form of prevention and health promotion

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Introduction: The concept of health established by the World Health Organization consists in not merely the absence of disease but complete physical, mental and social well-being. Studies have shown that leisure works as health promotion by reducing stress and providing good feelings, such as well-being and wholeness. Leisure activities in poor communities have been recognized as an excellent strategy for health promotion because of the positive changes they evoke with education and culture. Experience: We aimed to contribute to primary prevention and health promotion in

#### AR01.05

Art therapy as a preventive treatment in General Practice.

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#### Introduction

Art therapy includes a variety of inherent methods and techniques that bring relaxation, joy and spiritual delight. It is based on the belief that the creative process associated with art making brings positive life change. Through creative art therapy, processes allow the individuals to express their thoughts, feelings, emotions, namely to achieve artistic self- expression and self-discovery. Creative therapy can be skillfully used with emotionally unstable patients in order to reduce stress, control behavior, deal with conflicts and problems, develop interpersonal communication, improve self-esteem and confidence.

Objectives:

The aim of our study is to examine and assess the role of different types of art therapeutic activities in prevention and treatment of patients in general practice.

Materials and methods:

We have used a scientific method of analysis in our study of available materials for different types of art therapies that are used for assessment, prevention and treatment of patients and have a positive effect on psycho- and physical condition.

Results:

Art therapy includes painting as therapy, music therapy, movement therapy, drama therapy and game therapy. Different forms of art therapeutic activities are used for different specific purposes and relevantly specific problems. Creative therapy plays an essential role in the upbringing and education of children, adolescents and improve mental and physical health of adults, geriatric patients, families and groups. Different types of art techniques are used successfully for assessment and treatment of anxiety and depression, mental disorders and other emotional problems, drugs abuse and other addictions, domestic violence, cognitive and neurological problems, psycho and social problems associated with medical illness, disability, injury, etc..

Conclusions:

Creative therapy places the individual as a leading, active participant and creator. Art helps to overcome the difficulties, achieve harmony and ennoble.

## AR.02 - Art 2

#### AR02.01

Phenomenology of "draft" as an anecdotal causative pathological agent, presented in the Family Medicine practice in Bosnia and Herzegovina: a practitioner's ally in the faster patient recovery

## A. Smailbegovic;

J.U. Dom Zdravlja, Zenica, Bosnia and Herzegovina.

The research presents comparative, prospective/retrospective study in the Family Medicine practice undertaken over an 8 month period in the Fall-Spring 2010/2011, during the peak incidence of patients complaints caused by the apparent "draft." The "draft" or "body cooling" caused by "draft" is ingrained in the folklore of Bosnia and Herzegovina and is commonly blamed by the patients for just about every ailment ranging from common infections to neurological conditions. The goal of the study was to understand the ethno-specific conditions and ingrained beliefs of patients to develop a better doctor-patient relationship and healing regimen through the basic tenets of Family Medicine: the art of listening, understanding and life with the patients for the goal of faster healing and recovery of the patient.

A pool of 108 patients was available for this based on two criteria: age (18-45) and working diagnosis (sy thoraco lumbale). All patients who had met the inclusion criteria were divided in two groups: the ones who believed their condition was a result of a "draft" (the "study group") and the other who didn't name "draft" as a causative agent for their visit to the practice (the "control group"). The group split was roughly half-half. Anamnestic data collected during first visit and retrospective data (from chart one year prior to enrolment to study) were collected in study sheet. Prospective data (physical and neurological exam findings, X Ray and lab work) were included and assessed at each visit as well as patient's overall medical history and incidence of similar complaints in the past.

The results show that the patients from the "study group" have demonstrated a faster recovery and improvement than the "control group" because they have been intrinsically aware of the perceived cause of their ailment. The "control group," which did not have a self-explained cause to their ailment, did not recover as fast and kept searching for the "reason" to their ailment.

By using the ingrained-belief of patients and quickly verifying the underlying condition, it is possible to save the time and expense of additional tests while streamlining the patient towards faster recovery.

#### AR02.02

Why should I ask my patients to quit? The important role of the general practitioner and the support of quitlines in the cessation process

**U. Haberl**, A. Beroggio, S. Meingassner; Rauchertelefon, St. Pölten, Austria.

Tobacco smoking is the largest preventable cause of death, disease and illness hardly all over the world. As well we know that resources in the daily work with patients are limited, health professionals play an important role to encourage their patients to quit, to accept an intervention and to increase their success rates. The 5 A's of tobacco cessation support is a helpful tool to standardize the medical talk:

Ask about the tobacco use

Advise the patient to quit

Assess the readiness to quit

If patients are motivated to quit within 30 days it's important to show them ways how to manage the quit process. One possibility is to refer them to quitlines, where they get individual and professional counselling.

The effectiveness of quitlines is already confirmed. In the Clinical Practice Guideline of the U.S. Department of Health and Human Services is written: "Telephone quitline counselling is effective with diverse populations and has broad reach. Therefore, clinicians and healthcare delivery systems should both ensure patient access to quitlines and promote quitline use." Also the WHO defines telephone quitline counselling as one of the three most important

arrangements to quit, beside clinical cessation services and nicotine replacement therapie.

Therefore the next steps are:

Assist in the quit attempt (with the support of quitlines)

Arrange the follow-up (quitlines will follow-up over the phone)

In Austria the quiltine called "Rauchertelefon" launched on World No Tobacco Day 2006. Since the beginning 8372 people have called the quiltine. "Das Rauchertelefon" concentrates on smoking cessation and the support of a smokefree life. Most of the first contacts are reactive, which means that smokers call the number 0810 810 013 by themselves. For smokers who intent to quit or exsmokers who call to prevent relapse we offer proactive counselling up to six follow up calls.

To offer health professionals and health care institutions an effective support for their smoking patients, we provide the program "Rauchfrei werden. Per Fax!". With this tool it is possible to refer smoking patients directly to the quitline and patients get proactively called by the counsellors.

#### AR02.03

Enlightenment of human care: medical students' experience in Family Medicine

**B. B. Ribeiro**<sup>1</sup>, L. S. Silva<sup>1</sup>, M. A. Janaudis<sup>1,2</sup>, G. Moreto<sup>3,4</sup>, P. G. Blasco<sup>4</sup>;

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Introduction: Medical School students seek to learn the art of healing from experimented professionals. This paper intends to show the progressive loss of the traditional warm and careful personal relationship between physicians and patients and to declare the efforts to reintroduce this important aspect in the practice teaching and to re-humanize the medical practice. Method: The present work is based in the available literature and in the reports of medical students that followed the routine activity of family physicians from Brazilian Society of Family Medicine SOBRAMFA. Several actions were taken in the undergraduate course to induce the student to ponder on the theme, including the discussion of movies, theater pieces, music and real case histories. Authors conducted a qualitative study. Core values of family medicine and general life themes were presented. Discussion: Following physicians work represents an important resource to motivate the medical student and to teach how to proceed to conquer the patient confidence. This experience helps to show that the medical practice is not limited to technical aspects and that the dialog with the patient and his family, to elucidate doubts, to consider the patient expectations and to well understand the patient and family living conditions, is as important as the medical protocols and procedures. Following the professional acting helps in the student enlightenment about these aspects of the medical practice. Conclusion: The contact with and the discussion of real cases allows the student to remember the knowledge acquired in the several disciplines of the medical course, to reflect about its applicability to the existent conditions in Brazil, and to use this reflection to modify and improve the present health care conditions

#### AR02.04

#### Another view of the medical care

M. A. Carrazedo, F. M. C. Führer, **D. C. P. Lopes**, F. H. Santos, G. G. Acceta, L. Vieira, M. P. H. Santos, M. R. Levites, K. C. Abrão; Anhembi Morumbi University, Sao Paulo, Brazil.

With the advent of technology and the success of medical research which have brought us many discoveries, the doctor, have specified too much in the pathology causing a bureaucratization of the human being. Nowadays, the disease is cured, not the patient. Many doctors learn in a self-taught way how to relate to the patient, and an advice that is given is to keep an emotional distance, what causes the doctor to forget the essence of the medicine that is "caring", and this must cover both the pharmacological and psychosocial treatment.

The initial point is simplifying the approaching and handling of the therapy, regarding the patient, focusing our view in an entire patient, not only the disease. For it, a suggestion is "retreat" when it comes to medical perspective.

Knowing that, to treat a patient, it is necessary to address his cultural and social aspects, regarding all the factors that support a true health

There is hope that in the future, medicine could be a simplified and to some extent, medical perspective could return to its very nature, searching the comeback for doctor's idealism in a way to cure mankind and not just pathology.

Remember that true health isn't made by the absence of disease, but by a combination of every factor in a human life.

The Academic Group of Humanization and Human Care was made to provide a support that is both focused in humanized treatment, as in medicine students social relations, since it was made clear the importance of the development of this sensitivity when dealing with the suffering of the patients. Therefore, we shall work with lectures and practical classes so we can help others develop this kind of sensibility and holistic vision of the human being.

We seek the importance about sensibility development in seeing another person. Thus, creating empathy about medical treat towards suffering and stimulating creativity in the presence of daily life

We use logical, psychosocial and theoretical knowledge in lectures, theatrical workshops and ordinary classes. Making it possible for a student to become aware of different scenarios regarding patients.

#### AR02.05

### Education on arts & medicine: a Dutch experience

F. H. Tilmans<sup>1</sup>, **H. A. Thiadens**<sup>1</sup>, A. B. M. Rietveld<sup>2,3</sup>; 
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<sup>3</sup>Nederlandse Vereniging voor Dans- en Muziekgeneeskunde, Den Haag, Netherlands.

The relation between the arts and medicine is not coincidental. The inventors of auscultation and percussion were musicians themselves. Nowadays, every doctor will treat patients that participate in performing arts. Whether these patients perform at a professional level or as keen amateurs, both groups require a particular medical approach to their complaints.

At the Leiden University Medical Centre an elective course on Performing arts medicine was taught in 2011. The course duration of three weeks provided opportunity to explore aspects of specific injury and treatment of dancers, musicians and painters. Many medical professions were integrated in the course, e.g. orthopedics, psychiatry, otolaryngology, dermatology, ophthalmology and pulmonology.

All students were offered an individual exploratory visit to a specialized outpatient clinic or physiotherapist to experience the essence of performing arts medicine. As a group we observed a rehearsal of the *Dutch Dance Theatre*, which illustrated what the artistic body has to endure. Examples of paintings were discussed to recognize diseases in the portrayed.

The course was concluded with a seminar presented by the participating students. It provided a mix of scientific and artistic approaches to both historical and current topics in performing arts medicine.

**Conclusion:** Performing arts medicine deserves a place within the European curricula. It comprises multidisciplinary medical topics and integrates anatomical, ethical, and philosophical aspects of modern day medicine.

## AR.03 - Art 3

### AR03.01

Cognitive errors in clinical practice

C. Wellbery, K. Lin;

Georgetown University, Washington, DC, United States.

A substantial number of errors that occur in diagnosis and treatment are attributed to flaws in clinical reasoning. This presentation will enumerate common biases clinicians rely on in everyday practice, what their implications are for diagnostic error and how to correct them.

A wide variety of diagnostic biases have been described in the literature. These include the notions that common diseases occur more often, and that a single diagnosis accounting for numerous symptoms is better than cobbling together several explanations. Many biases are nothing more than practical diagnostic shortcuts and, in most cases, actually lead to correct decision making. However, at times pearls become pitfalls, leading to erroneous conclusions.

Using case examples, we will illustrate commonly described biases. One such bias is known as the availability bias, which refers to the ease with which a particular answer comes to mind. When a patient does not respond to treatment, an anchoring bias would lead a physician to prescribe a stronger dose or a different formulation of a previously prescribed medication rather than consider another diagnosis. Relying on another physician's opinions illustrates the bias of groupthink, or blind obedience, in which an agreement is reached based on an authoritative source (e.g., laboratory and imaging test results) without sufficient examination. Another bias associated with diagnostic tests is the confirmation bias, which leads the interpreter to overemphasize findings that support the original diagnosis. There can be overlap among biases.

Interventions to reduce diagnostic errors are currently under investigation. Advocates of metacognition suggest teaching the sources of biases and implementing mental awareness practices to counter them. In one study, reflective reasoning was found to reduce availability bias in residents. Physicians who analyzed a spectrum of diagnostic possibilities made a more accurate diagnosis than those who relied on a previous case with similar features. For an interesting practical use of a diagnostic checklist to reduce error, we will show a short illustrative video.

Other tentative solutions to bias-induced error include scrupulous follow-up, point-of-care decision making tools, and involving other team members.

## AR03.02

Mindfulness based approaches to Holistic Health - A practical exploration

#### O. Pichlhoefer;

Medical University of Vienna, Wien, Austria.

- Background: Functions of mind including attentiveness, critical curiosity, presence and self-awareness, are key features of any successful professional. Mindfulness has been defined as 'paying attention in a particular way: on purpose, in the present moment, and non-judgmentally'. The Development of these traits can foster a relaxed and alert state of mind which not only brings a resilience against stressful experiences but also leads to a way of conducting moment-to-moment actions that could be regarded as tacitly ethical, in the sense that these actions are done with an implicit consideration of the needs of patients, co-workers and students.

Mindfulness Based Stress Reduction (MBSR) has been developed and studied over the last 35 years in its application to many health conditions and to professional development.

- Intended outcomes: Knowledge and first person experience of the basics of mindfulness meditation, and an understanding of how these techniques can be used to manage stress, enhance communication, and promote empathy both in clinical practice and everyday life.
- Structure: A presentation followed by guided exercises and interactions in diads and discussions.
- Who Should Attend: Anyone interested in comprehensive personal and professional development

#### AR03.03

#### Nutrient therapy in the treatment of depression

#### E. V. O`Flaherty:

Gleneagle Medical Clinic, Dublin, Ireland.

Mental health problems are due to a chemical imbalance in the brain. Common sense would suggest that we should fix them by getting the biochemistry right. Thus for example I treat depression initially with medication but I immediately set in train a whole series of tests to find out what is wrong so that in many cases I can get them off medication after several months. They are likely to remain well if they persist with their nutrients- individualised doses of vitamins, minerals, essential fatty acids and amino acids.

I read the side effects of an SSRI recently in the leaflet that came with it and it mentioned 105. Nutrients have very few side effects , although high doses are often necessary. Good effects I often see are actual joy in many patients, improvement in libido and a marked improvement in self-esteem. My aim is to set many of them free within six months so that they can live a normal fulfilled life. I reckon I am saving the health service in my country several millions euros every year.

This work was started by a Canadian psychiatrist, Dr Abram Hoffer and later developed by Americans Dr Carl Pfeiffer MD PhD and Dr William Walsh PhD.

Dr Walsh has spread the knowledge to doctors in several countries and I myself attended the week-long course in Sydney in 2006. You can read more about him and his new book at www.walshinstitute.org.

I would be happy to give an introductory lecture and for time reasons to concentrate on depression, although it works for many other conditions too. I like being a GP but this is by far the most useful and fulfilling work that I do.

## AR.04 - Art 4

#### AR04.01

The influence of professional social network on clinical decision making

**D.** Agur Cohen<sup>1</sup>, M. Levy<sup>2</sup>, O. Cohen Castel<sup>1</sup>, K. Karkabi<sup>1</sup>;

<sup>1</sup>Technion- Israel Institute of Technology, Haifa, Israel, <sup>2</sup>Shenkar College of Engineering and Design, Ramat Gan, Israel.

#### **Background**

Social networks of physicians or patients target to promote knowledge dissemination and save time in distributing medical innovation. However, the main barrier of knowledge sharing remains tacit knowledge capturing (e.g., realizing the rationale underpinning clinical decision). Making it explicit and accessible would contribute to systematic decision-making processes.

### Research Objective

The aim of this study is to examine the role of physicians' professional social network in decision-making processes. The

research questions address usage patterns of family physicians within the network, including mechanisms of knowledge transfer and sharing, and the network influence on physicians' cognitive processes during decision-making processes.

#### Methods

The study used the qualitative interpretive research methodology. The RAMBAM professional social network of 300 family physicians served as the research field, and It was examined in three stages: analysis of the current physicians' activities within the network that relate to decision-making processes, deep interviews with family physicians who raised and uploaded clinical dilemmas to the network, and a semi-structured questionnaire distributed to the entire network members.

#### Results

The content of 150 discussions concerning decision-making processes, in the years 2009-2011, was inductively analyzed. We identified the following categories: 1. Physicians' application reasons to the network. For example: asking for integrative perspective, psychosocial aspects and ethical-value issues. 2. Characteristics of network physicians' responses to raised dilemmas. For example: professional reference, innovative reasoning and personal tips and referring to scientific/cultural information sources.

Analysis of the deep interviews with physicians who uploaded clinical dilemmas to the network revealed issues regarding the roles of the network in clinical decision-making processes. For example: enabling personal experienced-based knowledge sharing, strengthening the a priori physician diagnosis and improving and consolidating decision making.

#### Conclusions

Professional social network can contribute to medical knowledge capturing and dissemination and to physicians' decision-making. This study can assist in future design of medical professional social networks as knowledge source in medical decision-making.

#### AR04.02

## Pilot of a new method of patient participation in guideline development

#### K. M. van Asselt;

Dutch College of General Practitioners, Utrecht, Netherlands.

#### Background

The interest of patient participation in guideline development is growing. However, is it not common practice yet. Various methods of patient involvement have been used, but it is unclear which method is most effective. The effectiveness may depend on the scope and purpose of the guidelines, such as improving coordination of care, education or shared decision making. A usual method is to consult disease specific patient organisations in the external review phase. The Dutch College of General Practitioners has made new efforts to involve the patients in an earlier stage of guideline development.

#### Purpose

To share practical knowledge of methods of patient participation in guideline development for general practice.

#### Methods

For our pilot, we selected the guidelines on urinary tract infection (2005) and stroke (2004), which needs to be updated. We asked general practices in the Utrecht region to recruit patients for participation in focus groups.

Patients or their relatives with CVA or urinary tract infection were recruited consecutively.

The focus groups were asked to identify and discuss specific problems perceived in health care and to suggest tools for implementation of the guideline.

#### Results

Results are expected in March 2012. Similarities and differences between the results of the focus groups on UTI and stroke will be presented. Strengths and weaknesses of the pilot will be outlined.

#### Conclusion

Composing focus groups of patients with acute and chronic conditions is feasible in general practice. Patient recruitment in general practice can be considered as an alternative for representation by members of patient organisations.

#### AR04.03

Communication Through "TAI CHI CHUAN" (Dr. Marx Video).

A. Cánovas-Inglés, A. piñana-lopez, E. Esparza-Pérez, F. Guillén-Cavas, J. Flores-Torrecillas, R. Requena-Ferrer, S. Martín-Soto, M. I. Montes-Díaz, I. García-Sánchez, P. G. Murcia-Casas; SMS, Cartagena, Spain.

Tai Chi is an antique Chinese exercise that provides health and was introduced in Europe in the late 20th century. It consists of slow and smooth continuous movements to relax and strengthen the body and mind. Furthermore, Tai Chi Chuan, facilitates easy learning of the movements and as an instrument of communication, motivates and emotionally involving participants and promotes their active participation. Tai Chi is an instrument that can improve communication between professionals in the health and performance.

OBJECTIVES:

To use Tai Chi Chuan as a tool to improve communication and the working environment in a Health Centre.

DESCRIPTION OF THE EXPERIENCE

Interventionist and prospective study. Cartagena Health Area in the Centre of Health Cartagena Downtown of the Service Murciano of Health (SMS). Study period: began on 11 January with a great master of Tai Chi. 34 professionals of the Primary Health Team, were included in the experience 19, among physicians, nurses, pediatrician and support staff. Every Thursday, during 55 min., in turn, taught the classes. The exercises, including warm-up, stretching with deep breathing, Qi Gong and Tai Chi Chuan, with support of techniques, philosophy, music and open spaces. Variables: emotional, learning, and stillness. It will be presented a video of the activities.

CONCLUSIONS

Health professionals are excited with the practice of Tai Chi Chuan and learn better to communicate with users and patients. Tai Chi as an extra, parallel to the healthcare activity, provides greater joy and stimulates the interrelationship between all professionals of the Health Center.

#### AR04.04

Dr. Marx´ Videos: Medical Interview and Humor (I)

A. Canovas Ingles, A. Piñana-Lopez, C. Alonso-García, G. Mihailonona;, R. Luquin- Martínez, A. Barragán-Pérez, A. Barragán-Pérez, M. P. Martín-Villaseñor, J. M. Bueno-Ortiz; SMS, Cartagena, Spain.

#### **OBJECTIVE**

We start with a theoretical framework of analysis of the medical interview without forgetting some contributions taken from medical studies about the humor. Our objective is to observe the functions of the humor in the effectiveness of the interaction of communicative in the act of the medical interview.

## DESCRIPTION OF THE EXPERIENCE

Our methodology is based on the analysis of clinical interviews recorded on video by professional health care and patient volunteers, focused on his perception of the role of humor in their respective professional discursive practices. It's all in a Day's Work. Creating the series of videos from the "Dr Marx (Doctor M, Animated, Resuscitator, Xoxo)". Videos of Dr. Marx series are just now presented at this Congress, first video, on the principles of Family Medicine about the interaction of communicative in the act of the medical interview will be presented. There are several characters interpreted in the video by: physician, nurses, administrative, patients and more characters who interpret the act of a medical interview with its stages from a standpoint of humor. With this way of inquiry we provide reflections on the humorous uses in the field of the Primary Health Care, which no doubt have positive although not free of risks communicative effects. CONCLUSIONS

This video was made to be used teaching medical resident practical procedures of medical interview. The realization of the

videos increase the cohesion of health professionals and it involves a user participation that react to collaborate to the realization of the same, as well as use in a didactic way for Family Medicine Residents.

#### AR04.05

Dr. Marx´Video (II): The Principle of Family Medicina (ROMAN PERIOD)

A. Cánovas-Inglés, A. Piñana-Lopez, J. Espinosa-López, J. P. Olivo-Ros, Y. Martínez-Sandoval, G. Madrid-Cervantes, E. Pagán-Dato, M. Daniela-Graure, A. Claudiu-Coman, J. M. Bueno-Ortiz; SMS, Cartagena, Spain.

#### OBJECTIVE

We start with a theoretical framework of analysis of the medical interview without forgetting some contributions taken from medical studies about the humor. Our objective is to observe the functions of the humor in the effectiveness of the interaction of communicative in the act of the medical interview.

DESCRIPTION OF THE EXPERIENCE

Our methodology is based on the analysis of clinical interviews recorded on video by professional health care and patient volunteers, focused on his perception of the role of humor in their respective professional discursive practices. It's all in a Day's Work. Creating the series of videos from the "Dr Marx (Doctor M, Animated, Resuscitator, Xoxo)". Videos of Dr. Marx series are just now presented at this Congress, new last video, about on the principles of Family Medicine (Roman period) and the near future will be presented. Characters were interpreted by all members: physician, nurses, pediatric and administrative all dresses about the Roman period. With this way of inquiry we provide reflections on the humorous uses in the field of the Primary Health Care, which no doubt have positive although not free of risks communicative effects.

#### CONCLUSIONS

This video was made to be used teaching medical resident practical procedures of interview clinic. The realization of the videos increase the cohesion of health professionals and it involves a user participation that react to collaborate to the realization of the same, as well as use in a didactic way for Family Medicine Residents

### AR04.06

Traditional Turkish Classical Music and Use in Old Turkish Medicine. Is music really the food of spirit?

I. Kasim<sup>1</sup>, M. Tokac<sup>2</sup>, **R. Kahveci**<sup>1</sup>, I. Sencan<sup>1</sup>, T. Albayrak<sup>1</sup>, A. Ozkara<sup>1</sup>;

<sup>1</sup>Ankara Numune Training and Research Hospital, Department of Family Medicine, Ankara, Turkey, <sup>2</sup>Medical Director, Basaksehir State Hospital, Istanbul, Turkey.

Music had a different place in old Turkish societies. It was thought as a way of spiritual maturation. There is an old Turkish saying: "Music is the food of spirit". That's why especially for psychiatric disorders music was used as a therapeutic. Using music for therapy has 6000 years' background. But first using of music therapy in hospitals (shifahane, darushshifa) was almost 1000 years ago. First known hospital where musical therapies were used is Nureddin Hospital in Damascus by Nureddin Zengi (king of Seljuks) in 1040. This hospital had a special section for psychiatric patients. Kayseri Gevher Nesibe Medical School and Hospital (1206), Divrigi Hospital (1228), Amasya Hospital (1308), Fatih Hospital (1470), Edirne Hospital (1484), Süleymaniye Medical Faculty and Hospital (1557) were enormous hospitals that used music therapy. According to Evliya Chelebi, who was the well-known traveller of his age- said in his book that Edirne Hospital had a special band for patients. Edirne Hospital was the first hospital that was planned and constructed for music therapy.

Traditional Turkish Classical music has 553 makams (musical note lines). But more than 100 makams have wide usage. Some

makams were used for known diseases. These are written in books that called "Edvar":

Makam Medical usage

Rehavi for excited and hyperactive people

Isfahan for amnesia and dementia

Kuci for depression

Rast for depression and stroke

Zirefkend, büzürk, reva, buselik,ussak, zengüle, rehavi, hüseyni, hicaz, nevruz, gevesi, sehnaz, hisar, hümayun, müberka, bestenigar, saba, rekeb etc. makams also used for certain disease and circumstances. Doctor first takes history, then makes examination then if he decides to use music to choose the right makam, makes patient listen makams using for that disease and takes patients' pulse. In modern medicine there are a lot of researches about using music in medicine. Most of them find out that music has some beneficial effects on some physiological parameters and could be used for post op and obstetric pain palliation, operation and intensive care unit anxiety, for education of disabled children, to prevent school violence and even to lower hypertension.

## AR.05 - Art 5

#### AR05.01

#### Are Turkish family physicians interested in art?

A. Ozkara<sup>1</sup>, S. Sumer<sup>1</sup>, **P. Döner**<sup>1</sup>, G. Iscan<sup>2</sup>, O. Tekin<sup>2</sup>, R. Kahveci<sup>1</sup>, I. Sencan<sup>1</sup>, I. Kasim<sup>1</sup>, E. Koc<sup>1</sup>, B. Ellialti<sup>1</sup>; <sup>1</sup>Ankara Numune Training and Research Hospital, Department of Family Medicine, Ankara, Turkey, <sup>2</sup>Ankara Training and Research Hospital, Department of Family Medicine, Ankara, Turkey.

Aim and purpose: Throughout the history, art and medicine have been in close contact. Both artists and doctors have professional interest on human to make people feel better. In various medicine fields, many doctors have been interested in art; Dr. Billroth was violinist, Dr. Henri Monder and Dr. Anton Chekhov were writers, Dr. George Chicotot was painter, Dr. Suheyl Unver was composer. Hippocrates emphasized the importance of togetherness of art and medicine, asserting "medicine is art". Leonardo Da Vinci used them together; he painted "Vitruvius" human drawing. Molier wrote "Le Malade imaginaire" including a patient with tuberculosis. Bruegel had "Blinds" and Rembrandt had "Anatomy lesson" paintings. Painting, dance, music therapies are significant parts of complementary medicine for promoting healing, wellness, and personal change. In this study, it is aimed to obtain whether Turkish family physicians are interested in art and in which branch of art they are interested in.

Method: We conducted a structured online questionnaire about physicians' relation and interest in art to 1500 general practitioners and family physicians. 272 participants replied to our descriptive questionnaire. Response rate was 18%.

Results: 48.9% were male and 51.1% were female. 156 participants were interested in art; 12 professional level, 96 avocational. Participants' interests: 38 (14.0%) painting, 40 (14.7%) writing, 8 (2.9%) piano, 28 (10.3%) singing, 24 (8.8%) cinema-theater, 15 (5.5%) guitar, 17 (6.3%) reed flute, 7 (2.6%) violin, 16 (5.9%) baglama, 17 (6.2%) other instruments. 24 (16.8%) photography, 72 (26.5%) marbling art, 4 (1.5%) calligraphy, 15 (5.5%) fancy work. 49 participants have at least one artist in family. There is a statistically significant relation between being interested in art and having an artist member in family (p<0.008). 63.6% think medicine has a relation with art. There is a statistically significant relation between thinking "medicine is an art" and being interested in art (p<0.001).

Conclusion: Within all creation, human is a perfect artwork with perfect balance. Especially family physicians and general practitioners have significant efforts for maintaining and saving this perfect homeostasis between body and psyche through their biopsychosocial approach. This well known reality also applies to your colleagues from Turkey.

#### AR05.02

## The doctor theme in Turkish movies

O. Cigerli<sup>1</sup>, H. Parildar<sup>1</sup>, A. Kut<sup>2</sup>;

<sup>1</sup>Baskent University Faculty of Medicine Department of Family Medicine, Istanbul Hospital, Istanbul, Turkey, <sup>2</sup>Baskent University Faculty of Medicine Department of Family Medicine, Istanbul Hospital, Ankara, Turkey.

Aim: We aimed to review the Turkish movies in which doctor theme was used and explore the doctors who are engaged in playing or directing the movies. Doctor theme is very important and common in Turkish Cinema for many years.

The movies in which the main theme is medical doctor such as (titled as "Doctor, Doctor Civanim") have been shooted between 1970-1990 years. Ekrem Dumer, Nubar Terziyan, Ihsan Yuce, Zeki Sezer, Muammer Gozalan, Onder Somer were the actors who displayed doctor figure in all movies. Interestingly a Turkish very famous movie star and director was a medical doctor named Cuneyt Arkin. In recent years there are famous film directors work as a doctor as well named Mustafa Altioklar. We found that physicians are portrayed as wise and talented people. For instance, the doctor character displays one or more of the following traits: healing, display loving kindness and forgiveness. Movie doctors can provide insightful and realistic portraits of the challenges, rewards and excitement of being a doctor. Positive images of family doctors like 'idealism' have declined since the 1960s, in the world but this is not the case in Turkey. In the world, a recurrent theme is the "mad scientist", the doctor-researcher who experiments on patients. But this theme has never been a theme in Turkish Cinema. Since we are family physicians, we looked at how our specialty is treated in movies. They are mostly home care doctors all in movies from the 1940s. This doctor character corresponds to family doctor who is called to home and makes his/her examination at home. In movies made after 1980's, doctors portrays who work in hospitals are mostly used. Unfortunately there is an unintentional humor in most of the films. Actually the average viewer misses these humor. Doctors in movies have the abilities such as a doctor diagnosing serious diseases only by seeing a X ray film. Humour exists also in their equipments such as a doctor can be seen with his/her stetoscope while making an operation.

#### AR05.03

## Observational Study about Doctors Ability in Handling Cases in Alor District, East Nusa Tenggara Indonesia

W. Istiono, A. Mukti, L. Trisnantoro, S. Sastrowijoto, F. Ekawati; Gadjah Mada University, Yogyakarta, Indonesia.

### Background:

The primary care physician is one of the major health care providers in Indonesia. The ability of country primary health care physicians is governed by the Indonesian Medical Competency Standards (SKDI). By default, the ability of physicians is expected to meet the needs of public health services both at the primary, secondary and tertiary to overcome the health problems in the country. Alor regency is one of the regency in East Nusa Tenggara Province is quite remote area. Health services in the district is relatively below than other areas in Indonesia. Therefore the study and specific interventions to improve the ability of physicians in this area is very important to be learned. Purpose:

to know and improve quality of care in Alor and provide stakeholder input to enhance the policies and better services.

Methods:

This study is an observational study about the comprehensive capabilities of primary care physicians in the district of Alor with SKDI and PCAT questionnaires compared with with the existence of cases, the support means and policies. Interviews were conducted to stakeholders about the services provided in the handling of cases with limited access to referral. Development of research will also be done with the intervention of training on clinical skills are still below the expectations of stakeholders. Results:

The ability of the average ability of physicians in Alor regency is still under Standard SKDI, but the average rating of good service provided by the community. The interviews with physicians and

stakeholders stated that the conditions of health care still needs to be developed. The biggest obstacle is geography, the ability of physicians that still needs to be improved and the lack of support from relevant local government in health policy. Third I would be glad to hear some of your survival tips / skills to live a healthy life as a gp / family doctor.

Note: these "guerilla tactics" should not be taught in the universities, medical schools, medical training programs.

#### AR05.04

## How to be woman, mother and physician and not to die in the attempt

S. Fuentes<sup>1</sup>, M. Gallardo<sup>2</sup>, M. Jimenez<sup>3</sup>, M. Domingo<sup>4</sup>, A. Mena<sup>5</sup>;

<sup>1</sup>Cap Santa Rosa, Santa Coloma de Gramenet (Barcelona), Spain,

<sup>2</sup>Cap Jaume Soler, Cornellà (Barcelona), Spain,

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Flor, Barcelona, Spain,

<sup>4</sup>Cap Sant Roc, Badalona (Barcelona),

Spain,

<sup>5</sup>Cap Maragall, Barcelona, Spain.

OBJECTIVES: To evaluate the daily difficulties that many family physicians live in an attempt to reconcile work and family life, especially those with afternoon shifts.

DESCRIPTION OF EXPERIENCE: With the increasing feminization of medicine, many physicians, most of them young women with small children (or that wish to have them) access to new jobs with afternoon shift. As many working mothers, most of us assume the traditional allocation of gender roles, the children care and the housework. The afternoon shift is a challenge to organize family life, generates psychological stress and also economic costs if, unable to take care of children, caregivers should be hired.

MATERIAL AND METHODS: We administered questionnaires to physicians in primary care centers, that include personal data, work and family conciliation items and Maslach Burnout Inventory (MBI). We cross differents data from the questionnaires specially focus on gender differences. The results were presented to teams and requested a "brainstorming" to generate proposals for improvement.

CONCLUSIONS A high percentage of professionals expressed difficulties for work family conciliation. Women with little children were the group most affected. The main purpose of the brainstorming was the flexibility of shift work

APPLICABILITY: We believe it is possible to adapt the shifts work of family physicians to promote work and family conciliation without prejudice the care of patients, especially in self-managed primary care centers

#### AR05.05

#### Guerilla tactics for gps / family doctors

#### U. Busch,

Med. Univ. of Vienna, Lengenfeld, Austria.

Guerrilla Tactics for Gp's

Aims & Backgrounds

All is fair in love and war. Listening to Stevie Wonders Song, sometimes a Gp / Family doctor experiences the end of the line of undergraduate, graduate and postgraduate training in real life situations. What is useful then? Gp's / family doctors have to face a very challenging life in the mined terrain of deadly diseases, facing human destiny, conflicting priorities of being a good doctor and to be human in very different geopolitical and health care settings

How do Gps/ family doctors survive in different landscapes, different health care systems and keep on performing the art & science of general practice every day?

I wan't to discuss your individual challenges, your approaches, the hostile conditions of your daily professional life as a gp / family doctor in your country, your office first.

Then I wan't to offer you some unusual "guerilla" techniques to overcome your daily challenges

- 1. Dog training / Dog watching -school of species appropriate body language
- 2. Taking a picture school of seeing
- 3. Haute cuisine school of senses
- 4. Dance lessons- school of humor

## AR.06 - Art 6

#### AR06.01

## Individual biopsychosocial approach of fibromyalgia

#### P. Tabouring;

Université du Luxembourg, Luxembourg, Luxembourg.

Fibromyalgia (or DIPS-diffused idiopathic polyalgic syndrom) is particulary often met in GP. Its individualized care is in the area of competence of the GP. The hypothesis of a functional pathology of chronic physical exhaustion is confirmed by certain biological marks which can be present in other exhausting pathologies (burnout, chronic fatigue syndrom and overtraining)

Aims

•to evaluate the diagnosis by means of validated biological parameters

to trace generating and maintaining factors of physical exhaustion in the patient's biography

•to recognize the unfavourable effects of environment in the exhausted patient's life experiences

•to help efficaciously the patient suffering by fibromyalgia by means of a proven and individually adapted biopsychosocial model Method

Systematic application of the adapted biopsychosocial model as soon as fibromyalgia is suspected

#### Results

Going out from the validation of the diagnostic hypothesis by the biopsychological pattern, the application of the context adapted biopsychosocial model makes it possible to attain good to excellent results in the totality of cases.

The results are confronted to the regular failures before the adoption of the individualized biopsychosocial model.

### Conclusions

Since the arising of biological functional parameters of physical exhaustion, the use of an adapted psychosocial care and of appropriate medications for established biological deficiencies makes it possible to reach good to excellent therapeutic results in fibromyalgia. The observation of biological parameters during the treatment moreover facilitates the follow-up of these patients at medium - or long - term.

Going out from the tale of the continuous exhausting physical suffering story, the individual psychotherapeutic care aims at lifting and restoring the patient by accompagnying him in the contruction of a new self-image according to his potentialities.

### AR06.02

Four General Practitioners in charge of a specialized nursing home for people with dementia: How we changed in 6 months the medications through Start and Stopp criteria applied

## J. Leners;

ALA, Ettelbruck, Luxembourg.

Since three years , a specialized nursing home , as a unique model in Luxembourg, has been established by the national Alzheimer association. The medical team taking care of 140 residents are 4 GP all involved in daily medical practice outside of the nursing home. The doctors are doing weekly visits on the wards and have a system of "on duty" each fourth week for 7 consecutive or successive days. Specific medical recommendations have been formulated for this aged population (mean age : 78 y) and guidelines for medications on request have been initiated.

But the most challenging work was to apply the recently publicized criteria , called : Stopp and Start criteria. As they have been formulated for an elderly population, we thought our residents might well be included. We had a mean of 6,7 drugs prescribed before starting to check every prescriptions in order to see which one could be stopped, which one should be added.

We came out after 4 months with a new mean of 4,3 drugs per residents and no challenging behavior changes in this most vulnerable elderly population. A systematic review over time is necessary in order to keep the medications up-dated to every changing health situation.

### AR06.03 Quality of life

**N. Turfaner**, A. Erdoğdu, F. Sipahioglu; Istanbul University, Istanbul, Turkey.

Quality of life reflects the gap between the hopes and expectations of a person and their present experience. It is the degree to which a person enjoys the important possibilities of his/her life. Possibilities result from the opportunities and limitations each person has in his/her life and reflect the interaction of personal and environmental factors. The best way of approaching quality of life measurement is to measure the extent to which people's 'happiness requirements' are met; those requirements which are a necessary, although not sufficient, condition of anyone's happiness, without which no member of the human race can be happy.

Three major life domains are identified: Being, Belonging and Becoming

The **Being** domain includes the basic aspects of 'who one is' and has three subdomains. Physical Being includes aspects of physical health, personal hygiene, nutrition, exercise, grooming, clothing, and physical appearance. Psychological Being includes the person's psychological health and adjustment, cognitions, feelings, and evaluations concerning the self-control. Spiritual Being reflects personal values, personal standards of conduct, and spiritual beliefs which may or may not be associated with organized religions.

Belonging includes the person's fit with his/her environments and also has three sub-domains. Physical belonging is defined as the connections the person has with his/her physical environments such as home, workplace, neighbourhood, school and community. Social Belonging includes links with social environments and includes the sense of acceptance bv intimate others,family,friends,co-workers,and neighbourhood community. Community Belonging represents access to resources normally available to community members, such as adequate income, health and social services, employment, educational and recreational programs, and community activities.

Becoming refers to the purposeful activities carried out to achieve personal goals,hopes and wishes. Practical Becoming describes day-to-day actions such as domestic activities, payed work,school or volunteer activities,and seeing to health or social needs. Leisure Becoming includes activities that promote relaxation and stress reduction. These include card games, neighbourhood walks,and family visits,or longer duration activities such as vacations or holidays. Growth Becoming activities promote the improvement or maintenance of knowledge and skills.

	Being-Belonging-Becoming					
B E	Physical Being	Being physically able to get around.  My nutrition and the food I eat.				
I N	Psychological Being	Being free of worry and stress. The mood I am usually in.				
G	Spiritual Being	Having hope for the future.  My own ideas of right and wrong.				
B E	Physical Belonging	The house I live in. The neighborhood I live in.				
L O N	Social Belonging	Being close to people in my family. Having a spouse or special person.				
G I N G	Community Belonging	Being able to get professional services (medical,social,etc.) Having enough money.				
B E	Practical Becoming	Doing things around my house. Working at a job or going to school.				
С О М	Leisure Becoming	Outdoor activities (walks,cycling,etc.) Indoor activities (TV,cycling,etc.)				
I N G	Growth Becoming	Improving my physical health and fitness. Being able to cope with changes in my life.				

#### AR06.04

#### Not listening to patients' claims always takes its toll

P. Alfonso<sup>1</sup>, **M. de la Torre-Carpente**<sup>2</sup>, M. Fernandez-Alonso<sup>1</sup>, S. Sánchez-Ramon<sup>3</sup>, A. Ferrer<sup>1</sup>, A. Gómez-Arranz<sup>1</sup>, A. de la Cal-de la Fuente<sup>1</sup>, E. Guillem<sup>4</sup>, L. Zapata<sup>5</sup>, M. Rollán-Gómez<sup>6</sup>; <sup>1</sup>Centro de Salud Casa del Barco, Valladolid, Spain, <sup>2</sup>Hospital del Rio Hortega . Servicio Cardiologia, Valladolid, Spain, <sup>3</sup>Hospital del Rio Hortega (Servicio de Urgencias), Valladolid, Spain, <sup>4</sup>Hospital del Rio Hortega (Servicio de Cardiologia), Valladolid, Spain, <sup>5</sup>Hospital Campo Grande, Valladolid, Spain, <sup>6</sup>Hospital del Rio Hortega, Valladolid, Spain.

Palpitations are a frequent symptom, most of the times happening in brief repetitive bouts. A definite diagnosis is not always possible and this fact can become intolerable for some patients

We show to your attention the case of a male patient aged 55 years, suffering stress at work, no other diseases or treatments. He had a history of brief, fast, repetitive palpitations and he had been referred to a private cardiologist. An echocardiogram ruled out structural heart disease but he was diagnosed of intranodal tachycardia and he underwent a successful ablation procedure.

A couple of weeks later, he went to his primary care center due to the same sensations he had before the ablation procedure. He said he had not feel any improvement since the start of the treatment. The following weeks he was attended several days in the primary care center by different family physicians. Every time he received care in the health care facility an electrocardiogram (EKG) was done without any abnormal findings and so his symptoms were regarded as resulting from stress.

Finally, as no diagnosis was reached, the patient decided to buy an EKG machine. Next time he felt palpitations he underwent an EKG by himself and brought the register to his primary care physician. On seeing the EKG, an auricular fibrillation diagnosis was done.

We want to point out several issues of this case. First, the difficulty of diagnosing palpitations, even though the patient had several episodes neither of them rendered a positive EKG. Second, it is vital to always listen to patient claims, especially when repetitive and before "labeling" the case as a functional one, rule out organic disorder. Third, if palpitations are attributed to psychosomatic diseases, it is necessary for the patient to fulfill the diagnostic criteria. Finally, do not forget that cardiac arrhythmias and psychosomatic diseases can be present at the same time.

#### AR06.05

## When a Word is not enough - the problem of Infertility in General Practice

**L. Constantino**, L. Santiago, P. Miranda, P. Botas, C. Matias, M. Neto:

Eiras Health Centre, Coimbra, Portugal.

In General Practice the problem of infertility within the couple is approached in a longitudinal, systemic approach to address doubts, diagnostic strategies and planning decisions. Access of the Family Physician (FP/GP) to relevant clinical data gathered in Secondary Care may improve the outcome of counseling, adds value and consistency to the couple's decisions and may help decisions in subsidiary issues such as contraception.

Case description: A young Couple (woman aged 28 and man aged 31) is referenced in 2007 for secondary care due to infertility. A study conducted earlier documented male subfertility (had a daughter of a previous relationship after assisted reproductive care) and women with thalassemia minor and prior history of CIN II cervical cancer previously treated. After 5 years of infertility, family pressures (brothers to the wife already had children, including her twin brother) and personal consultations motivated by some depressive symptoms, the couple had trichorionic triamniotic transfer of three pregnancy after the embryos. FP/GP consultations were necessary to the couple discuss options and decisions and enhance the acceptance of decisions of both and move to a new phase of the nuclear family. After delivery and postpartum review, the woman remained determined not to make any contraception because of the couple's medical history. In 2011, after menstrual disorders, pregnancy is confirmed in the first trimestre becoming an unwanted pregnancy by the couple, prompting serious family conflicts. After abortion the womam returned to FP/GP consultation for counseling / therapeutic listening and chooses to initiate contraception.

Discussion: The information conveyed to an infertile couple may have to be focused longitudinally, even if a consultation was appointed by other main problem. It is critical for the couple to be aware of the possibilities and implications of their clinical condition and risks. Communication with MF represents an added value in similar situations for their accessibility, availability, knowledge of the history and scope of clinical therapy.

#### AR06.06

The importance of comunication between Health Professionals - a case report

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<sup>1</sup>ACES Cova da Beira, Fundão, Portugal, <sup>2</sup>FCS UBI, Covilhã, Portugal, <sup>3</sup>ULS Castelo Branco, Castelo Branco, Portugal.

Background: Throughout life it is frequently necessary to resort to various health professionals. When communication between the professionals fails, the patient is left with the responsibility of providing the clinical information, which is often misleading, incomplete or incorrect.

Case Description: 63-year old woman, Caucasian, married, housekeeper, with basic education. Nuclear family, middle-class on the adapted Graffar scale, stage VIII of the Duvall family life cycle, without other relevant information after family assessment.

The patient came to the Health Care Center due to a sudden onset ptosis of the right upper eyelid with blurred vision and ipsilateral deviation of the tongue, deviation of the labial commissure to the left and inability to contain saliva. She denied a history of trauma or any new drugs and was very anxious, fearing she might have had a "stroke". Physical examination revealed facial paresis on the right side, without other deficits. Bell's palsy was hypothesized. Past information revealed history of blepharospasm (2008); head CT normal; she was referred to a neurology consultation where she had a MRI (normal); she was later sent to a dystonia consult. In the meantime, no clinical information was made available by the Hospital's physicians. She was unaware of the diagnosis and the treatment being used (only mentioning to have been "stabbed with a syringe on the right side of her face", 3 days ago). Based on this information the probable diagnosis was changed to peripheral right facial palsy secondary to the effect of botulinum toxin treatment. The patient was reassured regarding her condition, informed about the possible side effects and artificial tears were prescribed. She

was referred to the ER to be evaluated by a neurologist and asked to bring her clinical information the next time she had a dystonia consult

Discussion: Communication is an essential aspect of health care: the information exchanged between the physician and the patient enables the integration of the latter in the therapeutic process, reduces their anxiety and increases their knowledge of the disease, treatment and possible adverse effects; communication between health professionals allows for teamwork and for a proper management of resources.

## **COUNTRY REPORTS**

## CR.01 - Country Reports 1

CR01.01

General Practice{Family Medicine) training in Nepal-An overview

S. Shrestha;

PAHS, Lalitpur, Nepal.

General Practice training in Nepal- an over view.

Shrestha SR

General Practitioner

Associate Professor, PAHS

Nepal is a land locked country of about 29 million population sandwiched between China and India, two most populated country of world. Most of Nepal consists of mountains, hills with a small strip of flat land in the south part of country.

Most of the health problems of country are similar with the health problems of developing countries. Ands many and health problems by indicators are worse but country is trying to improve these indications and got great success in last years. But it is still far from MDG goals.

Until around two decades, Nepal was totally dependent on doctor training in neighboring countries. At present Nepal has 15 medical college and totally self dependent on doctor production including post graduate training.

The first Post graduate residency training in Nepal was started in Family medicine(General Practice) in 1982 AD. It was started with the help of Canada and known and University of Calgary, Canada. In 1987 AD, training programme was modified with 33 months training in Nepal and 3 months in Malaysia. Later on all training was started to do in Nepal. And Training is done on following places: Tribhuban university hospital, Patan hospital, kanti hospital, Pokhara western Zonal hospital, Surkhet hospital, Okaldhunga hospital, Ilamhospital and Palpa Hospitals.

Since 1999 AD, six residents from India, Vellore started to get similar training from Tribhuban University,

At preset General Practice training is done from 3 institutions including Tribhuban University on completion of 3 years course and passing examinations, eligible for MD degree in General Practice

These graduates are working government, on government and private sectors of Nepal and giving their participation for the improvement of health sectors of Nepal.

### CR01.02

General Practice outside Ministry of Health in Nepal

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Postgraduate academic degree - Medical Doctorate in General Practice (MDGP) was started back in 1979 in order to support the health care system under the Ministry of Health (MoH). Right from the beginning, compliance from the employer side has been less

than expected. The ministry does not send the candidates for study. Furthermore, the graduates are not employed appropriately. The efforts of agencies like International Nepal Fellowship and Safe Motherhood Program in the past have failed. However, organizations like General Practitioners' Association of Nepal (GPAN) and Nick Simon Institute (NSI) are pursuing hard to support the government system in order to provide comprehensive health care to the needy people.

Currently, more than two thirds of MDGP graduates are outside the employment umbrella of the Ministry of Health. Those engaged outside the MoH can be classified under five broad headings:

- 1. Medical Colleges: Those employed under Tribhuvan University and B P Koirala Institute of Health Sciences are actively involved in postgraduate academic activities at the Department of General Practice & Emergency Medicine. Considering the national need, it is high time for medical colleges under Kathmandu University to start postgraduate program.
- 2. Non Governmental Organizations (NGOs): MDGP graduates are favored by action oriented national and international NGOs. Vacancies can be seen in national dailies very frequently. Furthermore, hospitals run by these organizations are involved in training MDGP residents.
- 3. Private sector: Private sector includes two different types of employment:
- a. Solo practice: Mostly fairly senior GPs are in this category.
- b. Private hospital employment: Some of the private hospitals have recognized GPs as specialist of comprehensive emergency care and/or general health check up.
- 4. Abroad: There is fairly wide scope for employment abroad.
- 5. Further study: Some of the graduates seem to be interested to pursue studies mainly in subjects like surgery, obstetrics gynaecology and emergency medicine.

Thus, the inefficiency of MoH to attract and absorb GPs has negative impact in healthcare system but at the same time has positive impact in the professional development by widening the horizon of employment and scope of work.

#### CR01.03

## Nardino program: the Puglia care model for chronic conditions

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<sup>1</sup>ASSIMEFAC, Lecce, Italy, <sup>2</sup>ASL Lecce, Lecce, Italy, <sup>3</sup>ARES Puglia, Bari, Italy.

#### Aim and background

Based on the experience of the feasibility study Leonardo Project, Health Authorities of Puglia Region (Italy) planned to extend the model of care for chronic conditions into the setting of General Practice and Primary Care.

In 2011 18 small hospitals have been closed down in the Region, because of inappropriateness of admission and increasing costs, and primary care had to be strengthened to positively give an answer to the needs of care.

The Nardino Program is aimed to improve the care team integration and to disseminate an approach oriented to patients empowerment and self-management education, according to the Chronic Care Model.

Material and methods

Nurses / Care Managers (CMs) have been included into general practices, or primary care districts, fostering a team-based approach involving CMs, General Practitioners and Specialists as integrated "partners" of the patient. The CMs had a suitable training aimed to coach and support patients in managing their chronic conditions.

Shared guidelines and clinical pathways have been adopted for diabetes, cardio-vascular diseases and high CVD risk, heart failure, and COPD

An individualized Care Plan is write down for each patient, based on guidelines and needs, expectations, social situation of patients. Some communication tools and a shared computerized case file have been adopted to promote integration among health professionals.

Results

41 nurses/Care Managers have been recruited and appropriately trained. Also a common one day training for GPs, Specialists, social workers and CMs was carried out. Many indicators have been stated to asses results and to perform a continuous quality improvement. We expect the same results of the Leonardo Project: increasing adherence to guidelines and to treatment, improving patients and health professionals satisfaction, better clinical outcome.

Conclusions

A patient-centred, team-based model of care in facing chronic conditions has demonstrated the feasibility, indicating relevance of multi professional integration, the strategic role of CMs in supporting patient and doctors, and the central role of general practice as appropriate setting to gain patient empowerment.

Health Authorities of Puglia Region are implementing the care model in the whole region starting from Health Districts where some small hospitals have been closed down.

#### CR01.04

## Proposal of Health Promotion and Production Model on Large Scale (HPPM)

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From the first definition of the concept of health "complete physical, mental and social well-being, and not the simple absence of the state of disease or illness" (the WHO 1948), in 1972 it was reached the concept of health as the result of a production process involving various factors: the previous period stock of health, access to the sanitary cures, exposure to environment factors and adoption of healthy attitudes. The health is a perishable store and its protection involves productive investments. The interaction between social forces, directed to the health production, is the strategy identified in the present model. The project, which aim is the adoption of healthy styles of life, health production on wide scale and improvement of the well-being, it will be implemented in 5 years on the territory of the provincial LHA of Foggia (680,000 inhabitants).

STRUCTURE OF THE PROJECT

- 1: definition of the experimental project. Location of territorial net and citizens involvement of every age and social segment.
- 2: structuring of the experimental project. Material preparation for the operators.
- 3: survey of previous experiences of territorial schools and istitutions. Detection of the actions to the promotion of health, already done by the several istitutions involved.
- 4: performance of the project. Starting of the plan, activation of the territorial network, operators training.
- 5: step by step and final monitoring . Intermediate and outcoming indicators of the process.
- 6: communication activities. Meeting, conferences, multimedia and papery propaganda.

ACTORS "HEALTH PRODUCERS"

Citizen, Physical Education system , Nutrition system, Social and Therapeutic system, Specific Bio-development, Small towns system, Communication system.

"THE MPPS PROJECT"

Beforehand authorization of the Councillorship to the policies of the Health of the Puglia Region, they draw up an agreement protocol between the participants to the realization of the project. Puglia region: economic and political support.

Province of Foggia: economic and social management of the project.

Prefecture of Foggia: facilitation of the activities.

Provincial Education Office: teacher training, students and families involvement

LHA: project performance and management, operators training (doctors, administrative staff)

Municipalities: application of directives network "healthy cities", management of the territorial social forces.

#### CR01.05

## The Albanian Health System - FD/GP and Primary Health Care in regulatory, organizational and managerial level

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Albanian Health System

- Health System is mainly public, developing towards a Bismarckian system of Health Insurance Fund.
- The Government is the leading provider of health care services, health promotion, prevention, diagnosis and treatment of diseases.
- Ministry of Health (MoH) is leading the development, health policy planning and implementation of health strategies.
- Private sector, which is still under development, covers most of the pharmaceutical and dental services.

Organization

Health care mission: "Health for all".

Primary Health Care (PHC) represents the first point of contact with health services, giving high priority to sanitation and epidemiological situation of the population and its needs for health services.

Basic package of PHC.

Health Insurance Institute (HII)

When is HII created, on which legal basis, how is financed and what services covers.

HII is the only purchaser of health services.

Health Center

 $\operatorname{HC}$  legal status and mission, its medical and support staff and services offered.

Characteristics of GP/FD

How are GP/FD paid?

Financing of Health System

How is the albanian Health System financed:

(Hierarchically contributory)

- Private payments (out-of-pocket);
- State payments;
- Contributions for health insurance,
- Local government;

Financing of Primary Health Care

What HII finances, what is the investment of MoH and Local Government?

Issues related to the current state of primary care services

- Inequalities in the coverage of services in different areas of the country as a result of :
- · Poor quality of the services perceived by the population
- · Continuing education of medical and non-medical staff
- The high percentage of out of pocket payments.

Conclusions

Continuing and speeding up the process of decentralization of political power to regions in term of primary care.

A process of privatization of Primary care at the level of Family doctor, outpatient specialist would be a great promoter of decentralization of primary system

Privatization process of Primary Care would:

- Significantly lower the financial burden of the state
- Decrease the level of «under the table payments»
- · Strengthen the system of accreditation

#### CR01.06

Contribution to family medicine development in Albania through undergraduate, postgraduate and continuing medical education activities

#### E. Turkeshi

ABC Health Foundation, Tirana, Albania.

Aim: Major reforms have been implemented in primary healthcare in Albania. However many barriers to Family Medicine development are yet to be overcome. Several professional nongovernmental organizations (NGO) have contributed in Family Medicine development in Albania. This study presents the evaluation of the contribution of one NGO in Family Medicine development in Albania through its educational programs.

Methods: Annual introductory training in Family Medicine for final year medical students, internship program in Family Medicine and national conference of Family Medicine for practicing physicians, organized by an Albanian NGO since 2003 have aimed the promotion and development of Family Medicine in Albania. These programs have been evaluated through evaluation forms, focus groups and personal interviews with participants and major stakeholders.

Results: Awareness of Family Medicine as a specialty and its broad scope of services has increased in undergraduate and postgraduate levels. Around 10-20% of each final year class of the Faculty of Medicine, University of Tirana have been introduced to Family Medicine. Ten medical graduates have gone through the internship program and three of them have continued the 2 year specialization program in Family Medicine of the Faculty of Medicine. A growing number of general/family physicians (130-150) are participating in the yearly CME conference and equipped to improve their services to patients all over Albania.

Conclusion: Development of Family Medicine as a specialty in Albania needs to include interventions in undergraduate, postgraduate and CME levels. The growing Family Medicine education activities provided by NGOs need to be integrated with and endorsed by official medical education programs. They are crucial to raising awareness for and supporting the ongoing conceptual and structural changes of the medical system in Albania that enable the practice of the broad scope of Family Medicine and its recognition as a medical specialty.

#### CR01.07

#### New trends in the providing of Occupational Health Services

#### D. Bezáková:

General practitioner, Prievidza, Slovakia.

#### A:Introduction

The health care system in Slovakia has undregone tremendous changes during the last fifteen years. Changes in the status of doctors, changes in the financing of health care and socioeconomical changes as well have had strong influence at the relations between certain components of the health care system. The unwanted consequence of that was weakening of the doctors' fellowship, loss of the credit of medical professionals in the eyes of patients, weakening the trust at the patient-doctor relationship and subsequent overusing of medical services, which however had none desirable results in the field of professional harm reduction.

Since August 2006, the advent of Occupational Health Services introduced new rules to the "Game of Health". Five-year experience of BOZPO, s.r.o. is reflected in the creation of a new model of cooperation between two important components of health at work - Safety technical services and the OHS, which aims to provide comprehensive services and give clients the benefits of these significant areas.

B:Aims

The aim is to present the efforts of BOZPO,s.r.o. in introducing new elements into the providing of comprehensive health services at work. An important aspect is to create communication channels between the Safety technical services specialists and OHS team members, design a draft model of information sharing between them and the possible creation of possibilities of joint education. A significant role belongs to improvement in communication between the OHS team and other cooperating doctors about their vision regarding the care of the patient at work and the improvement in providing OHS.

C: Methods

As appropriate ways of realizing these aims the company BOZPO considers for example organizing regular meetings of occupational safety technicians and the OHS specialists, introduction of a common database of information about the client, inviting of external experts and trainers and discussing problematical issues and model cases with their participation.

In cooperation with physicians, introduction of the use of questionnaires and sharing of their results through workshops, organization of joint meetings and trainings regarding for example: changes in the legislation, specific client requirements, compliance with

BOZPO, s.r.o. workstandards.

#### CR01.08

## Family Medicine and State Health Care System:between the obligation and reality

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Aim:To determine the position of Family Medicine in Health Care Centers in Bosnia and Herzegovina considering the State Health Care System in term of obligation and reality signed by Health Low

Method:Ten Family Medicine teams in ten different Primary Health Care Centers fullfilled the questionare form based on State Health Care Model in order to see what is the level of organisation of Primary Health care Centers and position of family medicine teams inside them.

Results:Around 60% of services in Primary Health Care centers are provided by Family Medicine Teams.The rest of eleven Primary Health Care organisational parts make less then one family medicine service

Conclusion:Primary Health Care centers are based on Family medicine teams.But the salaries are the same.

#### CR01.09

## Ongoing mumps outbreak in Republic of Srpska (BiH) - challenges faced by family doctors

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INTRODUCTION AND AIM: Immunisation against mumps was introduced in Bosnia and Herzegovina in 1980 in a form of 2 doses of measles, mumps and rubella combined vaccine. The aim of this paper is to determine what are the challenges faced by family doctors in the Republic of Srpska (RS) during the outbreaks of vaccinable diseases, with focus on ongoing mumps outbreak.

METHOD AND MATERIAL: Descriptive analyses of data - infectious diseases notifications - obtained from the Public Health Institute of RS (PHI) and Epidemiological Service of the Health Center in Bijeljina. Epidemiological surveillance of communicable diseases in the RS is regulated by the Law on Protection of Population from Infectious Diseases.

RESULTS: In June 2011 mumps outbreak started in RS, and according to data available until 29 February 2012th a total of 3.704 cases of mumps were reported to PHI. Highest percentages (99%) of notifications were obtained from family doctors. Majority of notified cases were from East Sarajevo 1.453 (39.2%) and Trebinje region 1.163 (31.3%). Age distribution: under 5 (0.5%), 6-10 (6.3%), 11-15 (3.1%), 16-20 (54.5%), 21 and over (25.6%). Vaccination status: unknown 48.2%, unvaccinated 18.1% incompletely vaccinated 16.8% and completely vaccinated 21.9%. Unfortunately, virological and serological surveys were not carried out.

CONCLUSION: One of the main difficulties faced by family doctors is lack of case definitions for infectious conditions under public health surveillance. Additional aggravating factors are activities of anti - vaccinal movements that affect the parents aware of the need for vaccination of their children and quite limited laboratory services.

#### CR01.10

## Ten years of the Spanish Health Care Service (SHCS) decentralization model

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In 2001 SHCS decentralization process to the Autonomous Regional Governments finished. Since then SHCS is a set of 17 regions and 2 cities systems.

Regional decentralization of national competencies on health, education, justice and so on, had the aim to improve services to citizens and efficiency.

Primary Care (PC) crucial elements are still in all Regional Services (RS): salaried professionals, teamwork in health centres with a given population, and management by objectives. Patients have universal coverage, free of charge at the point of care, charge in drugs: free for retired and 40% for the rest. **Objective**: SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the model on citizens, professionals, financing. **Results**: **Citizens**: (S): increase of services covered and accessibility in each RS; (W): lack of consciousness of costs and overuse of services, difficulties to be treated in other RS; (O): Integration between Hospital and Primary Care, reduction on waiting lists; (T): Increase direct co-payment, inequities among regions, reduction on portfolio covered services.

**Professionals**: (S): civil servants, availability of electronic clinical history in each RS, increase of TIC; (W): overuse of technologies without costs restrictions, search for other professionals revenues: out of hours, on call at hospitals, waiting lists...; (O): Clinical governance and new management formulas, professional promotion by merit; (T): increasing number of patients per GP, 10% reduction on professional's salaries.

Financing: (S): freedom on investment according to RS plan; (W): failure to budget in RS; increase of managers costs n RS. Gaps on regional investment per patient from 1003 € to 1563 €, lack of compensation to cross-border health care issues, lack efficiency concerning high specialization services in small regions (neurosurgery, transplantation programs, thoracic surgery...) Non professionals managers (politicians); (O): to control direct expenses, synergies among regions in decreasing pharmaceutical budget; (T): delayed payment to third enterprises, Regional Political biased decisions instead of technical decisions, new Private Provision Services are more expensive than public model in the long-term.

**Conclusions**: Threats of economic sustainability of RS. Future tasks: consider patient co-payment, other professional work contracts and technology usage restrictions. Are there any other possibilities to maintain our RS?.

#### CR01.11

"The degree of control of vascular risk factors in type 2 diabetes in an Andalusian rural health center."

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Purpose of study: diagnosis and control of vascular risk factors (VRF) is especially important in patients with type 2 (DM2) to reduce the events, which is the leading cause of mortality in this population.

The aim of our study was to assess the degree of control of different cardiovascular risk factors in T2DM patients enrolled in a family medicine clinic of a rural health center.

Design: Cross sectional study.

Methods: We analyzed the unique health history, computer program recorded in primary care consultations, 75 patients among 133 diabetic patients were included. The data analysis was performed with the SPSS statistical package.

Results: Of the patients included, 48% were men with a mean age of 70.9  $\pm$  9.9 years. 40% of cases had a BMI  $\geq$  30 and 20% of them had a BMI <25. The average weight was 74.8  $\pm$  13.8kg. 30% were smokers. The systolic and diastolic BP controlled was found in 68% and 87% of the sample. Only 68% of patients had both controlled. HbA1c was <7 in 50% of cases with a mean of 7.39  $\pm$ 

1.38%. We found an optimal control of 51% total cholesterol, LDLc 49%, HDL-c 65% and triglycerides 72%. 32% had a total lipid control. 71% of patients were high risk. 10.7% of patients achieved the target.

Conclusions: Although there is a tendency to a better degree of control of cardiovascular risk factors in this population, we are still far from achieving optimal control of vascular risk in patients with

#### CR01.12

"Therapeutic efficacy on the control of vascular risk factors in type 2 diabetic patients in a rural health center."

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Objective: To assess the degree of control of different VRF and pharmacological profile in T2DM patients enrolled in a family medicine clinic of a rural health center.

Methods: A Cross sectional-study. We analyzed the unique health history, computer program recorded in primary care consultations of 133 patients were included in the process of diabetes. 75 subjects were included. The data analysis was performed with the SPSS statistical package.

Results: Of the patients included, 48% were men with a mean age of 70.9  $\pm$  9.9 years. 40% of cases had BMI  $\geq$  30 and 20% of them had a BMI <25. 30% were smokers. The systolic and diastolic BP controlled was found in 68% and 87% of the sample. HbA1c was <7 in 50% of cases. The prevalence of dyslipidemia was 52%. Of these, 18.7% had coronary disease, stroke 6.7% and 2.7% peripheral arteriopathy. 70.6% of our patients antihypertensive drugs (average of 1.6 per day). Antihypertensive consumption was: 33.3% ACE inhibitors, 32% ARBs, 26.7% thiazides, 22.7% calcium antagonists, 17.3% beta blockers and 16% diuretics loop. 17.3% of patients controlled their diabetes with diet and exercisealone and 82.7% with oral antidiabetic drugs with an average of 1.2drugs per day, being most commonly used drug

Conclusions: Our patients with diabetes are at high vascular risk and need a change of drug therapy to achieve better control of VRF and in particular on lipid-lowering and antidiabetic.

### **CR01 13 Ukrainian Health Care System**

#### S. Khanenko:

Independent expert in health care system, KYIV, Ukraine.

Problem - PERMANENT DEMOGRAPHIC CRISIS.

Ukraine - the biggest European country with square 603,628 km2. High corruption index (Transparency international) - the 14th place among 19 countrees of Eastern Europe and Central Asia.

DEMOGRAPHIC TREND

Population of Ukraine decreased from 52 million people in 1991 to 46 million in 2008 (6 million people, 11,5%).

UN forcast - till 2050 population of Ukraine will decrease by 40%.

Birth rate - 10,2/1000 (one of the lowest in the World).

Mortality rate - 16,2/1000 (one of the highest in Europe).

High mortality among men of working age.

HEALTH STATUS OF UKRAINE POPULATION

Main problem - chronic diseases, start of diseases in young age. Non-infectious and chronic diseases - the main cause of mortality among men of working age.

Infectios diseases morbidity - the highest in Europe.

High HIV/AIDS and tuberculosis morbidity.

HIV/AIDS and tuberculosis are the causes of mortality in 90% of infectios diseases mortality cases.

UKRAINIAN HEALTH CARE SYSTEM

No general medical insurance.

Less than 1% of population has health insurance.

93% of health care institutions represent public sector.

7% - private sector. Half of them are occupied in dental sector, the second place - laboratory tests.

Few unsuccessful try to reform Semashko system in public sector. Concentration on episodic diseases treatment.

Low attention to prevention and primary health care.

Public health care system is very centralized (vertical system headed by Ministry of Health Care) and decentralized in the same time (gap between program and budget authority). Main actors:

- 1. Public sector health bureaucracy actors. Have the main influence and are central to govern the system.
- 2. Heath service providers. Very dependent from health bureaucracy actors.
- 3. Health care consumers and general public. Not many effective influence tools. Low initiative to act.
- 4. Payers insurance companies, employers (some provide periodic medical inspections to employees, are free to choose
- 5. Pharma, medical products and equipment producers and sellers (often corruption influence).

#### FINANCING

Public sector - state and local budgets (1 billion euro in 2011). Unofficial out of pocket payments - > 1 billion euro.

Private sectors (300 million euro) - out of pocket, insurance companies, employers.

#### CR01.14

The role of postgraduate education and scientific researches in reformation of primary care on principles of family medicine in Ukraine

G. Lysenko, V. Tkachenko;

National medical academy of postgraduate education, Kyiv,

Today in Ukraine the reformation of primary care on principles of family medicine is intensively conducted by state power with participation of Ukrainian association of family medicine and number of international projects.

The legislative documents, protocols and standards of care are prepared, the centers and out-patient's clinics of general practitioners are opened and the process is continued.

During last 15 years the system of pre- and postgraduate education is developing in Ukraine. The departments of family medicine were founded at medical universities and institutions of postgraduate education, the forms and methods of education are in improving with use of distance teaching and modern computer technologies.

The first Institute of family medicine was created at National medical academy of postgraduate education in 2009. The main aims of Institution are the providing of continuous professional education of family doctors, the coordination of scientific researches and participation in monitoring of family medicine' introduction in Ukraine.

The important steps were the opening of new scientific specialty 'General practice - family medicine' in 2010 and the creation of special council for protection dissertations at NMAPO, that opens possibility for scientific career of general practitioners and for teachers.

The 3rd Congress of Ukrainian general practitioners was conducted in October of 2011 on which the perspective plan of development of family medicine was set.

## **CR.02 - Country Reports 2**

#### CR02.01

### Improving Care Services for Diabetic Patients in Turkey

A. Ozkara<sup>1</sup>, S. Guler<sup>2</sup>, I. Sencan<sup>3</sup>, **R. Kahveci<sup>3</sup>**, S. Com<sup>4</sup>, R. Akdag<sup>5</sup>:

<sup>1</sup>Ankara Numune Training and Research Hospital, Department of Family Medicine; The Turkish Prevention and Control Program for Diabetes, Committee member, Ankara, Turkey, <sup>2</sup>Ankara Numune Training and Research Hospital, Chair of Endocrinology; National Diabetes and Obesity Coordinator, Ankara, Turkey, <sup>3</sup>Ankara Numune Training and Research Hospital, Department of Family Medicine, Ankara, Turkey, <sup>4</sup>Basic Health Directorate, General Manager, MoH of Turkey, Ankara, Turkey, <sup>5</sup>The Minister of Health of Turkey, Ankara, Turkey.

Diabetes mellitus and its complications affect the patient's health status significantly. It causes negative effects on the life quality of the patient and patient's family. The prevalence of diabetes mellitus is quite high in Turkey. Turkish Diabetes Epidemiology Study found the prevalence of diabetes mellitus in Turkey as 13,7% among adults in 2010. As an action "The Turkish Diabetes Prevention and Control Program" (DIABTURK) is started under the leadership of The Ministry of Health, Republic of Turkey. This action plan identified five main objectives; 1. Prevention of diabetes

- 2. Effective treatment of diabetes and its complications.
- 3. Increasing the quality of life for patients with diabetes.
- 4. Control of childhood diabetes.

5. Strengthening the fields supporting management of diabetes Third objective (increasing the quality of life for patients with diabetes) has 3 targets: 1. Patients should have access to integrated health care which would be necessary for better management of diabetes. 2. Urban environmentral and collective living areas should be regulated in order to facilitate prevention and good management of diabetes 3. Care services (self care, home care etc) should be improved for diabetic patients. This presentation will focus on the 3rd target, "improving care services for individuals with diabetes (self-care, home care, etc.)". The task force for this target has put an activity plan. It is planned to increase diabetic care support rate to 50% in 5 years. Related educational and service support will be given. Diabetic patients will be educated for foot care. Home care services for diabetics will be expanded. Ministry of Health Communication Center (SABIM 184) phone line will be improved to respond to questions from diabetic citizens. The role of primary care physicians in this action is essential. In this presentation detailed activity plan of the program will be given, the role of primary care physicians in this program and the planned researches will be discussed.

#### CR02.02

## Challenges of Medical Practice in Suburban/Marginal Populations of Tehran Metropolis in Iran

#### E. Fayazzadeh;

Tehran University of Medical Sciences, Tehran, Iran, Islamic Republic of.

Junior physicians in Iran are often encountered with numerous problems, as it is not always quite feasible to apply the knowledge obtained from textbooks and clinical rotations to what they might actually face with in daily general practice in settings outside big cities. Many of these obstacles are due to false beliefs which root back to the culture and traditions of the community mainly consisted of families of labor-class people who have immigrated to Tehran from remote rural areas throughout the country in recent decades. The most considerable of these problems include: 1)Selftherapy with herbal medicines or referring primarily to local seniors when getting sick and hence attending doctors only when becoming severely ill; 2)Abundant and improper use of antibiotics and corticosteroids; 3)Lack of strict adherence to medical therapy for the treatment of bacterial diseases or long-term control of hypertension, diabetes, etc. and ignoring the importance of lifestyle modifications in these cases; 4)Illicit drug abuse; 5)Excessive tendency to traditional medicine such as cupping therapy and leeching with unproven/questionable benefits in the treatment of a wide variety of diseases including chronic pains, allergic diseases,

diabetes, hypertension, and drug addiction. There are also lots of limitations which may prevent physicians from properly providing health care to these classes of people: 1)The language burden; many patients who belong to various minority groups cannot communicate well in Persian; 2)Religious considerations; which don't allow proper examination of patients of opposite sex; 3)Widespread poverty and lack of health insurance coverage; thus many patients can very hardly afford the expenses of health care services and are not revisited for follow-up examinations; 4)High illiteracy rate and lack of proper public education; many patients are not aware of symptoms of important and life-threatening diseases, don't undergo routine check-up visits and have poor compliance to medical treatments. To conclude, for many young doctors in Iran, the real learning of medicine just begins after graduation. They should find unique solutions to countless cultural and socio-economic challenges and restrictions of practice in their society or they could never succeed in applying their knowledge and skills for efficient treatment of their patients.

#### CR02.03

## Efficacy of family medicine in public health improvement in rural area of Iran

M. Biglari<sup>1</sup>, F. Nazaripouya<sup>2</sup>, B. Borzouei<sup>3</sup>, T. Azizi Motlagh<sup>4</sup>, B. Ghazanfarzade<sup>4</sup>, M. Damaliamiri<sup>5</sup>, N. Fetri<sup>1</sup>, M. Majzoubi<sup>3</sup>; <sup>1</sup>Health Center Hamedan, Hamedan, Iran, Islamic Republic of, <sup>2</sup>Hamedan Province Health Center / Hamedan University of Medical Sciences, Hamedan, Iran, Islamic Republic of, <sup>3</sup>Hamedan University of Medical Sciences, hamedan, Iran, Islamic Republic of, <sup>4</sup>Hamedan Province Health Center / Hamedan University of Medical Sciences, hamedan, Iran, Islamic Republic of, <sup>5</sup>Bu-Ali Sina University, hamedan, Iran, Islamic Republic of.

Backgrounds: Iran is one of the most populous countries in the Middle East. In order to improve public health care, since 2005, Iran's Ministry of Health and Medical Education has started the family medicine program in rural areas and in 2006 this plan was organized in cities with population less than 20,000.

Objective: The aim of this study was to investigate the efficacy of family medicine in public health improvement in rural areas of Hamadan province in the west of Iran; 5 years after the onset of program.

Methods: We calculated prenatal mortality rate (PMR), neonatal mortality rate (NMR), infant mortality rate (IMR) and under-five mortality rate (U5MR) in 2004 and compared these indicators with PMR, NMR, IMR and U5MR in 2009.

Results: 5 years after the implementation of the family medicine program in rural areas; NMR was significantly decreased from 17.4 to 10.9 per 1,000 live births (P-value < 0.0005). A significant decrease was seen in IMR from 22.7 per 1,000 in 2004 to 14.8 per 1,000 live births in 2009 (P-value < 0.0005). U5MR was significantly decreased from 26.4 per 1,000 in 2004 to 17.5 per 1,000 in 2009 (P-value < 0.0005). Although in this period a reduction in PMR was seen , this reduction (from 10.9 per 1,000 to 9.4 per 1,000) wasn't statistically significant (P-value > 0.05).

Conclusions: The family medicine program has become highly organized and efficient in rural areas and cities with population less than 20,000 since 2005. 5 years after the onset of this plan, a dramatic decrease was seen in prenatal, neonatal, infant and under-five mortality rates. According to our findings, implementation of family medicine program may be one of the effective factors in public health improvement in rural areas of Iran.

### CR02.04

Teaching family medicine in a brand new medical school in Brazil.

#### L. N. Duro:

Universidade de Santa Cruz do Sul, Santa Cruz do Sul, Brazil.

Primary care has become a key on the improvement of the population health care quality worldwide. With that, inevitably the way medical school students have been receiving their formation is been discussed as well. This line of thought, passing by the Flexner report, has been fortified the moment Primary Care itself has been growing in importance in all countries. In Brazil this was no longer different. Since the promulgation of the new Constitution in 1988, when the new National Health Care System was created, changes in the concepts and attitudes of working on the public health are being made. The Family Health Program was created in 1994, with the concept of geographic territory of responsibility of a Health Care Facility, multiprofessional team workers, focus on primary care and the humanization of care. This program was so successful that it became a government strategy since the year of 2000, where this level of care would be prioritized. In order to better train the doctors that will work with public health in the future, the Santa Cruz do Sul University Medical School was created with important characteristics to become a better professional. Since the first months of class, the students are directed to a Family Health Care Unit, to work with the neighbor community. The students are stimulated to be responsible for a family of the neighborhood, with whom they will learn and work until the end of the six years of the medical course. Besides, they learn the idea of a "expanded clinic" (integral care of the person) and work together with the Health Care Team, in order to be trained inside the context of the National Health Care System, emphasizing the social determinants of diseases, team working, humanization of the care and all the important points of Primary Care.

#### CR02.05

Morbidity Pattern in the General Outpatient Department of a Suburban Tertiary Hospital in Nigeria.

**O. E. Kayode-Adedeji**, P. Imomoh, M. Odewale, C. Affusim, K. Ayanwun, A. Oyedeji, R. Folorunsho;

Irrua Specialist Teaching Hospital, Irrua, Nigeria.

Introduction: The General Outpatient Department (GOPD) is the major entry point of patients in a hospital and the spectrum of disease conditions seen in this unit reflects the disease pattern and burden in the community.

Objectives:

- 1. To determine the most prevalent diseases presenting at the Primary care Unit of the Hospital.
- 2. To identify the diseases of public health importance in the community, with a view to reducing the burden.
- To compare the pattern with those of other centres. Method:

A retrospective study over a one year period. Data was obtained from medical records unit of the GOPD.

Result: A total of 17, 591 consultations were made in the study period. The females were twice the number of males. The commonest diseases were Malaria(18.6%), Hypertension(17.2%), Dyspepsia(4.5%) Respiratory tract Infections(3.8%), Mental Illness(3.5%) and Low back pain(1.8%).

Discussion: The prevalence of Non- communicable diseases in this rural/Semi-urban setting, was considerably higher than communicable diseases, and females sought medical treatment more than males. The pattern observed is in tandem with findings in other centres in Nigeria and at variance with those in Europe, U.S.A and Asia.

Conclusion: There is a gradual shift from predominantly communicable diseases to non-communicable diseases; however the most prevalent communicable disease remains Malaria. There is need for patient education on life style modification, and improving the health seeking behaviors of the male population in this environ.

#### CR02.06

#### Trend of Immunization in Rural Nigeria

**O. E. Kayode-Adedeji**, B. O. Kayode-Adedeji; Irrua Specialist Teaching Hospital, Irrua, Nigeria.

Background: Immunization is one of the key child survival strategies globally and an important component of primary health care. Vaccine preventable diseases remain one of the major causes of illnesses and deaths among children in Nigeria. Even though the routine immunization coverage has improved since 2003, the national coverage is still one of the lowest in the

world. In 1990, Nigeria attained Universal Childhood Immunization (UCI) with 81.5% coverage for all antigens. But the success was not to last long, and by 1996, Immunization

coverage had declined substantially to less that 30% for DPT 3 and 21% for  $\,$ 

three doses of Oral Poliovirus Vaccines (OPV). This study reviews the Immunization uptake and completion rates at Irrua Specialist Teaching Hospital over a four year period, using BCG and Measles vaccines as milestones.

Objectives: 1.To determine the uptake of Immunization between 2007 and 2010  $\,$ 

2. To review the completion rate over the same period.

Method: Data was obtained from the Birth and Immunization registers at the Maternal and Child Health Centre of the Hospital. Results:

	BCG RATE (%)	MEASLES RATE (%)	COMPLETION RATE (%)
2007	93.3	37.6	40.3
2008	89.2	38.9	43.6
2009	81.7	33.7	41.2
2010	96.1	35.3	36.7

Discussion: While the BCG rate could be considered commendable over the period, the dropout rate has been unacceptably high. The implication of this is a huge burden of vaccine preventable diseases in the community. These figures from south-south region of Nigeria are higher than those from Northern region.

Conclusion: Concerted efforts have to be made to improve the national immunization coverage.

#### CR02.07

Knowledge, attitude and practice of Jordanian women aged 20 and above towards breast ancer: A ross-sectional Survey 2006

M. I. Tarawneh<sup>1</sup>, O. H. Alsmadi<sup>2</sup>;

<sup>1</sup>Jordan Royal Medical Services, Amman, Jordan, <sup>2</sup>Ministry of Health, Amman, Jordan.

Aim: To measure the level of knowledge of women  $\geq 20$  concerning: Breast Self Examination (BSE) and Clinical Breast Examination (CBE), the importance of early detection of BC, high risk group, important symptoms and early indications of BC, to determine the rate of Jordanian women practicing BSE and CBE, and the tendencies of women's willingness to: Learn and perform both BSE, CBE and to Undergo mammograms.

Method: Five thousand and two hundred thirty (5230) women were interviewed. A cross-sectional method using a special questionnaire during the period between 1st September to 30th November 2006. The sample was randomly selected from women aged 20 and above, who frequently visit Ministry of Health Centers in the 13 governorates, and women's organizations (Family Associations and Women Associations).

Results Simple descriptive statistics using means, median, percentage was used. Seventy one percent of the sample knew what a self breast examination is, and 92.9% realized the importance of this examination in the early detection of breast cancer. About 50% of the study group know the meaning of the clinical breast examination and perform it. Breast self examination among women aged 30 - 39 years was 40.7%.

Recommendations: To enforce the role of the health care workers to establish health education programs about the importance of the

early detection of breast cancer and producing health education materials in health enforcement and media role including the issue and the importance of early detection in the schools and universities curriculum.

efficient and effective way to generate demand for health services and to encourage utilization of PHC facilities in a quality manner and seizing opportunities for all age categories.

#### CR02.08

Hypertension in diabetic patients-A descriptive study at one primary health care center/Amman- Jordan

M. I. Tarawneh<sup>1</sup>, O. H. Alsmadi<sup>2</sup>;

<sup>1</sup>Jordan Royal Medical Services, Amman, Jordan, <sup>2</sup>Ministry of Health, Amman, Jordan.

A descriptive study, to identify the characteristics, complications, and treatment of the essential hypertension in the adult diabetic patients, at one primary Health care center. 163 hypertensive patients (28.7 %), out of five hundred and sixty eight adult diabetic patients, were targeted to this study. Using a questionnaire, during the patient regular follow-up, through the period of three months ( 1st / June- to 1st / September / 2009). Hypertension is defined according the WHO guidelines for diabetic patients. The results are as follows: male to female ratio 1/2, mean age  $58 \pm 2$  years, mean duration of hypertension 8 ± 6 years, mean systolic blood pressure 149 ± 24 mm/hg, mean diastolic blood pressure 86.8 ± 9.7 mm/hg, and the body mass index (BMI) 31.2 kg/m. Patients having isolated systolic blood pressure 140 mm/hg are 104 individuals, isolated diastolic blood pressure 90 mm/hg are 92 individuals. Family history of hypertension are in 26.4 % , smokers are 20.9 % . Complications are nephropathy (30 %) , cardiac diseases { myocardial ( 10.2 %) , angina (12 %) , and heart failure (16.6 %) } , retinopathy (18.2 %) , stroke (12.3 %) , and peripheral vascular diseases (4.8 %) . Preventive measures, public awareness, weight control, low salt diet, smoking cession, and regular treatment should be emphasized .

#### CR02.09

Implementing essential services packages (ESP) at primary health pare (PHC) centers in Jordan/ life cycle approach

O. H. Alsmadi<sup>1,2</sup>, M. Tarawneh<sup>3,2</sup>;

<sup>1</sup>Ministry of Health, Amman, Jordan, <sup>2</sup>Family Medicine Department, Amman, Jordan, <sup>3</sup>Jordan Royal Medical Services, Amman, Jordan.

Objective

Identify the importance of implementing ESP at Primary Health Care Centers based on age group

Background

Multiple factors significantly affect the utilization of services efficiently in Jordan such as lack of information on selective healthy behaviors and improve quality of service provision to be able to address missed opportunities. In order to overcome these challenges, Health systems Strengthening -USAID funded project developed a service package (ESP) that consist of a set of preventive and curative health care interventions meeting all age groups delivered as one entity or in subsets to improve health outcomes.

Design and Evaluation Methods

Clinical services for the PHC level were defined for each age category, a set of PHC clinical guidelines was developed, key clinician competencies were identified and training modules developed, these interventions integrated with promotional activities to improve awareness, promote healthy lifestyle, and increase demand.

Results/Outcome:

Selected PHC centers (40%) participated in the implementation of the ESP at PHC level, HSS focused on life cycle approach as an essential component in the planning and promotion of the ESP. Defining the ESP resources and involving Community in the promotion of ESP services was critical

Conclusions

Introducing ESP at the PHC level for each age category with full integration and efficient utilization of community resources is an

#### CR02.10

Country Reports: Indonesian Primary Health Care Conditions, How to Start the Family Medicine Implementation?

W. Istiono, F. Ekawati, M. Claramita, A. Sutomo; Gadjah Mada University, Yogyakarta, Indonesia.

Background

Indonesia is an archipelago country with 1992550 km2 square consist of more than 13.000 islands spread from Sabang in Aceh province until Merauke in Papua province. The condition in each island is different with the others, therefore with the health status. With more than 239.870.000 populations, high MMR and IMR rates, Indonesia faces a compicated problems to solve in health care systems. A new paradigm in primary health care practice, a family medicine approach, should be a significant input to think to improve the health status in Indonesia. However, there were still many complicated cases inhibit the development of this, even from the government. Therefore, we collect data to support the importance background and as an input of family medicine establishment in Indonesia.

Methods:

We collected the qualitative and quantitative data in Primary Health Care: the doctors ability, the Public Health Center management, and stakeholder perspective in several area in Indonesia: Gorontalo, Sleman, Riau Islands, and Alor East Nusa Tenggara.

Result:

We found that the doctors ability were below the Indonesian Doctors Competency Standards (SKDI) in average there were just 3-8/155 cases that could reach the standards. Many rural PHCs have no doctors, there were also many non-permanent (contract) doctors and there were poor implementation of government programs in primary health care settings. The stakeholder perspective wished that this condition should be improved soon in order to revitalize the primary health care status in Indonesia.

Discussion :

The primary care doctors in Indonesia had only 5+1 years education in medicine, and after they graduated from the university, the had the competency based-exam to achieve a licence to do their practice in primary health care. Basictly when the doctors had this licence from medical council in Indonesia, they were considered to solve the primary health care problems. But the facts were different. They were many complicated cases to discuss. Many contract doctors left their practice and seeking for a better life in the cities or continue their education in specialization due to minimal supports and there were no clear carrier paths in remote primary health care.

#### CR02.11

### The strategy for primary health care reform in Korea

B. S. Go<sup>1</sup>, Y. J. Choi<sup>2</sup>, K. W. Kim<sup>3</sup>, **K. H. Cho<sup>4</sup>**;

<sup>1</sup>Primary Clincs, Jeju, Korea, Republic of, <sup>2</sup>Hanlim University, Seoul, Korea, Republic of, <sup>3</sup>Sooul Back Hospital, Seoul, Korea, Republic of, <sup>4</sup>Yonsei University, Seoul, Korea, Republic of.

Purpose:

The purpose of this reports was to review of current status of primary health care and focuses how to strengthen primary care in Korea.

Method:

The experts spanned the panel discussion and completed data with Analysis of the medical care system in the world.

Result:

Except 9 percent of Family physician, Korea dose not have a strong community-based primary health care system with more than 90 percents of Medical specialist.

Dedicated healthcare professionals, new payment system and best practice model for strong primary care require in health care reform. System established about 7 years, with 2 year Preparing stage, and 5 year initiation and establishing stage. And then completed 10 years of the final system should be required.

#### Discussion:

Efforts to develop a workforce of primary healthcare professionals will be essential and financial support of a gradual improvement is needed. Encouraging a system-wide focus on improving the primary care should begin with changing the focus of governance from reimbursing medical services.

interesting question,if in different countries,in different cultures GP's tasks are variable,or if they are similar.in this workshop there will be a structure of questions and it will be up to the participants to find out,how important is is for them ,to reflect this questions.in the final part we could find a résumé that shows the common points of view,the clash of interests and that what we all want to be changed

# **OPEN SPACE**

#### OS.01

Europe has a financial problem: can we help?

# C. I. Steylaerts;

WONCA Europe, Diest, Belgium.

Introduction

Everybody is well aware of the financial crisis, since every channel of information (books, newspapers, TV, ···) is focused on it.

Normally, this is no subject for a scientific conference. Since it afflicts the lives of every patient, with consequences on the equity and care parameters, it deserves our attention.

Hypothesis .

We now have one "universal currency", money, that we know and handle as Eur, USD, yuan, etc.

There are several "complementary" currencies and even "complimentary" currencies: fureai kippu, saber, curitiba, to name a few interesting ones.

In the WONCA Europe Definition of General Practice / Family Medicine, one of the core competencies of our profession is "to be community oriented".

The hypothesis is "that handling 3 complementary currencies starting in our daily practice and our organisations will introduce community oriented care that was previously impossible or at least difficult to manage or imagine".

World Café

In almost every European country some form of handling complementary currencies is currently used.

We invite participants to engage in

- $\cdot$  introducing what happens in their country on the topic of complementary currency 5  $\min$
- $\cdot$  making a SWOT analysis of those known projects 10 min And then
- $\cdot$  to discuss the possibility of creating WONCA Miles to be used, pro's and con's 15 min
- how to use them and how not to use them 15 min

For instance

Instead of getting money for your work, you could get credits to be exchanged for a "dream". Or more prosaic, for entrance to a conference, a website,  $\cdots$  anything.

Conclusion

The WONCA Europe Honorary Treasurer is currently researching the possibilities of introducing a WONCA Coin. This World Café might be instrumental and / of decisive to start or end this pathway of caring for people.

#### OS.02

# GP's perspective of caring for demented patients in nursing homes

#### A. Wilhelm-Mitteräcker;

GP, Vienna, Austria.

In this workshop we should discuss the 5 following subjects :1.the relationship between patients,their relatives and the homeowner.2.the fulfillment side of the task.3.multimorbidity-selection of treatments.4.emotions of the patients.5.sexuality of the patients and the ones who are caring them.the challange of this workshop is to find out,how in different countries this points are reflected and how GP's concerns about the caring are accepted.there is the very

#### OS.03

## Advocacy in general medicine - Skills for everyday life

#### I. Divisch;

Austrian Medical Students` Association, Vienna, Austria.

"Medicine is a social science, and politics is nothing else but medicine on a large scale. Medicine, as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution: the politician, the practical anthropologist, must find the means for their actual solution." More than 100 years ago, Rudolf Virchow had the idea that doctors should not only confirm a diagnose and treat patients but also advocate for the public health issues they have to deal with. Working as general practitioners and performing primary care means to be as close to the patient as possible. This leads to a special insight to health-related problems of both individuals and the general public. The question of how to handle these troubles still remains to be answered. It is outside the reference as a doctor and people in charge often are not aware of these problems or are unwilling to make a change. Attending this workshop you will get to know ways of how you can make yourself heard.

Furthermore, doctors always have to advocate for health when they are working with patients. In industrial nations, where a serious number of people suffer from non-communicable diseases, we need a strong primary care system to deal with the controversy of this preventable harm. Advocacy and other soft skills in general medicine are a huge opportunity to have a direct impact on the behavior of patients that affect their health. If you want to discover these skills and acquire tools that are crucial for advocating in everyday life while working in general medicine, you should definitively join this workshop. Moreover, we will share our experiences, deliver ideas and think about concrete next steps everyone can take individually in future.

### OS.04

#### Footprints of person centered medicine

B. Panhofer<sup>1,2</sup>, B. Degn<sup>1,2</sup>

<sup>1</sup>ÖGAM, Vienna, Austria, <sup>2</sup>Medical University, Vienna, Austria.

Person centered medicine symbolizes a paradigm shift in the medical world.

The rich and empowering concept of personhood as well as the value of communication and narratives in medical healing could be overviewed. We can resume on the crucial framework of culture and spirituality. We can go in search of the in-between of the hard datas of evidence based medicine and the soft fields of empathy and relationship.

Aim: exchanging and reflecting the topics of the conference in order to follow new footprints and to cross borders.

Method: open space.

You are invited to describe your individual approach to the topic and to share it with colleagues. Speakers of the conference, who touched person centered medicine in their presentation are asked to get into discussions and reflections with participants.

#### OS.05

#### Meet the Vasco da Gama Movement

**S. Streit**, Executive Group of Vasco da Gama; University Hospital Bern, Bern, Switzerland.

#### Aim

Young and future GPs who participate at the WONCA Europe Conference have the possibility to meet each other and get in touch with the Vasco da Gama Movement

Vasco da Gama Movement is the organisation for young and future GPs. We will present ourselfes, provide informations about our activities and present our network.

Every participant of this workshop will understand who we are, what we do and why it's worth to be connected on a European level.

#### Conclusions

Results

Providing a network for young and future GPs ensures motivation for General Practice and helps each country finding young and motivated persons who will take care for Family Medicine in the future

# **WORLD CAFÉ**

# WOC.01 - Act Together - a call to action on family medicine in Europe

# WOC01

Act Together' - a call to action on family medicine in Europe

A. C. Howe, Clare Gerada, Amanda Howe, John Howard on behalf of RCGP International and Wonca Europe partners, **A. C. Howe**; RCGP, London, United Kingdom.

Family medicine has developed at a very variable pace across Europe. Its status and capacity are challenged in most health systems, and even in countries where it is strongly embedded it is still not seen as a popular career. There are many barriers which we must address to overcome these problems.

The 'Act together' project will bring to the World Café a summary of the evidence we have on why we need to strengthen family medicine, and some expert opinion on key factors for effective partnerships to help us build our capacity and status across Europe. A short presentation of these findings will lead into the learning conversations which (subject to our thought development between now and July!) are likely to focus on areas such as overcoming negative thinking by enablement: overcoming structural dispersion by the use of social media networking: and overcoming political disadvantage by effective lobbying. The outputs of the event will feed into the campaign over 2012-3, where key messages will be debated and fed back from Wonca member organisations. This will culminate in a 'Call for Action', which aims to ensure the development of family medicine is a priority for all health systems in Europe.

# WOC.02 - Helping Distressed Doctors in General Practice

#### WOC02

**Helping Distressed Doctors in General Practice** 

A. Rochfort<sup>1,2</sup>, J. Gensichen<sup>3</sup>, Z. Ozvacic<sup>4</sup>, EQuiP Wonca Europe Network, Professional Health Working Group;

<sup>1</sup>Irish College of General Practitioners, Dublin 2, Ireland, <sup>2</sup>Honorary Secretary EQuiP (European Association for Quality and Patient Safety in General Practice, Copenhagen, Denmark, <sup>3</sup>University of Jena, Jena, Germany, <sup>4</sup>University of Zagreb, Zagreb, Croatia.

Doctors are as human as their patients. It is inevitable that at some stage of a doctors career, from student days to retirement and beyond retirement, that they may have symptoms of possible illness, or experience physical or psychological distress. A doctor may need the assistance of a general practitioner / family doctor for any of the potential reasons other patients need the services of family medicine. Doctors may be distressed by life events, family issues, financial problems, grief and loss, addiction or illness. General Practitioners / Family Doctors may be consulted by any doctor for medical care. We need to be competent in managing health issues and to have a management plan in place for this specific patient group. This is a significant challenge for medical education.

After a brief introduction the participants will explore the issues of identifying doctors in distress, including dealing with the culture of denial of distress in medical doctors. During the interactive session, issues such as how best to approach a colleague in distress or difficulty will be explored and also how to manage such a colleague during a consultation.

Doctors as patients should expect to receive the same high quality, safe, and confidential patient care that is given to other (non medical) patients.

The conclusions of this session will be posted on the website of EQuiP, the European Association for Quality and Patient Safety in General Practice / Family Medicine, a Wonca Europe Network, in the section on the Professional Health Working Group <a href="https://www.equip.ch">www.equip.ch</a>.

# **POSTERS**

# P.01 - Children/Adolescents

#### P01.01

Dental Caries of Postwar Refugee Children Compared With Bosnian and Herzegovian Children

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**BACKGROUND**: Caries is a bacterial infection caused by specific bacteria. Changes in dietary patterns depending from economic family situation resulting from preventive guidance provided by local pediatricians or family doctors, dentists, or other health care providers could have limited our ability to identify associations between refugees dietary factors and **caries** experience.

**AIMS**: The purpose of this study was to describe the prevalence of **caries** experience and untreated decay among refugee children stratified by their region of origin and compared with other Bosnian children

**METHODS:** Comparisons of the refugee children with Bosnian children in their homes and nutrition and caries examination survey data were made using comparation of this two groups children during last decade from beginning of 21<sup>st</sup> centery.

**RESULTS:** The pediatric dentist found 33% to 43% children with one or more cavitated carious lesions, but the disease rate was much higher when precavitated lesions were included. The highest proportion of children with no obvious **dental** problems was from Sarajevo (70%) compared with 57% from Refugees regions in Bosnia and Herezegovina. Bosnian children had **caries** experience dissimilar to that of refugees (30%: 43%) but significantly lower risk of untreated decay (25%: 60%).

**DISCUSSION:** Epidemiologic data indicate that caries has changed in the last decade, it now is distributed unequally in Bosnian children population, it was higher twice in refugees population comparing with other children.

**CONCLUSIONS:** Many refugee children have never received oral health care or been exposed to common preventive oral health measures, such as a toothbrush, fluoridated toothpaste, or fluoridated water. **Dental s**creenings can easily be incorporated into a busy primary care pediatrics practice and our results suggest that pediatric primary care providers can significantly contribute to the overall oral health of young children by the early identification of children who need to be seen by a dentist.

#### P01.02

Prevalence of Negative Mantoux reaction for BCG Vaccinated Saudi Children and the need for revaccination

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This cross-sectional epidemiologic study conducted with the primary objective of calculating the prevalence rate of a negative Mantoux reaction following primary BCG vaccination at birth. Other objectives include determining the correlation between the Mantoux reaction size with some epidemiologic variables. Of these are age, gender, family history of tuberculosis, presence/absence of BCG scar and its diameter.

The methods included a questionnaire; recording of the child temperature, weight, and height; and verification of the presence or absence of the BCG scar and measuring its largest transverse diameter. Mantoux technique was employed using 2Tus of Purified Protein Derivative (PPD) RT 23 in Twee 80. The studied population was under Five healthy Saudi children attending well baby clinic and/or for the purpose of immunization at PHC Centers. The sample size was all children that meets the criteria over a period of 2 months. In the event, 523 children satisfied the criteria out of 672. Reading of the Mantoux reaction results was carried out by the investigator.

The results of this study showed that the number of the males (267, 51.1%) was and that of females (256,48.9%). The age range was 3 to 59 months with a mean of 27.7 months for the males and 27.5 for the females. 53.5% of the children were from the middle class, 41.3% from low, and the remaining 5.2% belong to the upper socio-economic classes. BCG Scar was present in 496 (94.8%) of the children.

The results also showed that 29.8% of the studied children has a negative Mantoux reaction. The sensitivity to the PPD induced by the BCG vaccine waned off with the increase of the children's age. Low socio-economic class and the absence of the BCG scar were significantly associated with a negative Mantoux reaction. The results also showed that with the increase of the BCG scar diameter sensitivity to the PPD increased.

Based on this study BCG revaccination at the age of 36 but not later than 59 months for the children of the city of Dammam is highly recommended. This policy does not exist at present in the K.S.A.

#### P01.03

Research project: study on the respiratory functions among children who play controlled sports with their peer group (same-age children)

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# Purpose:

To determine whether controlled physical exercise improves lung capacity in the pediatric age group (ages 5-13) by measuring pulmonary parameters.

Material and Methods:

Design: Descriptive longitudinal, with a control group.

Location: An urban school with children ages 5-13, and the Malaga (Spain) Football Club's sport school.

Population and Sample: Children enrolled at a school, ages 5-13, who are authorized by their parents or guardians to participate in the study. Children of the same ages who are practicing sport at the Malaga (Spain) Football Club's sport school were used as control group.

Measurements: To obtain the values for the study, we performed the measurement of lung capacity using portable device COPD-6. If a change is detected in lung of a particular subject, we would perform a formal spirometry. If necessary, we would complete a bronchodilation test with salbutamol.

Variables: Age, grade, gender, height, weight. Force Expiratory Volume in the first second (FEV1) in both, liters and percentage. Quotient of the Forced Expiratory Volume in the first second and the Forced Expiratory Volume in the sixth second of exhalation (FEV6); FEV1/FEV6 both in absolute (liters) and as a percentage.

#### P01.04

Obesity in children aged 6-14: evaluation of the sensibility of their parents to the problem of obesity in the general medical setting

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# **OBJECTIVES OF THE RESEARCH**

To survey the sensibility of the family to their child's weight problem.

To identify lifestyles and eating habits responsible for the weight gain.

To determine how the general practitioner (GP) can act to help prevention of obesity.

### **PATIENTS AND MÉTHODS**

21 GPs from the province of Foggia took part in the research. The children recruited were aged between 6-14 and 0 months. During the medical examination the children's personal data and his/her relatives' anamnestic-auxological data were collected, and an objective examination (height-weight and pubertal) was carried out. When the child was found to be overweight a clinic-anamnestic investigation was carried out.

#### **RESULTS**

During the research 208 patients were examined (49.5% girls, 50.5% boys).

The percentage of overweight and obese cases was equal to 27.4% and 17.3%, according to the CDC (Centres for Disease Control and Prevention) percentiles, 28.4% and 12% according to IOTF (International Obesity Task Force) values.

The excess weight was recognised mainly by the parents, but the examination by their doctor was carried out mainly in obese subjects (obese boys: 38.9%: obese girls: 42.8%). The parents underrate the fact their children are overweight, and so do the children. Only 12.5% of the parents have begun slimming programmes for their children with poor results.

 $92.\overline{7}\%$  of the subjects spends more than 2 hours a day in front of the TV/PC. About 56% of the obese has at least one television in their bedroom.

About half of the overweight subjects does not practice any after school physical activities.

26.8% of the children does not eat vegetables during meals, 14.3% does not eat fruit. The weekly consumption of meat/fish, as well as having breakfast is predominant in both girls and boys.

An association between being overweight and consuming drinks containing sugar, as well as consuming snacks and sandwiches in between meals, has been noticed.

During the research 4 cases of borderline blood pressure and one case of hypertension were found.

# CONCLUSIONS

In order to prevent obesity, it is important to act at various levels: school, family, doctors (GPs and family paediatricians), food industry, public administration and mass media.

#### P01.05

Growth and pubertal development in 6-14 year old children survey in the province of Foggia and diagnostic work-up in the general medical setting

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### **OBJECTIVES**

To examine the problematic issues in health care of 6-14 year old children, evaluating their growth and pubertal development. To assess the necessity of specific training courses for the General Practitioner.

### **PATIENTS AND METHODS**

A sample of the 6-14 year old population in the Province of Foggia was distributed depending on the health care received by the General Medicine Doctor (GP) and by the Primary Care Paediatrician (PCP). The sample of children treated by the GP was evaluated according to the growth/pubertal development; 208 subjects then underwent an objective exam. Their height was compared with the genetic Target of their parents and the pubertal development with Tanner's growth chart.

#### **RESULTS**

58 GPs took part in the survey. 81% of the doctors declares that they follow the pubertal development of the child, but only 29.8% uses Tanner's growth chart. Only 14 doctors out of 58 have taken part in previous paediatric training courses and 78% of them is interested in taking part in new courses. The height of the children visited, was < to  $10^\circ$  for 10 (4.8%) of them, > to  $97^\circ$  for 6 (2.9%) of them, whereas 20 (9.6%) children diverged from the genetic Target. Therefore for 21 of them a diagnostic analysis for low-high

stature was suggested and for 11 of them a 3-6 month follow-up was recommended to evaluate growth velocity. The genital stage takes place at the same time for all the boys except for 1, while for 17 of them pubic hair is not in accordance with the age. In 4 girls an anticipation of the development of breasts was noted, in 20 of them an alteration of the piliferous development and in three cases a diagnostic analysis was suggested, while in the others a 6 month follow-up was recommended. We obtained one diagnosis of GH deficiency and one of precocious puberty.

#### CONCLUSIONS

To create *ad hoc* training courses for the GPs, encouraging them to carry out the auxological measurement checkups expected for the age phase in in order to improve assistance and prevention.**P01.06** 

#### Primary arteries changes in obese hypertensive adolescents

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OBJECTIVE: Childhood obesity has become a global epidemic, and now it is evident much earlier in life. In adults, obesity is recognized as an independent risk factor for the development of both hypertension and cardiovascular disease. The aim of our prospective cross-sectional study was to evaluate arterial wall parameters - intima - media thickness (IMT), distensibility and stiffness of common carotid artery (CCA) and cardiovascular risk factors (systolic and diastolic blood pressure (BP), body mass index (BMI) - in hypertensive adolescents (HA) and normotensive adolescents (NA).

METHODS: Arterial wall structural and functional parameters were measured using echo-tracking method (Art. Lab system). BP was measured using BP monitor (Schiller ARGUS VCM). Twenty nine HA (17-18 yr. old, systolic BP ≥140 mmHg, diastolic BP ≥90 mmHg) and fifty five NA were included. Height, weight and BMI were obtained in each group. All analysis was performed using the Statistical Analysis System, SAS (version 8.1). The study protocol was approved by the Lithuanian Bioethics Committee.

RESULTS: Hypertensive adolescents had significantly greater values of IMT (494  $\pm$  84.69  $\mu m$  vs. 465  $\pm$  65.2  $\mu m$ ), distensibility (767  $\pm$  121.94  $\mu m$  vs. 692  $\pm$  149.01) and carotid stiffness (2.28  $\pm$  0,8 vs.1.86  $\pm$  0.76) (p<0.05) compared with normotensive adolescents. They also had higher weight, height, BMI and systolic and diastolic BP (p<0.05). Pearson correlation coefficient in hypertension group showed a positive correlation between BMI and BP (systolic BP, diastolic BP, MAP) (r=0.392-0.357-0.369). Positive correlation between BMI and IMT (r=0.359) and between BMI and stiffness of CCA (r=0.505) was also found in hypertension group. However correlation between BMI and distensibility was negative (r= -0.284).

CONCLUSIONS: Disturbance of arterial wall parameters can be found in adolescents with hypertension. Obese hypertensive adolescents had a significant reduction of common carotid artery distensibility, increased intima media thickness and stiffness. Obesity may accelerate vascular changes in young patients with hypertension.

#### P01.07

How the young who are physically healthy as well as those with chronic disease estimate their self-respect and life quality outside school

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**PURPOSE** Accumulation of risk factors in the society which is going through the process of transition and is approaching the European life quality standards, without a parallel accumulation of possibility factors, causes the sensitivity of the young concerning their self-respect and life quality outside school. The research background is that the young and their parents, living in a high-risk environment with negative stimulants, recognize their life quality, with the stress on the estimate of their self-respect and quality of life outside school.

**METHODS** Microresearch work through an anonymous questionnaire for the 15-year olds and their parents.

RESULTS The questionnaire analysis shows that the young give positive estimates of their self-respect and quality of life outside school. They estimate that their emotional and physical health is jeopardized. Children suffering from chronical diseases (asthma, diabetes, epylepsy, haemophilia, kidney illnesses) express their attitudes exactly the same as their healthy peers do. It is confirmed that the family represents a stable and irreplaceable factor for forming personality security and self-respect.

**CONCLUSION** The young (both healthy and with chronical diseases) estimate that their self-respect and quality of life outside school /friends and family/ is not jeopardized, regardless the life conditions they grow up in. Parents have less insight of the real state of their cildren's life quality.

### P01.08

# Adolescents and their knowledge of sexually transmitted

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Introduction: According to World Health Organization data, the spread of sexually transmitted diseases (STD) affects young people aged from 15 to 19 the most. That is the age when adolescents indulge in their first sexual experiences.

Aim: Investigating and determining parameters linked to adolescent sexual behavior and the extent to which adolescents are acquainted with sexually transmitted diseases, contraception, and the way they obtain information about it.

Participants and methods: In 2011, 200 students (boys and girls) aged from 15 to 19 were underwent an opinion poll. They answered questions dealing with knowledge about STDs, ways of obtaining information on contraception, sexarchy and number of sexual partners.

Results: The majority of participants demonstrated insufficient knowledge about basic STDs and the way they are transmitted 50% of the girls and 60% of the boys are poorly acquainted with the issue. 49% of the girls search for information on STDs and contraception in magazines, whereas boys (30% of them) prefer searching for information on the Internet. The average sexarchy (first sexual intercourse) age is 17±1.5 in girls, and 15.5±1 in boys. Boys have more sexual partners - 35% of sexually active boys had sexual intercourse with more than three partners. The same is with 16% of sexually active girls.

Conclusion: Preventive and educational work with the young - promotion of first sexual activity delay and providing adequate information on STDs.

Key words: Adolescents, sexual behavior, sexually transmitted diseases.

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### P01.09

# Emotional problems in hypertensive adolescents

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OBJECTIVE: The diagnostic proceedings in adolescent hypertension should comprise clinical and laboratory as well as psychological and psychosocial examination. Clinical examination and laboratory tests are mandatory during the initial presentation of the patient whilst the psychological exploration can be a part of an individually adapted treatment regimen. The aim of our prospective cross-sectional study was to evaluate emotional problems - anxious/depressed, withdrawn/depressed and somatic complains in hypertensive adolescents (HA) and normotensive adolescents (NA).

METHODS: Achenbach System of Empirically Based Assessment - Youth Self Report for ages 11 - 18 was used to determine emotional problems of male adolescents. BP was measured using BP monitor (Schiller ARGUS VCM). Thirty one HA (17-18 yr. old, systolic BP ≥140 mmHg, diastolic BP ≥90 mmHg) and thirty nine NA were included. All analysis was performed using the Statistical Analysis System, SPSS 17.0. The study protocol was approved by Lithuanian Bioethics Committee.

RESULTS: Hypertensive adolescents were not more anxious/depressed significantly (  $5.645\pm0.640$  vs  $4.410\pm0.457$  ) (p>0.05), or withdrawn/depressed (  $3.322\pm0.603$  vs  $2.897\pm0.371$  ) (p>0.05) and they had not much more somatic complains (  $2.516\pm0.324$  vs  $2.307\pm0.303$  ) (p>0.05) compared with normotensive adolescents.

CONCLUSIONS: There is no significant difference between hypertensive male adolescents and normotensive male adolescents in having emotional problems. Further investigations with greater number of patients should be made.

### P01.10 Lost in a glass

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In Italy, alcoholic beverages are sold freely, their consumption is stimulated by persistent advertising campaigns despite being responsible for more than 50% of road accidents.

Alcohol is definitely the psychotropic substance directly responsible for more damage to the person, both psychological and physical level. The younger, more vulnerable to mental and physical aspects of alcohol are considered particularly at risk. In Europe, a young man out of four died due to alcohol, the first risk factor for disability, premature mortality and chronic illness in young people.

# Objectives

The aim of this study is to investigate, in the setting of general practice, knowledge and attitudes about the use and possible abuse of alcoholic beverages, in boys aged 13 to 16 years. The specific objectives is to raising public awareness about youth alcohol-related problems, promoting a new lifestyle and to stimulate an informed choice of their own behavioral choices and their attitudes related to drinking.

# Method

Submit an anonymous questionnaire - Lost in a Glass Questionnaire - for boys between 13 and 16 years attending the biennium the State Institute of Higher Secondary Education - "A. Manzoni " - Caserta, Italy - and analyzed the results, create a meeting - day Getting lost in a glass - with the guys to discuss issues relating to alcohol.

### Results

587 questionnaires were administered in 16 classes. Analysis of the data has been found that:

 60% of respondents attending friends, discos and bars, low rates 20% of the cultural and / or sports facilities

- At 70% happen to have consumed alcoholic beverages at least once and this was the first time before 14 years by 84%
- 50% of respondents drink at least once a week, especially during private parties for 24%, with the family at 36%, and 31% at disco
- The 26% is usually consuming alcohol at meals
- 36% has been drunk at least once, 75% of them before the age of 14. 22% get drunk at least once a month.

#### P01.11

What proceeds kids to violence: Evaluation of causes of physical violence among 7-17 years of age children admitted to a hospital emergency service

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It is observed that adolescents' tendency to try to solve their problems with violence has been increasing in recent years. This study aims to explore the causes of physical violence among the children that admitted to a hospital emergency service in Ankara. 55 children who admitted to emergency because of facing a physical violence were included in the study along with another 55 children as control group, with similar distribution of age, sex, place of living, school status, social security, chronic diseases etc. It was found that most of the physical injury was around head and neck region (81,8%). 92,7% of the cases had an blunt trauma. 63.6% of children had the trauma at school. 14,5% of the assaulted children had a similar occasion before. 40% of cases said that the cause of fight was a girl/boyfriend. While this cause was more common in the age of 15-17, younger children said the act was accidental, or as a result of joke, or spoiling of friendship (p<0.001). A significantly higher percentage of children in the study group believed that there were gangs at school (p=0.002). Our study showed that boys fight with boys and girls fight with girls (p<0.001). It was observed that substance abuse was more common in the study group. Reading habits and joining social activities were more common in the control group (p<0.001). It is observed that some children have more tendency for physical violence and this also has relation with school success and social activities. A general look at the situation reveals that such acts are more common in rural areas and families with lower socioeconomic status. Family pysician who is working in such regions should be aware of the situation and should have a closer look at these families. A sincere relation with the family and school might help prevent such violence.

# P01.12 A different way of promoting school health

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Getting the doctor close to his community is as important as medical care. It's actually a way of promoting health and avoiding illness. This necessity of getting out of the medical office is shared by many doctors and there's no doubt that getting close to their patients is indeed the basis of primary prevention. Thus, the primary care physicians are more and more requested to work on school health programmes, where there are many teenagers eager of knowledge but whose risky behaviours might have future negative consequences.

One presents the experience of field work where the methodology "objective based learning" is used. This is a concept also used in education programmes of some health areas and it is based on the work of small groups, in student's autonomy and on the search of information that answers to objectives, developing self-learning

competencies and stimulating the establishment of a routine of studies. This way of learning is completely different from the usual one, based on one way communication, teacher to student. The theme of the sessions was sexuality and teenagers risky behaviours.

This new way of communication and teaching should be a permanent concern of the doctor so that a close relationship with the teenager can be achieved. This more informal learning aims to appeal to teenagers' interests, share experiences, giving answers to their common doubts, transmit ideas as important as behaviours changing which can put in jeopardy themselves and others and improve life styles in order to grow up and live healthily.

### P01.13

Social correlates of drug misusing among Kosovar adolescents: A population-based cross-sectional study

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**Study objective:** of this project is to explore the problem of drug misuse among adolescents in Kosovo and to better understand the social mechanisms that influence adolescent drug misusing; we analyzed the relationship and relative importance of a broad spectrum of social variables of drug misusing during adolescence. **Design:** Cross sectional questionnaire survey performed with 261 students from 4 secondary schools in October 2005. The survey was performed in Gillan, town in south-east of Kosovo.

Main results: From all questioned students, 2.4% consumed all kind of drugs

regularly and the prevalence of substance misuse was higher among students in last year of high school. 93.9% of students thinks that there are lots of young people misusing illicit drugs in they city and 51.7% of them believes that, in they school some of students, takes illicit drugs. Young people misuse illicit drugs in hidden places thinks 77.7% of students and only 1.1% mentioned school. Less than 50% thinks that it is very easy to find drugs, almost all the kinds. 75.5% of students have enough information regarding drugs but, 88.9% of them needs for more information and data's

**Conclusions:** Students in Gjilan continue to misuse drugs despite their knowledge about the health consequences of substance misuse, but in the same time, most of them consider that information and counselling are the best way of preventing from substance misuse

Prevalence of drug misuse in our study is much lower comparing to data in region and in developed world. It is possible that these differences are result of different methodology, especially sampling. We expected higher percentage of this value; the future studies should endorse or decline our results.

Substance misuse is preventable. If boys and girls reach adulthood without misusing illegal drugs, they probably will never develop a dependency problem.

### P01.14

Use of internet games and social networking sites in primary school pupils: a multi-centre cross-sectional study in north Greece

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Purpose: The use of internet games and Facebook has been associated with internet-based violent exposures and experiences. The purpose of this multicentre study was to describe the use of internet games and Facebook in primary school pupils.

Methods: Six Primary Health Care Centres (PHCCs) within the 3<sup>rd</sup> Health Region Authority (Macedonia) investigated into the habits of children attending the primary schools in their areas (aged from 6 to 12 years old). The director of each PHCC informed the principals of the nearby primary schools about the purposes of the study and arranged the visit at the school campuses. Children's guardians were previously informed by a leaflet about the purposes of the study and they were asked to provide informed consent. GPs from the local PHCC visited the school campus, facilitating the pupils to answer questions about the way they use internet, demographic questions, their dietary habits and the way they spent their leisure time. The study was organised by the 3<sup>r</sup> Health Region Authority. Approval from the Greek Ministry of Education was obtained for this study.

Results: 897 children (46.9% male), from 26 primary schools participated in the study. 367 (40.9%) children played internet games, while 115 (12.8%) had a profile at Facebook. 451 (50.3%) had internet access at home. 40.5% (210/519) spend approximately one hour daily surfing at internet. Boys played games and used Facebook more than their female classmates (46.8% vs 35.5%, p=0.009 and 17.6% vs 8.1%, p<0.001, accordingly). The pupils that played internet games and used Facebook were increased as they proceed at the six classes of primary school (A: 22.6%, B: 31.4%, C: 39.2%, D: 48.4%, E: 43.5%, F: 50.4%, p<0.001 and A: 1.2%, B: 4.1%, C: 8%, D: 10.7%, E: 23.3%, F:27.9%, p<0.001).

Conclusions: Increasing internet use in children between 6 and 11 years old was found, even in Facebook- although its use is not allowed at these ages. GPs should have increased awareness of this condition. Developing an active role in prevention programs with focus on children's behaviors online could reduce the risk of internet addiction and technology-based violent experiences and exposures.

#### P01.15 Childhood Obesity: Assessment and Orientation on Primary **Health Care**

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Introduction - Child obesity has increased significantly in this fast paced and self - conscious society. Considered as a global epidemic by the WHO, Portugal, like other countries has reported an obesity and overweight prevalence above 30% among children within 6 to 12 years old. This fact has often leaded to inumerous referrals to pediatric obesity centers. Therefore, an early and accurate diagnosis performed by the Family Doctor is extremely important for the overall child health.

Objectives - Establish guidelines adjusted to the Primary Health Care, which will outline Family Doctors on Childhood Obesity prevention, evaluation and guidance. Methodology - A literature review was conducted through UpToDate and Pubmed databases published between 2006 and 2011, using MeSH terms: "obesity", "childhood".

Results - The Body Mass Index (BMI) is the accepted standard measure used for the overweight and obesity on children above two years old. The International Obesity Task Force defines overweight if BMI in between 85th and 95th percentile and obesity if more than 95th, for age and sex. The overweight or obese evaluation in children should include a complete history and physical examination, including physical comorbidities signs. The laboratory and radiographic evaluation should be customized setting a basic panel tests at the time of initial diagnosis. Treatment comprehends three main areas: motivation, diet and exercise which should all be combined and developed with different strategies involving both family and school. This purposed treatment should achieve an ideal weight according to height, with an adequate nutritional intake without interfering with the child's growth. Different high risk ages for the development of obesity as well as criteria for referral to pediatric obesity centers were also observed.

Discussion - Obesity is an increasingly common problem in childhood, so prevention and early intervention is mandatory. The Primary Health Care is the key to implement child population dietary measures and adoption of healthy lifestyles, so they can incorporate them into their everyday lives.

#### P01.16 **Better Vision For Children**

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Introduction and Objectives:

The external examination of the eye, and vision assessment are essential for early detection and treatment of eye diseases, that can hamper the development and welfare of children. The visual pathways continue to develop after birth until about age 10, when the central visual system plasticity ceases and with it the possibility of a reversal of amblyopia already installed.

The objective of this study is to describe the results of an ophthalmologic screening performed in an elementary school of a rural area, and assess the need/importance of such types of screenings for child health.

Methodology: A cross sectional study was done through the assessment of all children attending an elementary school, using a validated protocol of Infant Vision Screening.

Exclusion criteria included: children attending a specialized ophthalmology consultation and children who didn't collaborate in the screening.

We carried out a preliminary questionnaire with questions about personal and family history, eye symptoms observed by parents and level of educational attainment.

Parameters evaluated were: sex, age, external ocular examination, optical transparency, ocular alignment, visual acuity, stereoscopic vision and ophthalmologic alteration with an ambliogenic risk. Children identified with eye disease were referred by letter.

Results: We studied 155 children, with ages between 6 to 10 years old, with an average age of 7.7 years. With regard to gender, 49% (76) were female and 51% (79) male. Of the total children studied, ophthalmic pathology was suspected in 8.4% (13) supported by decreased visual acuity. In children with suspected pathology 75% had family history of eye disease and 85% had at least one ophthalmologic symptom.

Discussion: The need to assess visual function as early as possible is based on the concepts of plasticity and its critical/limited period of development. This study demonstrates the usefulness of a generalized Children's Eye Screening, thus contributing to improve the quality of pediatric care.

Evaluation of risk group for development of Chronic Kidney Disease in children served by the Brazilian Family Health Strategy in Goiânia.

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Epidemiological studies show increased prevalence of Chronic Kidney Disease (CKD) in Brazil and worldwide. The determination of risk groups allows its prevention. Objective: To evaluate the presence of risk factors for CKD in children and adolescents served by the Brazilian Family Health Strategy (FHS) in Goiânia, Central Brazil. Methodology: A cross-sectional population-based study with children and adolescents aged 6-18 years served by the FHS in the Eastern Region of Goiânia. Through the evaluation of primary data and physical/laboratory assessment, we obtained the following data: personal or family history of obesity, diabetes mellitus and hypertension; weight (kg), height (cm), waist circumference (cm), blood pressure (mmHg), laboratory tests (creatinine, microalbuminuria) and determination of creatinine clearance (Schwartz formula). Results: In our sample of 177 individuals interviewed, 56 were in the age group of interest. Among these, the average age was 12.3 years (+ -3.4 years) and 29 (50.8%) of them were male. Regarding risk factors, one (1.8%) reported personal history of diabetes mellitus, eight (14.3%) reported previous kidney disease, eight (14,3%) reported family history of hypertension and nine (16.1%) had a family history of obesity. The second assessment of Body Mass Index (BMI) percentile for age identified eight (14.3%) overweight or obesity. Two (3.6%) cases of casual hypertension were found. It was identified microalbuminuria (mcg/mg) mean of 13.5 (± 7.4),

creatinine clearance average 163.7 ( $\pm$  38.2), with no alteration in case of both tests. Conclusion: In this sample, overweight was the most prevalent factor, followed by previous kidney disease. We evidence the importance of recognition of such factors by the family health teams to seek ways to care those factors with opportune and effective actions.

#### P01 18

# Adolescents' behaviours - Study of two Family Health Units.

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#### Introduction:

According to the World Health Organization, adolescence lies between 10-19 years and is a crucial stage in development. Adolescents are more susceptible to external pressures and adoption of risk behaviours.

### Objectives:

Characterize a population of adolescent users of the healthcare services of two Family Health Units (FHU). The variables in analysis were: self-esteem, family relationships, school factors, healthy lifestyles, sexuality and harmful habits like tobacco and alcohol consumption.

# Methodology:

We carried out an observational cross-sectional study, which analyzed the answers of adolescents aged 13 and 18 years, randomly selected, who appealed to both FHU during the analysis period.

Data collection was accomplished by the application of a self-administered questionnaire.

The statistical analysis was made by EXCEL 07 and SPSS 18.0. Discussion:

We obtained a sample of 95 adolescent users (65.3% female gender). Sixty-three point two percent had a surveillance appointment at the FHU. The majority (94.7%) felt good about themselves, have good relationships with their parents (95.8%) and enjoy school (90.5%), while 21.1% consider being a victim of bullying, more frequent among the female gender (female=22.6% vs. male=18.2%, p>0.05).

Sixty-one percent of adolescents practice sports and spend an average of 2.45 hours/day watching television or playing video games.

The prevalence of tobacco consumption was 22.1% (female=8.1% vs. male=48.5%, p<0.05), alcohol consumption was 43.2% (female=24.2% vs. male=78.8%, p<0.05), 22.1% of adolescents report at least one episode of alcohol intoxication (female=11.3% vs. male=42.4%, p=0.001).

Regarding sexuality, 17.9% had initiated sexual activity (female=8.1% vs. male=36.4%, p=0.001), with an average onset age of 15.2 years. All the adolescents reported using condoms to prevent sexually transmitted infections.

# Conclusion:

The results obtained from the adolescents surveyed in this study does not differ from other studies.

However, we identified a moderate percentage of young people who admit having risk behaviours, more prevalent among the male adolescents. Therefore, these issues should be addressed and analyzed during a surveillance appointment.

This survey identified a need to act in the community by promoting the development of adolescents and healthy adults.

#### P01.19

Access to ICT and sociodemographic profile of High School students. The JOITIC study group's first results.

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The advent of Information and Communication Technologies (ICT)-the Internet, mobile phones, chats, videogames, social networks...- is leading us to new ways of communication, leisure and human relationships. Their misuse may cause addictive and/or maladaptive behaviours with dramatic consequences at all levels. According to the available literature, the prevalence of ICT abuse ranges between 9 and 40%, depending on the selected population and the study design. Preventive measures taken at school could prove effective in promoting a healthier use of ICT.

To estimate the accessibility and use of ICT among the teenagers currently studying at the public and semi-private High Schools in our area, analysing related factors.

#### Methods

Cross-sectional multicentric study. Population: the students of 28 centres. The parents/tutors and students accepted to participate. An Ethic Committee approved the study's design.

Data were gathered from a self-administered questionnaire including socio-demographic and ICT accessibility information.

5558 adolescents were tested. Missing answers were below 1% in all analysed items except in school performance (3,13% missing). 48,6% female, mean age 14 years (range 11-20). 15,5% were born in foreign countries. 23% informed of low school performance (more than 2 subjects failed the previous year). 75,2 % took extracurricular activities. 88,9% of the teenagers had a good or very good relationship with their parents.

68.4% played videogames, of which 36.5% for three or more hours a week and 66.8% without parental control.

97,9% had a computer at home, of which 44,8% used it for two or more hours daily. 98,6% could access the Internet and 47,2% without parental control.

93,3% used the mobile phone; 45,6% owned one before 12 years old.

#### Discussion

Our high schoolers gain access to the ICT at very young ages and they use them in almost every aspect of their lives. More data are needed to determine the influence of ICT on adolescents' behaviour, in order to determine whether they could become a source of risks.

# P01.20

Teenagers and tobacco: is primary care intervention accepted?

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**AIMS AND PURPOSE**: 1. Knowing tobacco consumption prevalence amongst 14-year-old population.

2. Describing young people's attitude regarding tobacco consumption counselling from primary care departments.

**DESIGN AND METHODS**: STUDY SETTING: Observational descriptive study

SUBJECTS: 14-year-old teenagers attending services portfolio protocolized outpatients visit in a rural area basic Healthcare Unit: Cercedilla (Madrid) Primary Healthcare Team.

PERIOD: from 1<sup>st</sup> January 2011 to 31st December 2011.

DIAGNOSIS OR INTÉRVENTION: Tobacco and cannabis consumption, starting age, consumption pattern: sporadic/daily, dependence, giving up motivation and usefulness of health assistants' intervention beliefs.

STATISTICAL ANALYSIS: Analysis using Statistics Program SPSS 14.0

**RESULTS**: N=76. Sex: 54% females (41). 46% males (35).

40% has smoked tobacco sometime. 35% has consumed cannabis occasionally

Starting age: 13 years old (12-14).

Consumption Pattern: 60% among tobacco users are weekend smokers of whom 70% smoked both tobacco and cannabis.

40% left are daily tobacco users: Number of cigarettes per day: <10 cigarettes 25%; 11-20 cigarettes 12%; >20 cigarettes 3%.

Dependence (among smokers): Fagerstrom score <4 (low dependence) 78%; 4-7 (moderate dependence) 19%; >7 (high dependence) 3%.

Motivation: 65% of the consumers feel able to quit smoking; 8% believes to need help. 30% think that health care assessment could help them.

#### CONCLUSIONS

- 1. High tobacco and cannabis consumption prevalence in the studied area.
- 2. Teenagers tobacco consumption active detection programs should be increased
- 3. Teenagers accept primary care professionals' intervention, although they consider assessment of little use.

#### P01.21

General practitioners perceptions how to improve the quality of care for obese children

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<u>Background</u> Obesity is increasing among children. A general practitioner in the Netherlands sees at least two overweight or obese children every week. However, overweight or obesity is often not diagnosed in these children. The perception of general practitioners how to enhance the care for obese children is needed for the quality and implementation of improvements in care delivery.

Research question What are general practitioners' perceptions to improve care for overweight or obese children?

<u>Methods</u> The data for this study was obtained by both qualitative and quantitative methods. We used focus-group interviews and questionnaires. For the focus group interviews we recruited general practitioners who are affiliated to the academic network of general practitioners of the VU University medical centre (ANH-VUmc). We recruited general practitioners working in the region of Amsterdam for the self-administered questionnaire. All focus group interviews were recorded and transcribed verbatim. Questionnaire data were analysed using SPSS 15.

Results In total, 26 general practitioners participated in 4 different focus groups. Sixty-four general practitioners filled in the questionnaire. Important tools for the GP mentioned to support good care are: an overview of the social map (i.e. caregivers involved in the care of obese children), feedback from involved caregivers, information leaflets for parents, and instruments for diagnosing obesity (e.g. growth curve, BMI calculator). Furthermore, more education about healthy foods at schools and financial compensation for a treatment were mentioned as vital to enhance to counter the problem of obesity in children.

<u>Conclusions</u> Our results show that general practitioners do not know where to refer obese children to. They need more information about effective intervention programs for obese children nearby. Feedback from other caregivers helps the GP in giving good quality of care and support the parents and their obese child.

#### P01.22

# The incidence of morbidity of tonsillopharyngitis among children in general practices

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Introduction.

Tonsillopharyngitis, induced by a group A  $\beta$ -hemolytic streptococcus(GAS), is a common, acute illness, causing serious complications all over the world. It is of a great importance to know the etiology of tonsillopharyngitis and incidence of the pathogen to choose the right treatment and prevent complications.

To evaluate the incidence of morbidity of GAS tonsillopharyngitis among children, aged from 5 to 15 years in general practices in Latvia.

Methods.

From February to March of 2012 an open label, clinical, observational study was arranged in Latvia with a participation of 25 Latvian general practitioners using a rapid antigen detection test (RADT) to diagnose GAS tonsillopharyngitis (20 tests per a GP). 509 children, having clinical symptoms of tonsillopharyngitis and aged from 5 to 15 years were included.

414 respondents were observed in several towns of Latvia and 92-in rural areas. Children underwent RADT depending on their clinical symptoms. 62% of children in Latvian towns had negative RADT results, but 38%- had positive RADT results. 56%- in rural areas had negative RADT results, 44%- in rural areas had positive results. 57% of children in towns were prescribed antimicrobial therapy, in rural areas- 61%.

Conclusion.

38% to 44% of Latvian children, having clinical symptoms of tonsillopharingitis and aged from 5 to 15 years, have a group A  $\beta$ -hemolytic streptococcus infection. The study is continuing.

# P.02 - Vit D

### P02.01

# Vitamin D levels in Spanish elderly people

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Objective: To determine the prevalence of vitamin D deficiency and insufficiency in a sample of elderly people and establish if there is an association with muscle strength and risk of spontaneous falls.

Material and methods: Cross-sectional study conducted in 473 people over 65 years selected in primary care. We considered vitamin D deficiency when the levels of 25-OH-vitamin-D3 were below 10 ng/ml and vitamin D insufficiency when between 10 and 20 ng/ml. Other variables were: muscle strength in dominant hand assessed by dynamometry, musculoskeletal function assessed by the test "timed up and go", bone densitometry, body mass index and serum parathyroid hormone (PTH). The data were analyzed by Pearson correlation and ANOVA with post hoc multiple comparisons using Scheffé's method.

Results: The mean age was 72.4 (SD: 5.2) (range 65-92) and the men/women proportion was 45.2%/54.8%. Mean serum concentration of 25-OH-vitamin-D3 was 34.2 ng/ml (SD: 22.3). The prevalence of 25-OH vitamin D3 deficiency was 6.1% (95% CI: 3.9-8.4) and the prevalence of insufficiency was 24.9% (95% CI: 20.9-29.0). It was observed a weak positive correlation between vitamin D levels and muscle strength (r=0.123, p=0.009), although the average level of muscle strength in the dominant hand was not significantly lower (p>0.05) in subjects with deficiency (22.7 kg) or insufficiency (23.4 kg) compared to those with normal levels (25.1 kg). There was no relationship between vitamin D level and duration of the test "timed up and go". In subjects with osteoporosis (6.6%) PTH levels, age and duration of the test "timed up and go" were significantly higher (p<0.05).

Conclusions: Hypovitaminosis D is a frequent finding in Spanish elderly people, despite being a country with abundant sunshine. In

almost one out of three elderly people the vitamin D level can be considered as deficient or insufficient. Although the serum concentration is directly correlated with increased muscle strength in the dominant hand, the average serum concentration levels in those with hypovitaminosis D are not significantly different from those with normal levels. The risk of falls, assessed by the test "timed up and go", is not higher in those with hypovitaminosis D.

#### P02.02

# Vitamin D deficiency and metabolic syndrome among hypertensive women

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**Objective:** We tried to investigate 25-hydroxy vitamin D levels and determine vitamin D deficiency and metabolic syndrome (MS) among hypertensive women.

Patients and methods: Data collected in 124 women (mean age: 51±7) with hypertension included demographics, cardiovascular risk factors, measurements for MS criteria and laboratory assessments of 25-hydroxy vitamin D levels also with serum levels of glucose, HDL and triglycerid.

**Results:** Vitamin D deficiency (≤ 20 ng/ml) was present in 68 patients (54.8%) and hypovitaminosis D (21 to 40 ng/ml) in 32 patients (25.8%). Metabolic syndrome was present in 96 patients (77.4%) and all patients with vitamin D deficiency had MS, while only 24 (19.3%) patients with hypovitaminosis D had MS.

**Conclusion:** In our study, we determined that vitamin D deficiency and hypovitaminosis D are very common among hypertensive women and metabolic syndrome seems to be associated with vitamin D deficiency and hypovitaminosis D.

#### P02.03

# Vitamin D deficiency is associated with lower hemoglobin levels

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Vitamin D deficiency is associated with lower hemoglobin levels.

**Objective:** We tried to determine the vitamin D levels in patients with anemia and compare with controls.

Patients and methods: After exclusion of other main reasons of anemia, a total of 66 patients with anemia and 45 controls were evaluated with levels of 25-hydroxy vitamin D (25 (OH) D) and whole blood count, after detailed medical history and physical examination. Vitamin D deficiency is defined as a level 25 (OH) D ≤ 20 ng/ml and anemia is defined as a level of hemoglobin ≤ 11 g/dL in female and 12 g/dL in male.

**Results:** Vitamin D deficiency was present in 38 patients (57.6%) with anemia and in 21 controls (46.6%) with no anemia. Vitamin D deficient subjects had lower mean hemoglobin levels compared to others with normal level of 25 (OH) D in both groups.

**Conclusion:** In our study, we found that there is an association between vitamin D deficiency and hemoglobin levels leading to higher risk of anemia.

#### P02.04

Vitamin D level is independently associated with hemoglobin level in the Korean pre-menopause women and post-menopause women

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Background: Association between vitamin D and hemoglobin has been shown in the limited subjects with a diseased kidney. However, from the several experimental studies, the possible correlations were suggested in general population independently kidney dysfunction. The purpose of this study was to assess the impact of vitamin D on hemoglobin level in the Korean adult, considering gender and menopause status.

Methods: Using data obtained from the first year of the Fifth Korea National Health and Nutrition Examination Survey (KNHANES V) 2010, 5,786 subjects (2,528 men and 3,258 female) over age 20 were included in this study. Correlation analysis between vitamin D and hemoglobin level was performed in men, pre-menopause women and post-menopause women. After adjusting for confounding factors, multiple linear regressions between vitamin D and hemoglobin, multivariate logistic regression for anemia were performed. Anemia was defined as hemoglobin of <13 g/dl in men and <12 g/dl in women.

Results: 25(OH)D was independently positive associated with hemoglobin level in pre-menopause women and post-menopause women after adjusted for age, creatinine, related smoking status and activity(added in post-menopause women). In men, 25(OH)D did not shown independently association with hemoglobin level. Pre-menopause women with lower vitamin D level were at significantly higher risk for anemia; OR(95% CI), 25(OH)D 20≤25(OH)D<30, 1.076(0.384,3.013); ≥30ng/ml, 1: 10≤25(OH)D<20, 1.533(0.588,3.998); 25(OH)D<10, 2.921(1.060,8.051), even after adjusting for age, creatinine, and smoking status, but post-menopause women did not show the statistical significance.

Conclusions: Vitamin D was independently associated with hemoglobin level of women.

### P02.05

# Vitamin D deficiency is associated with increased risk of Hemoglobin A1c in Korean type 2 Diabetes Mellitus

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**Background/Objectives:** In few report, vitamin D deficiency was associated with risk of diabetes mellitus(DM). However, it is unclear that association with vitamin D status and hemoglobin A1C(HbA1c) level. The purpose of the current study was to explore the effect of plasma 25-hydroxyvitamin D level on HbA1c in subjects with DM.

**Subjects/Methods:** Characteristics of 572 patients over age 20 in the Korea National Health and Nutrition Examination Survey V,2010 were stratified by 25 OH vitamin D status. They were grouped according to vitamin D level <20, 20 to 30, and >=30. Uncontrolled DM(or increased HbA1C) was defined as HbA1c > 7.5%.

**Results:** Vitamin D level is inversely associated with HbA1c in Korean adult with type 2 DM. Univariate analysis showed associations between HbA1C and vitamin D level, age, gender, body mass index (BMI), smoking status, insulin, systolic or diastolic blood pressure, lipid profile. On multiple logistic regression analysis, the odds ratios (95% CI) for HbA1c > 7.5% were1(vitamin D > 30), 1.812 (0.777, 4.227; 20 <= vitamin D <= 30), and 2.738 (1.218, 6.154; vitamin D < 20) after adjusting for age, gender, BMI, smoking status, insulin, blood pressure and lipid profile. (P < 0.001).

Conclusions: Vitamin D deficiency (<20 nmol/L) was significantly associated with the risk of HbA1c > 7.5 in Korean type 2 DM.

# P.03 - Case reports

#### P03.01

### **Clinical case of Sacral Chordoma**

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#### Introduction:

The chordoma is a rare tumor originating in ectopic remaining of notocordial tissue, more frequent in males, rare before 40 years of age. This tumor lies often in the sacrum, with slow growth and locally aggressive. Despite of the unusual metastization as first form of presentation, the prognosis of these patients is reserved due to the necessary extensive intra-injury resections.

Description of event:

Male patient, Caucasian race, 37 years of age, with an irrelevant pathological background, family history of malignant neoplasms that could not specify since he does not maintain a relationship with his family. In 2007, started with low back complaints and was observed in the Orthopedics Emergency Room. The patient was subject to an x-ray of the lumbosacral spine and was discharged with a diagnosis of discal hernia. Due to the persistence of the symptoms and difficult control of the algic complain, the patient also underwent a CT scan of lumbosacral spine, which proved the diagnosis of discal hernia, having started physiotherapy and swimming. The complaints returned 2 years after this episode, having been referenced back to the Orthopedics consultation, and underwent a CT/PET scan, which demonstrated the existence of pelvic mass with intense uptake, with pre-sacral location, exofitic growth, invading the left wing of the sacrum, suggestive of malignant lesion. After this examination, the patient held still a MRI, a pelvic and a thoracic scan that at the time did not demonstrate lesions attributable to the metastization of the disease. The patient underwent a L5-S1 total sacrectomy in 2010, wich resulted in irreversible post-surgery consequences, such as colostomy, permanent bladder drainage bag and paraplegia at L5 level. Currently, the patient lies bedridden, making chemotherapy and is followed in consultation of pain.

Conclusion:

The diagnosis of clinical cases such as described occurs often belatedly, with major implications for prognosis. The natural history of this type of tumors points out to a high risk of local recurrence even after total resection. Given these facts, it should be stressed the importance of careful evaluation of patients and their family adaptation to the disease situation and its multiple implications.

#### P03.03

#### A case of Tuberous Sclerosis detected during pregnancy

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A case of Tuberous Sclerosis detected during pregnancy During antenatal follow-up until to the twenty-ninth week no pathology and fetal anomalies detected in 27 years old, gravida 2, parity 1 patient and biparietal diameter of fetus was (BPD): 29 ± 0 weeks, femur length (FL): 28 ± 4 weeks, and abdominal circumference (AC): 28 ± 5 weeks. On thirty-fourth week on suspicion of interventricular septal hypertrophy in obstetric ultrasound, fetal echo was done. Mass in interventricular septum (rabdomyom?) was detected. In ultrasonogram made in this week it was found that BPD: 34 ± 0 weeks, FL: 32 ± 5 weeks, AC: 31 ± 6 weeks and it is not compatible with gestation. During antenatal follow-up of the patient cardiotokograpy was reactive but artefactly. Patient was delivered by cesarean section at 38th week of gestation. The infant was treated in intensive care for bruising after delivery. Starting at postpartum 3<sup>rd</sup> day and increasing in 2<sup>nd</sup> month lasting 5-10 seconds of bruising, right eye blinking and contraction

of his right arm, seizures were observed. The patient does not come to the world as a result of a consanguineous marriage, and family history of her parents was normal.In physical examination findings compatible with Wolf-Parkinson-White Syndrome (delta waves) in ECG and hypertension noticed and treatment was started. No murmur was detected in infant. In cranial MRI subependimal nodules (hamartoma / tuber?) were detected. Rabdomyom is the most common cardiac tumor in childhood. 50% of patients have other clinical findings of a tuberous sclerosis. Our case was a a tuberous sclerosis patient which shows brain involvement.

#### P03.04

#### Acute renal failure

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Scope of the case: Emergency Room

Description: a 63 year old male refers left elbow pain and bleeding that doesn't stop despite treatment with levofloxacin.

Personal history: Hypertension. Dyslipidemia. Diabetes Mellitus. COPD. Smoker. Achilles tendon rupture 2 months ago. Allergic Drug Reaction:beta-lactams.

Physical examination: BP: 132/76 P: 68lpm. SatO2: 98%.T<sup>a</sup> 36°C Good condition. Aware and oriented.

Left elbow: warm and red with purulent exudate. It hurts when he moves it, but can do all the movements.

X-ray: normal.

Laboratory: neutrophilia with left shift. Elevation of CRP. Acute renal failure. Renal ultrasound: no abnormalities.

The purulent material is drained and the abscess is treated. Development:

- Differential diagnosis: acute nephritic syndrome, septic shock, acute tubular necrosis, drug ARF, septicemia.
- Clinical Trial: this is an acute renal failure caused by sepsis situation abscess and abuse of antibiotics.
- Treatment: dialysis to normalize renal function.

Evolution: After dialysis, renal function recovery.

Discussion and conclusions: the misuse of antibiotics can make these things happen in emergency situations. This patient had suffered a spontaneous rupture of the Achilles tendon secondary to the use of levofloxacin for the treatment of pneumonia. Reestablish

the Levofloxacin because of the bursitis associated with the status of the patient's septicemia, caused acute renal failure and it had to be resolved with dialysis.

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#### P03.05

# Puerperal mastitis, when a picture worths more than words

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Context: Puerperal mastitis is an acute infectious process of the mammary glands, which affects several women during lactation,

with a clinical presentation that goes from a local inflammation accompanied by systemic symptoms such as fever, malaise, chills, asthenia, prostration, to abscess and death.

Description of the case: Puerperal woman, 31 years old, natural from Morocco, non Portuguese speaker, belonging to a nuclear family, on the phase 2 of Duvall's cycle, with low incomes according to Graffar and without familiar risk. On September 9th 2011, the patient recurred to the general practitioner's revision of puerperium consultation.

At that time, she complained of left mastalgy. At the physical examination, the breast showed inflammatory signs, so she was discharged with the diagnose of puerperal mastitis, and medicated with cefuroxime 500mg 12/12 hours and ibuprofen 400 mg 8/8 hours. As the patient did not understand Portuguese, alarm signals and therapy dosage were explained to the husband.

On September 23rd 2011, a family friend alerted us to the fact that her situation had gotten worse, so, the patient's husband was called and recommended to bring her for reevaluation. Two hours later, she came to the unit. During the physical examination, it was visible an ulcer, showing signs of necrosis, at the supra areolar region of the left breast, with suppuration and exuberant inflammatory signs. The patient was referred to the residence area's hospital, where she was hospitalized during 15 days, at the Surgery Service, in order to do necrosectomy and intravenous antibiotic therapy.

Discussion: Puerperal mastitis is one of the factors related to an early abandonment of breastfeeding. Knowing its clinical and bacteriological characteristics, it makes possible interventions, which, in case they are successful, reduce the outcoming of new cases.

This case is also an alert to the need of developing new strategies of communication, in our clinical practice, in a global era, when we are dealing with the increase of multicultural clinical files.

#### P03.06

#### Syncope, more than psicossomatic...

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Context:Syncope is a transient lost of conscience caused by a transitory and global cerebral hypoperfusion, characterized by its sudden beginning, short duration and complete spontaneous recovery. According to syncope classification, it can be nominated reflex, due to orthostatic hypotension, cardiac disorders or cerebrovascular disease.

Description of the case:Female, 42 years, had her first general practitioner's appointment on February of 2008, due to an episode of syncope. At that time, were ordered a complete blood count, biochemical including thyroid function, a thyroid ultrasound and a holter. Concomitantly, the patient resorted to a private Neurologist, who made her an electroencephalogram, which was unspecific. Referred to a Neurology appointment at the residence area's Hospital, she made a brain magnetic resonance imaging that was normal.In September 2010, the patient returns with a clinical report, saying she had been seen in de emergency room due to two new episodes of syncope. After an examination, analysis and an electrocardiogram, that did not reveal alterations, she was discharged and referred to a psychiatric appointment. General practitioner prescribed a holter, an echocardiogram and a stress test, which were normal. Weeks later, she returns saying she had gone to a private hospital's emergency room, after another syncope, where she was medicated with mexazolam and escitalopram. Due to the recurrence of syncope, it was prescribed a brain tomography and the patient was referred to a cardiology appointment. In December 2010, she was submitted to a Tilt Test, which was positive to a Vasovagal syncope with a 2B response (Cardio inibitory assistoly). She was treated with midodrine, without relief of the symptoms. In January 2011, she was admitted to elective pacemaker insertion.

Discussion: This case is an alert to the importance of giving credit to the patient symptoms, and to the need of excluding the organic causes of syncope before attributing the complaints to psyquiatric disorders. Besides that, it calls our attention to the value of a good communication between primary care units and the secondary

care, so that clinical information is not lost in the process and the patient is not submitted to unnecessary and expensive tests.

#### P03.07

#### The importance of history taking in daily practice

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Our case report shows the importance of a good history taking. It reviews as well the differential diagnosis of limbs oedema.

Our patient is a 24 years old woman from Bolivia who attends to our consultation because of acute bilateral limb oedema . She has no previous pathologies or allergies and takes no drugs. Physical examination: BP 120/90, BMI 22, heart and lungs sounds

Physical examination: BP 120/90, BMI 22, heart and lungs sounds were normal, Abdomen normal, Limbs: Bilateral oedema to knees with pitting, palpable pulses, no signs of venous congestion.

Blood tests with hepatic and kidney function, hormones, Urinalysis, proteinogram, Chest X-rays and ECG were taken.

The only abnormality was found in the urinary Proteins: 1000 mg/dL.

In patient's next visit we asked deeply for possible causes of oethema and proteinuria. After a long, calmed and detailed talk with the patient, she told us she had eating disorders, compulsion toward food and vomiting after eating, for several years and she had never told anyone before.

Bulimia can cause arrhythmias, muscle weakness, swollen face, dental caries, limbs oethema, and it is possible to find anemia, high transaminases, hypercholesterolemia, low levels of sodium and potassium (specially in patients with vomiting habits and with use of laxatives). Hematuria, pyuria and proteinuria are also possible to find in these patients.

### P03.08

# Relationship between Doctor and Patient: a rough diamond

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Framework: To cut and to polish a rough diamond delay its time, so also to establish a doctor/ patient confidence relationship will be conquering slowly consultation after consultation, and this unique process is one of the characteristics of General Medicine and Family.

This clinical case highlights the importance for a family evaluation in situations of successive failure in medical consultation and bad adherence to treatments because traumatic events in the past can be at its origin.

Description of the case: Man, 74 years old, retired, Graffar middle-class, nuclear family, with a history of diabetes. The diabetes was diagnosed in 2007 and since 2008, he didn't appear at the Health Unit (HU). In 11/2010 his wife went to an open consultation with letter of Emergency Service, having the patient had an Acute Myocardial Infarction and refused internment. After 9 days, the patient goes to a consultation in the HU and it was made a family evaluation. By building the Medalie's line of life was revealed that one of the daughters died due to Diphtheria and according to the patient "by medical negligence"; it was also revealed that the patient had an episode of Guillan-barr, in which he told "I felt several times neglected". The Circle of Thrower attached great importance to religion and it showed that he was "Jehovah's Witness", which influenced the meaning attributed to the disease. It has created an atmosphere of empathy and it was made psychotherapy. Until now, he never missed a consultation in HU again.

Discution: Like a diamond cutter, that needs time and effort, in some situations the doctor needs the application of familiar evaluation methods to understand and better help his patient. The family evaluation showed that the religion and stressful events of life influence the way the patient experience the disease and these facts were the cause of the posture of the patient before any

proposed medical. In result of that, it was changed the relationship between doctor and patient, creating empathy that didn't exist and that led to some successes, particularly in the appearance to the consultations of clinical surveillance.

#### P03.09

# A case report of lichen planus pemphigoides: a dermatological condition a general practitioner should consider

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The lichen planus is an erythematosquamous dermatosis that affects the skin, mucous membranes, nails and hair. The elementary cutaneous lesion is a polygonal, purple papule with superficial whitish reticulated networks referred to as Wickham striae. These papules are often widespread affecting the flexural areas of wrists, forearms, ankles and the lumbosacral region. The presence of pruritus and positive Koebner phenomenon (the appearance of lesions typical of the skin disease along the site of injury) is characteristic.

The lichen planus pemphigoides is characterized by the development of bullous lesions on preexisting lesions of lichen planus or the appearance of new vesicles on undamaged skin. Case report

A 29 year old male patient attends the office of his general practitioner presenting redness of his feet that appeared more than 5 months ago. The doctor diagnoses him with plantar mycosis and recommends therapy with a topical antifungal medication. This treatment does not seam to be effective so the doctor prescribes a new ointment based on Betamethasone Dipropionate and Calcipotriol changing the diagnosis to stable plaque psoriasis. The lesions start to disappear but after a while he has a new but more severe painful outbreak. He is sent to the Dermatology Department presenting a new lichenous eruption that affects the hands, the soles and the ears and blisters with pretibial and plantar fissures.

The biopsy result demonstrated morphological alterations compatibles with the clinical diagnosis of lichen planus pemphigoides and chronic dermatitis compatible with lichen planus.

The treatment includes Clobetasol 17-Propionate cream 0.05%, Fusidic acid cream 2%, Prednisone (30, 10, 5 mg) and Tacrolimus Monohydrate ointment 0.1%. The patient responds to the treatment.

Conclusion

In general practice the lichen planus is a dermatitis that can be easily diagnosed only by the clinical features (the six P's: polygonal, planar, pruritic purple papules and plaques), nevertheless the lichen planus pemphigoides is a rare dermatitis that can be easily confused with mycosis, psoriasis and other erythematosquamous diseases. The final diagnosis is made by biopsy. Both diseases respond to glucocorticoids in an early stage even if the pemphigoid type is usually resistant and needs an immunosuppressant.

### P03.10 Amaurosis fugax

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Description: a 63 year old man while was driving noticed that he lost his right eye vision.

Personal history: hypertension. Dyslipidemia.

Physical examination: nervous. BP: 167/81 P: 77lpm. SatO2: 99%.

Good condition. Aware and oriented.

Cardiopulmonary Auscultation: rhythm and no murmurs. Breath sounds.

Neurological: normal, except his right eye visual deficit.

The man was send to the hospital.

Ophthalmology: normal ocular fundus. Chest radiography: normal. CT head: normal. ECG: normal.

Then, in the high resolution query: cranial MRI and carotid Doppler were normal.

Development

Differential diagnosis: depending on the duration of blindness: papilledema, meningioma, dry eye, amaurosis fugax, cerebrovascular or carotid disease, migraine, optic neuritis, carotid stenosis, sudden changes in IOP, changes in blood glucose.

Clinical Trial: cholesterol levels were high, which makes us think of the possibility of a right amaurosis fugax. The recovery of vision was complete in a few hours.

Treatment: ASA 100mg, Clopidogrel 75mg, 40mg Simvastatin, Bisoprolol 2.5mg.

Evolution: the patient continues to annual checks in neurology and ophthalmology, normal.

Discussion and conclusions: amaurosis fugax happens when a piece of plate travels from the carotid to the artery of the retina, causing a temporary blockage of blood flow and consequent loss of vision. In this case, our patient used to control his cholesterol levels with diet and it wasn't enough because he had another risk factor: hypertension.

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# P03.11

# Differential diagnosis of the most common plantar erythematosquamous dermatoses in General Practice

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The most common erythematosquamous dermatoses that affect the plantar region are: lichen planus, lichen simplex, psoriasis, secondary syphilis, plantar hyperkeratosis, tinea pedis, contact and atopic dermatitis.

The lichen planus is characterized by symmetrical, bilateral grouped erythematous to violaceous polygonal papules that affect the flexural aspects of arms and legs. The papules can present a whitish reticulated network known as Wickham striae. It is common the pruritus which intensifies by night.

Lichen simplex is characterized by thickened, excoriated patches of skin that can form plaques.

Plaque psoriasis can affect the soles and heels and is characterized by the presence of erythematous hyperkeratotic patches or plaques. The lesions are sharply defined.

Pustular psoriasis shows symmetrical and bilateral erythematous plaques containing multiples sterile pustules with areas of scaling. Secondary syphilis may affect the soles and palms showing a rash of macular, discrete reddish brown non-pruriginous lesions.

Hyperkeratosis is characterized by yellowish thick, dry skin on the heel that can present fissures and bleeding.

The "athlete's foot" is caused by dermatophytes. The pruritus is constant and affects the soles and interdigital spaces. It is characteristic in the advancing erythematous border.

Atopic dermatitis starts with an erythematous eruption of papulovesicles that will become dry and scaly in time. It can also cause hyperpigmentation.

Allergic dermatitis is an inflammatory reaction of the skin due to the contact with an antigen and presents localized vesicles on an erythematous skin. In the chronic form it may present lichenified plaques due to the pruritus.

Case Report

A 76-years old woman consults her general practitioner for presenting multiple painful blisters that appeared on both her feet three months ago. On physical examination she had bilateral

blisters with erythematous borders and pearly purple papules. A treatment with clobetasol ointment is started and a punch biopsy is performed

The result of the biopsy confirms the clinical diagnosis: lichenoid dermatitis compatible with lichen planus. After three weeks of treatment the patient is felling better but she refers new lesions that appeared on the rim of her heels. A prednisone treatment is added at which the patient responds to.

#### P03.12

# A case report of miliary tuberculosis due to BCG intravesical instillation

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The intravesical instillation therapy with bacillus Calmette-Guerin (BCG) is a therapy used for superficial bladder cancer. Generally it is well tolerated, although sometimes can occur complications like fever, urinary tract infection, malaise, asthenia, arthralgias, arthritis, osteomyelitis, sepsis, hepatitis, pneumonitis. The mechanism of the development of infectious complications is considered to be a hypersensitivity reaction or an active infection. Case report: A 63 years old man attends his general practitioner presenting fever, asthenia and malaise ongoing for 3 days. Medical history: gonarthrosis, Helicobacter pylori gastritis, right inguinal herniorrhaphy, rectal polypectomy. In March of 2010 was diagnosed with non-invasive bladder cancer, for which receives a TUR (transurethral resection) in June. In February of 2011 receives another TUR for 2 new lesions in the bladder. He received 3 cycles of intravesical BCG immunotherapy as adjunctive therapy, the last one being more traumatic than usual. The physical examination was not conclusive. The urine test strips reveals leucocytes and erythrocytes, thus an antibiotic treatment with ciprofloxacin is being started. With no change in his status, the patient is admitted to the hospital and a new antibiotic treatment is initiated (vancomycin and imipenem). The blood analysis reveals leukocytosis, high acute phase reactants and slightly high transaminases. Urine culture and blood cultures are both negative. The serologic tests for Brucellosis, S tiphy, VHC, VHB, HIV, R. Conorii, EBV, RPR, TPHA are negative. Fine needle aspiration of bone marrow and mycobacterium study is negative. Chest radiography reveals micronodular infiltrates and the CT scan informs of numerous micronodular infiltrates in the lungs with a diagnosis of miliary tuberculosis. The antibiotic treatment is being stopped and initiated a treatment with isoniazid, rifampicin and ethambutol. The patient continues with fever and a treatment with prednisone is added. A new blood test reveals a normal leukocytes count, a slight anemia and the acute phase reactants and transaminases begin to normalize.

Due to the clinical stability and the blood analysis results, the patient is discharged continuing the treatment with antituberculosis drugs and a decreasing dosage of prednisone.

# P03.13

# Is it really Addison's disease-case report

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Being a primary care physician is a very responsible job and knowing your patient holds the key to proper diagnosis.My 62 years old female patient,who suffers from hypertention and stable angina pectoris comes to my office and complains of general weakness and fatigue.Her physical examination and lab shows no abnormal findings.She was sent to local hospital for further evaluation,but the cause of her problems stayed unclear.Two months later she feels even worse with frequent stomach pains and nausea.She brings the lab test that she did on her own showing elevated CRP and potassium level of 6,6mmol/l.Her

daughter says that she noticed her mother feels insatiable hunger after afternoon rests. Elevated potassim level and suspected hypoglycemia rang a bell in my mind for suspected Addison's. I sent the patient for reevaluation to the local hospital. New ultrasonographic examination showed tumor on her right kidney (wasn't present two months earlier) and CT confirmed the same, but also numerous lesions were seen in the lungs, as well as plenty of enlarged lymphnodes in retroperitoneum. Patient was sent to National Institute of oncology where she was diagnosed with stage IV ovarian cancer. Chemotherapy was applied, but unfortunatelly she died four months later. This case, once again, proved that listening to patients complaints is more than half the diagnosis, which we often forget burried in paperwork and dazzled with novel diagnostic machines.

#### P03.14

#### Case report: Living a week with pneumothorax?

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Introduction: Primary spontaneous pneumothorax (PSP) occurs without a precipitating event in the absence of clinical lung disease. In contrast, secondary or complicated pneumothorax results from trauma or pulmonary diseases. Nearly every lung disease can be complicated by secondary spontaneus pneumothorax (SSP), although it is most commonly associated with chronic obstructive pulmonary disease.

Case: A 79-year-old male patient had a sudden onset chest pain on the left side of his chest, left shoulder and lower back that spread to the left side; with accompanying cough. His complaints became evident with exertion, but at rest, though more comfortable, he expressed that the pain was continuing. After rest at home for a week, who did not go to any health care institution, he was admitted to internal medicine outpatient clinic of the Gulhane Military Medical Faculty because of his continuing complaints. He had a 72 pack-year smoking history and stage 1 chronic obstructive pulmonary disease (COPD). He was conscious, with vital signs of arterial blood pressure 120/70 mmHg, pulse 76/dk, respiratory rate: 20, body temperature 36' C. There were decreased respiratory sounds in all zones on the left lung auscultation, and ronchi at the right baseline. Other systemic examination was normal. Due to the forefront of clinical signs and symptoms of cardiopulmonary causes in mind, electrocardiogram, chest radiography, cardiac markers, complete blood count, CRP and other routine tests were planned. The patient had T inversion in leads D2, D3 and AVF derivations but repeated cardiac markers were found in the normal range. After lung X-ray, which was compatible with the appearance of pneumothorax on the left, the patient was referred to Thoracic Surgery Clinics. Tube thoracostomy was performed. Patient developed no complications during or after the process and complaints declined significantly. Postoperatively, on the 4<sup>th</sup> day, drain was pulled out and a thorax CT was taken. With no additional lung pathology, patient was discharged to come outpatient control. Discussion: In patients with good overall situation, long-term history of cigarette smoking or COPD and without an obvious respiratory distress, a differential diagnosis of "secondary pneumothorax" should always be kept in

### P03.15

### Cutaneous mastocytosis in a child

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# Aim and background:

Mastocytosis is a rare disorder of unknown incidence. Among children, 80% of the cases appear during the first year of life and

improve or resolve spontaneously until adolescence. Most cases are limited to the skin, with the maculopapular form being the most common. One of the worst complications of mastocytosis is anaphylactic shock, which is rare but can be fatal. We report a case of cutaneous mastocytosis in order to alert to this rare and potentially fatal disease.

. Results:

A 4 month old boy visited his general practitioner (GP) for a routine visit. He had been hospitalized 2 months ago for 20 days due to bacterial meningitis. The GP noticed small, round, reddish-brown macules and papules on the abdomen, thorax, lower limbs and face, as well as plaque-like lesions on the axilla. There were no other findings such as organomegaly or lymphadenopathy. The child's mother stated that the lesions worsened after the warm bath and varied in their presentation with time. The child was referred to a dermatologist who performed a biopsy which revealed cutaneous Mastocytosis. Further testing ruled out systemic mastocytosis. The parents were educated to avoid triggers and to recognize and treat anaphylaxis (an epinephrine pen was prescribed).

Conclusions:

The usual benign prognosis of the disease tranquilized the parents. However it is mandatory to rule out systemic forms of the disease. The education to avoid triggers (infections, some antibiotics, NSAIDs, anesthetic drugs and hymenoptera stings) has also the advantage of programming medical and eventual surgical care in the future. Failing the diagnosis could result in failing the treatment when anaphylaxis presents.

# P03.16 Is just a matter of cold?

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Framework: CREST Syndrome is a scleroderma's clinical form, characterized by calcinosis, Raynaud phenomena, esophageal dysmotility, sclerodactily and telangiectasia. Usually, cutaneous involvement is limited to distal extremities and, compared to scleroderma, the progression is slower, prognosis is more favorable and visceral affectation may not occur. This work's objective is to describe a clinical case of CREST Syndrome, focusing on the family doctor's role in early diagnosis and management.

Case report: Woman, 38 years old, caucasian, married, , belonging to a nuclear highly-functional family, upper middle class of Graffar, IV phase of Duvall cycle, without relevant personal background. On May 2008, she reported paleness and sensations of cold and numbness of both hands since one year ago, which seemed compatible with Raynaud phenomena. Routine blood test with auto-immune profile were carried, showing the presence of anemia (Hb 11,9g/dL) and anti-nuclear antibodies. She was referred to the Rheumatology consultation for confirmation of the diagnostic hypothesis of CREST on January of 2011, periods of polyarthralgia on the superior limbs started. With a higher clinical suspicion, the study for CREST syndrome was completed, conducting to the confirmation of the diagnosys. She was prescribed with ledertrexate2,5mg, 4 pills a day, since then, with clinical stabilization. Curently, the patient is followed-up by her general physician and in the specialty consultation.

Conclusion: This clinical case aims to demonstrate the importance of general physician's attention and the persistence relatively to the complaints and worries of the users. The early identification and referral, of some clinical cases, is of prime importance for their control, leading to a better management and improving patients' quality of life.

#### P03.17

Alveolar rhabdomyosarcoma botryoid-grade 2 from the clinic pediatrician-show

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Introduction: Rabdomiosarcom one of the most aggressive malignant neoplasms in children. More often in boys than in girls, usually aged between 2 and 6 years, rare in adults. It can occur in any muscle tissue, mostly in the head and neck, pelvis and extremities, noticing the island / palpable node. Data study of world-larger share of small pelvis as the primary tumor localization. Purpose: To show the rare disease in children / chosen role of doctors in primary care with limited diagnostic capabilities.

Methods: medical history interview, a complete clinical examination, biochemical, radiological treatment, histopathologic findings.

Case report: A girl aged 24 months, 15.5 TT, 87 TV, Conscious, oriented, afebrile neat vital functions / skin and visible mucous membranes usually painted, with no pathological efflorescences, without increased Igl.Gr.koš: regular, respiratory driven on both sides, ausk. cor et Pulmo b.o. Abdomen.b.o. Limbs: actively moving without swelling and deformity. Right inguinal region of the labia majora tumefakt roundish, palpatory painless size 10 mm. Personal history: properly vaccinated, denies allergies, so far healthy bila. Porodična history: bo echo changes: in the region of the right labia majora, and suprapubic heteroehogena visible mass clearly limited with hypoechoic central part, with visible paravezikularnim kiln vratima. Upućena dj surgeon: after standard preoperative preparation, surgical exploration of the changes. Take tumor markers AFP, CEA, Ca 125, beta-HCG. Ph finding: round blue cell tumor Alveolar rabdomyosarcoma. Uradjen the CT examination of the abdomen and pelvis, X-ray of the lungs (no pathologic changes). Oncologist sent to: chemotherapy according to the protocol CWS 2009th

Conclusion: The most common tumors - sarcoma of soft tissue, about 5% of malignant extracranial tumors of childhood. Diagnosis - biopsy / histopathological findings of tumor tissue attacked. Using ultrasound, X-ray, scintigraphy, MRI, and lumbar puncture, bone marrow, are excluded metastaze. Ima rapid evolution, hematogenim-limfogenim way, metastasizes to lymph nodes, bone marrow and bone therapy: a combination of surgery, chemotherapy and radiation.

Prognosis depends on the stage and extent of disease, age, location and histological type. Significantly, early-detection tumora. Prognoza good in about 65% of patients.

### P03.18 Persistent hiccups

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Hiccups are usually a benign and self-limited sign, resolving spontaneously in few minuts. Sometimes they can be persistent and hard to control, demanding the research of an organic cause. We describe a case of persisting hiccups with a quick fatal ending. Male, 56 years, administrative officer, inactive for 18 months because of depressive syndrome due to laboral problems.

Personal priors of Pituitary Adenoma (1995), submitted to surgery followed by Radiotherapy; currently followed in Endocrinology appointment. Last MRI (April 2010) showed no lesions or any abnormalities.

The Patient went to ER on the October 15th 2011, with complains of persistent hiccups, lasting for a week, associated with motor lentification, apathy and two episodes of nocturnal enuresis. It was performed a CT scan that showed a frontal intra-axial lesion, compatible with advanced Glioma. He was discharged from the ER with corticotherapy and phenytoin, with subsequent follow-up by Neurosurgery appointment. Due to the lesion characteristics, it was proposed for palliative treatment only.

On November 13th, the patient went back to the ER with prostration, aphasia, low response to stimulae and dyspneia, and remained in observation. He died on November 15th due to Respiratory Distress secondary to Pneumonia.

Hiccups can have multiple etiologies that should be carefully investigated by the family doctor.

# P03.19 Case report of adult Still's disease

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Adult Still's disease is a rare, systemic inflammatory disease of unknown etiology characterized by daily high fever, transient rash, arthritis, lymphadenopathy, hepatosplenomegaly, pleuritis or pericarditis.

Case report of a 23-year old patient who has come with fever up to 40 °C, sore throat, weekness and artralgia. Physical examination revealed generalized enlarged solitar lymphatic nodes, weakened heart tones and hepatosplenomegaly. Laboratory findings showed sedimentation rate 94, leukocytosis with neutrophilia (leu 15.7x109/l, neutrophils 87%) and value of plateles 81x109/l, AST 100 IJ/I, ALT 366 IJ/I, ALP 159 IJ/I and CRP 152 mg/L. The general practitioner decided to aplicate oral penicillin drug. The efficacy of ATB therapy has not been succesfull and the patient has been admitted to the Institute of Infectious diseases. The microbial examination excluded the infectious origin of fever (ASLO, anti-HIV, RRR, HBsAg, anti-HBs, anti-HCV, antibodies against leptospirosis, Chlamydia, BAB). Due to persistence of fever and positive microbial test from urinoculture (Enterococcus) the fluoroquinolone and cephalosporines have been administered. The sonography confirmed pericarditis and hepatosplenomegaly. The tests of autoimmune phenomenons (ANA, ASMA, ANCA, ALKM1) have been negative.

The final diagnosis of Morbus Still adultorum was determined 2 months after his admission to hospital and he got immunosupressive therapy with very good clinical and laboratory responses.

It's important that physicians in cases of unknown etiology of fever

keep in mind also the existence of adult Still's disease.

#### P03.20

# Exercise-induced rhabdomyolysis: A case report

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**Intraduction:** Rhabdomyolysis is a condition of skeletal muscle destruction (trauma, excessive exercise etc.) with leakage of muscle contents into plasma and clinically presented with fatique, weakness and tea-colored urine. In this case we described a patient complaining of only dark urine without fatique and weakness.

Case: A 26 year old male presented to our Emergency Service complaining of tea-colored urine after an exercise one day prior. On first presentation general medical condition was well, vital signs and physical examination were normal. His history was insignificant and did not report a drug taking neither acute nor chronic. Blood count and urine dipstick were unremarkable. Biochemical blood work showed an elevated LDH of 8020 U/L, a raised AST of 650 U/L and an ALT of 44 U/L with normal urea (26 mg/dl) and creatinin (1.02mg/dl). Therefore the patient was transferred to internal medicine service for oral and intraveneous hydration, fluid electrolyte monitoring and further evaluation. A detailed questioning revealed the absence of usual sport activity in patient's routine lifestyle except a high intensity an hour duration weight lifting exercise one day prior (severe and unaccustomed exertion). After detecting elavated plasma level of CK as 74.700 U/L (normally 24-190), with a diagnosis of rhabdomyolisis, intraveneous 0.9% NaCl infusion was planned (250 cc/hr). After one week follow up period circulating CK levels slowly normalized (day 3; 11.900 U/L, day 5; 4141 U/L, day 7; 537 U/L). Finally in day 8 CK level was normal with 358 U/L. Following eight days of

hospitalization, the patient was discharged home without renal complications and with normal circulating levels of LDH, AST and Al T

**Discussion:** In primary care, the management of patients complaining of muscle soreness, weakness and tea-colored dark urine should include detailed questioning about predisposition factors such as drugs, alcohol, muscular trauma and especially excessive exercise. As seen in that case, manifestation of muscle brekdown can ocur with dark urine complaint without muscle soreness and weakness. So that a detailed questioning for trauma and excercise should be concerned. Lack of awareness of this condition may result in severe consequences including renal failure and fatal cardiac arrhythmias.

#### P03.21

# Depressive episode in an elderly patient secondary to brain tumor - Case report

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Introduction: Depression in the elderly population is a major public health problem. It has a high prevalence, is frequently co-morbid with medical illnesses, impacts negatively on quality of life and carries a high risk of suicide, especially in men. We present a case of depressive episode induced by a frontal lobe tumor without accompanying neurologic deficits.

Case Presentation: A 78 year-old -female presented to the geriatrics clinic as a referral case from her family physician for affective and cognitive evaluation. She presents with a 7 year history of depressive symptoms related with the death of her husband and recently showed an exacerbation during the last 4 months. The condition was characterized by feelings of sadness or emptiness, diminished ability to concentrate or make decisions and recurrent thoughts of death without suicidal ideation. Her medical history regarding psychiatric and other medical conditions was unremarkable. The patient reported a positive family history of depression. The general physical as well as neurological examination didn't reveal any neurological deficit. The Geriatric Depression Scale (GDS) score of 10, whereas the laboratory evaluation including TSH was within normal limits. A head computed tomogram (CT scan) revealed a large right frontal mass, partially calcified with necrosis without edema or shift of the midline structures suggesting meningioma. The following MRI (contrast-enhanced) was consistent with a solitary large (5.5 x 5 cm) compatible with meningioma. Therefore a consult was sent to neurosurgical department for further management.

Discussion: Some organic processes, such as brain tumors, are accompanied by psychiatric symptoms, (affective, psychotic, and behavioral disorders). Depression is often overlooked in the elderly, contributing to a greater risk of suicide in this group than in vounger patients

Scholarly Question: Is there any indication of neuroimaging examinations in evaluation of depressive conditions even in the absence of focal neurological signs?

Conclusion: With this we show that in some cases, brain tumors can be neurologically silent and only present atypical psychiatric symptoms. We emphasize the need for neuroimaging studies in a patient with atypical changes in mental status, even without neurological signs or symptoms.

#### P03.22

"I `m relieved that`s not cancer Doctor!"

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#### Introduction:

Pulmonary tuberculosis (TB) is an infectious disease that presents as main symptoms/signs: fever, cough, night sweats, weight loss, hemoptysis, anorexia and fatigue. Despite the decline of

tuberculosis cases, Portugal is one of the European Union countries with a high rate of notifications.

Case Report:

A 47 year old male, caucasian, married, merchant, smoking 40 cigarettes / day, with a past medical history of type 2 diabetes, went for the first time to his family physician in the 25/05/11 for a "routine evaluation", complaining of non-productive cough since 2 months ago, weight loss (5 kg), without fever. Findings of his physical examination were normal, except a slight decrease of breath sounds in the right lung. It was requested chest radiography.

In the 14/06/11, the patient returned to the doctor to show the chest x-ray, that revealed hilar and bilateral perihilar opacities, of moderate level in the left side. This doesn't exclude a parenchymal component of inflammatory pneumonic nature in the right perihilar region", being necessary image control within a month. He was treated with amoxicillin and clavulanic acid, for 8 days.

In the 19/07/11, the patient came back to the consultation, reporting that keeps non-productive cough and feels tired. The chest X-ray revealed "discrete locking of the right costodiaphragmatic angle, translating sequelae of old pleural effusion... there is a right perihilar pseudo-cavity image". Thus, chest CT, Ziehl-Neelsen staining and culture examination of lower respiratory tract samples have been requested. In the 25/07/11, a relative came to the doctor and showed the chest CT, which revealed "right pleural effusion, multiple bilateral nodular opacities with consolidation and cavitation of the lower lobe suggesting tuberculosis ". For suspected pulmonary tuberculosis, the patient was referred to the Pulmonary Diagnostic Center and was confirmed the diagnosis of TB.

Discussion:

This case aims to remind the importance of the several radiographic changes of tuberculosis that, initially, may lead to the formulation of other differential diagnoses. TB is a disease of difficult clinical diagnosis which requires a high index of suspicion due to presence of nonspecific symptoms.

# P03.23 Juvenile multiple xanthogranuloma

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Juvenile xanthogranuloma (JXG) is the most common form of non-Langerhans cell histiocytosis. It is a self-limited dermatologic disorder that is rarely associated with systemic manifestations.

JXG consists of lesions that may be single (80-90%) or multiple and appear as firm, slightly raised papulonodules several millimeters in diameter. They are most often the same color a surrounding skin, but may be reddish or yellowish.

The majority of patients are children less than two years of age who have skin nodules on their head, neck, or trunk, but many extracutaneous sites have been reported.

The eye, particularly the uveal tract, is the most frequent site of extracutaneous involvement. Iris tumors may be diffuse or localized and lead to heterochromia, uveitis, spontaneous hyphema, and secondary glaucoma.

An association with neurofibromatosis type 1 and juvenile chronic myelogenous leukemia has been reported.

In the absence of therapeutic intervention both cutaneous and extracutaneous lesions involute spontaneously within 3-6 years although, occasionally, surgery is indicated for localized iris lesions. Case report:

A 14-months-old child who when he was 2-months-old presented a 5 mm reddish papule in trunk without inflammatory signs. He was referred to dermatology department for assessment. Later, more reddish papules and some little yellowish plates appeared in trunk. Personal history: umbilical granuloma cauterised with silver nitrate, cradle cap and retroauricular complicated eczema.

Familiar history: father narrates GH deficit treated with growth hormone.

A papular biopsy was performed and the pathological study reveals an image of fusiform cells juvenile xanthogranuloma. As

there were several lesions it was classified as nodular progressive histiocytosis.

Abdominal ultrasound, echocardiography and ophthalmologic exploration didn't reveal extracutaneus involvement. They have been repeated each three months and have remained normal.

Nowadays the child continues the follow-up in the Department of Dermatology and he has a normal development. Conclusions:

Juvenile xanthogranuloma is mainly a clinical diagnosis, which should be confirmed histologically.

Those at greatest risk of ocular involvement are children younger than 2 years with multiple skin lesions. These patients should be referred to an ophthalmologist, and continue periodic screening through the second year of life.

#### P03.24

# Clinical approach of epidermoid carcinoma in an elderly patient

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A ninety-four years old male patient with a diagnosis of chronic lymphatic proliferative process stage 0 who came to Primary Health Care because of a retro auricular abscess. After several unsuccessful outpatient antibiotic treatments he entered the Hospital Emergency Room were he was given a diagnosis of possible reactive lymphadenopathy . He had a blood analytical with leukocytosis .

A treatment with corticoids and daily nursing care was initiated.

Two months later he developed a facial palsy and a cranial CAT scam plus a biopsy were ordered with a final Diagnosis of Infiltrating epidermoid carcinoma . The patient was remitted to palliative care. From that moment on it ensued a progressive deterioration of his general state with a reduction in strength of his legs and fever.

Palliative care kept him on a treatment with transdermal fentanyl, levomepromazine and analgesics. Thereafter the patient's condition worsened presenting agitation, pains and incapacity to eat. A treatment with an IV drip of midazolam, levomepromazine and morphine was initiated.

The patient refused hospitalization dying at home.

#### P03.25

# When skin translates a genetic disorder---

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Introduction: Neurofibromatosis refers to two distinct genetic disorders, neurofibromatosis type 1 (NF1) and neurofibromatosis type 2 (NF2). Neurofibromatosis type 1 is an autosomal dominant disease, which affects about one in every 3000 to 4000 people. It presents a great variability of clinical manifestations, involving the skin, nervous system and bone. One of the most noticeable characteristics of the disease is the development of neurofibromas. Case Report: Female patient, 65 years, caucasian, divorced, with a past medical history of hypertension, dyslipidemia, and neurofibromatosis type 1. She has been treated with indapamide 1.5 mg and simvastatin 20 mg. Family background: father with Neurofibromatosis type 1 (death at 55 years). The patient said that her sister, two daughters and two grandchildren also have NF1. Came to consultation complaining of irritability, insomnia and sadness, saying that she doesn't like how people look at her. On the physical examination of the skin, there were seen multiple cutaneous neurofibromas, with 2 cm of diameter, placed\_on the back, and some of them with 0.5 cm placed on the upper and lower limbs and chest. She also presented bilateral axillary freckling and two "café au lait " spots on the trunk. It is advised the periodic evaluation of the family members with the disease. It has

been diagnosed depressive syndrome and treated with fluoxetine 20 mg.

Conclusion: This case wants remind all family physician for an uncommon disease on the primary health care: Neurofibromatosis type1. Despite all organic changes on patients, it is also important to take care of their mental health. Besides this, NF1 also modifies the appearance of the person and can affect their interpersonal relationships. NF 1 is a genetic condition, so the family physician has a key role in excluding the disease in other family members.

#### P03.26

### Paget's carcinoma of the nipple - Case Report

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Paget's carcinoma of the nipple (Paget carcinoma mamillae) is a special form of breast cancer which is usually found in ductal epithelium and along the surface channels of the breast, also including nipple and breast areola. It occurs in women aged over 60

Paget's carcinoma was first described in 1874. With this type of cancer, primary cancer lesion is intraductal and usually well differentiated and multicentric in the area of nipple and breast duct. It is very rare - it occurs on average in about 2% of all the breast cancers and it is primarily found in the nipple area. Symptoms occuring on the nipple and areola of one breast with no propagation into the surrounding breast tissue is the most common clinical picture. Epithelium of the nipple is infiltrated. The first symptom is an itching or burning sensation in the nipple area. Ulcers and erosions usually occur in the later stages of the disease

Diagnosis is easy to set up by biopsy and analysis of PH erosion. All the forms of skin lesions such are contact dermatitis or suspicious Melano changes in the nipple region or any other form of skin deformity filled with fluid should be first and foremost regarded as Paget's disease. Furthermore, they should be treated as such until the diagnosis is confermed or disregarded.

It should also be noted that despite a palpable finding and postmastectomic histological analysis, along Paget's disease there are ductal, medullary, lobular or papillar form of breast cancer. In most cases in patients with palpable tumor metastases already exist. If the changes are limited solely to the nipple, metastases would occur only in 5% of all cases, which would significantly increase the chances of patient being cured.

# P03.27 Learning from our practice

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There will be presented five patients who came to family doctor for acute medical problems,but complete physical examination and screening tests changed the presentation diagnosis.

Case no.1 :52 years old patient,male,smoker,with chronic bronchitis(monitoring by his pneumologist,with repeated chest-Xray) came to my office for an acute pain in his left calf associated with focal seizers(registered by pacient who used his mobile phone). It wasn't a sciatic nevritis as we thought but a frontoparietal brain tumour, a metastasis from bronchopulmonary cancer.

It is the case of a patient with risk factors diagnosed with pulmonary cancer by brain matastases.

Case no.2:58years old patient,male,seeking medical attention for right quadrant abdominal pain,but physical exam diagnosed arrhythmia(atrial fibrillation). After we control his cardiovascular diseases a colonoscopy was done which described displasic polyps.

Physical exam added new elements which influenced the investigation plan and the treatment.

Case no.3:83 years old patient,male, with multiple comorbidity ,who came for headache.It was a dental problem for his headache but

even if we solved it the patient continue to have an inflammatory syndrome. The diagnosis was prostate adenocarcinoma.

Because of the screening tests which were not done in time an advanced cancer was diagnosed.

Case no.4:52 years old patient, female, was diagnosed with liver chirosis, but the mammograthy done as a screening showed a breast tumour (breast adenocarcinoma).

Complete evaluation of the patient give information which could change the prognosis of disease and its treatment.

Case no.5:61years old patient,alchoholic,non-smoker came to my office for weakness and weight loss.Physical exam and investigations diagnosed a liver chirrosis,but other pulmonary tests(chest x-ray,thorax CT,bronchoscopy ) established the diagnosis of tuberculosis.

Two seriouse diseases were diagnosed almost at the same time with very bad prognosis for the patient.

Conclusion:

In primary care, even if we focus on the main problem of the patient, complete clinical assessment and recommendation for screening tests should be done in order to establish an accurate diagnosis and treatment and for better appreciation of the prognosis.

#### P03.28

#### An Oldest Cost Effective Method: The Art of History Taking

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Fifty seven years old female patient admitted to our outdoor patient clinic with the complaint of diarrhea up to eight times every day for the last eigth months. She had consulted many physicians in order to relieve crampy pain over the epigastrium spreading to whole abdomen and diarrhea. Diarrhea was watery, explosive in nature and contained no blood, mucous material and no other clue that may be associted with any gastrointestinal system disease. Previous microscopic and culture analysis of stool revealed no abnormality. Upon persistent symptoms and discomfort the patient had been referred to tertiary care center where colonoscopy had been applied to rule out the malignancy and other diseases of the gastrointestinal tract. Concurrently taken biopsy colonoscopy revealed no etiology other than minimal ischemic changes and eosonophilic infiltration. Patient had been used many drugs including antibiotics to get some degree of relief. The patient was evaluated throughly and asked not to use metformin for one week. The patient seen at the end of one week with complete remission from the crampy pain over abdomen and upto eight times explosive diarrhea per day

#### P03.29

# Paroxysmal atrial fibrillation - Why anticoagulate?

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Aim(s) and background: Atrial fibrillation is a condition well known as risk factor for thromboembolic events, like myocardial infarction and stroke. It's a frequent situacion seen in Primary Health Care. Risk scores (CHADS2 and CHA2DS2VASc) have been developed to stratify risk within this population, along with a score to determine the bleeding risk (HASBLED) of this therapy. Anticoagulation has been widely used to prevent these adverse outcomes in those who are found in higher risk. Recent guidelines from the European Society of Cardiology (2010) advise that patients with paroxysmal AF should be regarded as having a stroke risk similar to those with persistent or permanent AF, in the presence of risk factors. Our aim is to enhance the recognition and the adequacy of this guidelines in the context of Primary Health Care

Material and methods: A 83 year old woman, caucasian, with previous history of hypertension, diabetes and dyslipidemia, looks help for oedema, pain and heat in the legs and also with palpitations. On physical examination the pulse was rhythmic with

controlled frequency and no other relevant features. After having an echocardiogram and a holter EKG, she is found to have paroxysmal atrial fibrillation. After the CHA2DS2VASC and HASBLED scores were analyzed, it was decided to initiate anticoagulation with warfarin. The patient initiated warfarin, and successfully maintained INR within target levels. One month later, she goes to the hospital, with newer palpitation symptoms, and is found to have a cardiac rhythm disorder-flutter.

Conclusions: This case report emphasizes the advantages of treating paroxysmal atrial fibrillation in the same way as permanent atrial fibrillation, since it is a risk factor to recurrence of atrial fibrillation, as well as to other cardiac rhythm abnormalities, which predispose to serious thromboembolic events.

#### P03.30

# The case report of methimazole-induced cholestatic jaundice in patient with hyperthyroidism

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Despite the widespread use of methimazole for treatment of hyperthyroidism, little is known about its rare but serious adverse effect - severe cholestatic jaundice. Only 20 cases of cholestatic jaundice induced by antithyroid medications were mentioned in the literature. The 1 case of this adverse effect we had in our practice. A 26-year-old woman came to our practice with symptoms of weight loss, palpitations and hand tremors. After the examination the diagnosis of Graves Disease were established based on elevated plasma thyroxine (T<sub>4</sub>) level of 3,42 ng/dl (normal, 0.89-1,76), triiodothyronine ( $T_3$ ) - 12,98 pg/mg (normal, 2,3-4,2), low thyrotropin level - 0,008 (0,4 - 4,0 U/L), positive antybodies to thyrotropin' receptors. Treatment was started with 10 mg of methimazole and 20 mg of propranolol, each three times daily. The 20 days after starting methimazole, the patient began to have generalized pruritus and jaundice. She had no history of alcohol intake or liver disease. The liver function values were: total bilirubin 115 mmol/l (normal, 0.1-20); aspartate aminotransferase (AST) 180 mmol/l (normal, 1-45 U/L); alanine aminotransferase (ALT) 354 U/L (normal, 1-55 U/L); serologic tests for hepatitis A, B, and C were negative. The antihistamines and hepatoprotectors were prescribed without effect. Despite of decreasing the methymazole dosage due to thyroid function, the levels of total bilirubin, AST, ALT continue to increase. Three weeks later after normalization of thyroid function methymazole was discontinued and the jaundice and pruritus disappeared after several weeks. But later the level of  $T_3$  was increased again, that was the cause of restarting metimazole therapy and leaded to renewal of jaundice and pruritus. Methimazole-induced cholestasis diagnosed, which symptoms had completely resolved after the discontinuance of methimazole. The patient was hospitalized for

General practitioners and patients should be aware of such rare adverse effect of metimazole as reversible cholestatic jaundice and discontinue methimazole therapy when it has occurred. It will help to avoid unnecessary invasive procedures, mistakes in diagnosis and treatment.

# P03.31

How to manage health care resources and what means do we have in Portugal? About a case report

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FRAMEWORKPerson-centered approach, geared to the individual, the family and its social context, should govern Family Medicine's practice. Therefore, Primary Care should be the first contact with the national health care system and a network of integration, support and intervention in the community. The work environment of a GP is as varied as its patients - we mean doctor's office,

schools, community organizations and the most protected of all home.We propose a global "trip" by these considerations. CASE REPORT

Female patient, 56 years old, caucasian, retired on disability, single, family unit in phase VIII of Duvall's classification and lower middle class.Personal history of obesity, hypertension, diabetes mellitus type 2, steatohepatitis, depression, anemia (lack of folate and iron).

18/10/2011: asks his Family Doctor for home visit - she has pain and local edema in left breast. It is prescribed oral antibiotic and requested continued care for reabilitation.16/11/2011: the social worker of the institution that gives her some support tells us that the clinical status is worse, even after going to the emergency hospitalary service and being given a prescription of diclofenac and tiocolquicoside.18/11/2011 a new home visit is required - now, patient is totally dependent for daily activities, not walking and with swelling, redness, and tenderness in the breast, neck, upper limb, ipsilateral abdominal quadrants and left thigh. She was sent to hospitalary emergency because it was considered the need of endovenous antibiotic therapy - patient was observed and sent home without any medication or therapeutic plan.

25/11/2011: clinical status deterioration - patient was sent once more to the hospitalary emergency; he was admitted for treatment in hospitalary enfermary; died on the 30/11/2011. DISCUSSIONWith this case report, it is intended to approach WONCA's european definition of General Practice: "(...)efficient use of health care resources through co-ordinating care, (...), and by managing the interface with other specialities taking an advocacy role for the patient when needed."

This case report let us have a review on matters such as doctorpatient relationship, communitary management of health care resources and how to optimize them.

### P03.32 Marjolin's ulcer - a typical outcome

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This case report was made by it's authors during a Dermatology traineeship at Centro Hospitalar do Alto Ave - Guimarães.

The case is about a male subject, 34 years old, with a background of a skin burn in his right leg, at the age of four, from which resulted a permanent scar. He was sent by his Family Practitioner to Dermatology for an ulcerative lesion on the burn scar, with 6 weeks of evolution, growing progressively (by that time, the ulcer had 1,5cm). The wound was painless, very friable, with elevated margins and a surrounding erythematic plaque, having had no improvement after antibiotics and nurse care. Two skin biopsies were made, , whose pathologic exam revealed a malignant invading epithelial neoplasia with Spinocellular Carcinoma characteristics. The patient was then transferred to the Portuguese Institute of Oncology - Porto, where he underwent wider excision with graft.

This story illustrates a typical case of Marjolin's Ulcer, which is defined as a malignant transformation (mainly Spinocellular Carcinomas) in chronic ulcers, fistulas and scars from various etiologies (being burns the most frequent).

With an incidence ranging from 0.77% and 2%, thelatency period is about 30 years, being the average age of onset of neoplasia the 5th decade of life.

Clinically, these ulcers do not heal, increase in consistency, with unpleasant odor, high edges, nodules and increasing pain. Compared to other forms of Spinocellular Carcinoma, the Marjolin's Ulcer has a particularly aggressive behaviour, with high rates of recurrence and methastization. The whole body can be affected, but lesions are most frequent in the extremities, trunk, and scalp. In turn, the lymph nodes are the most common sites of methastization, followed by the liver, lungs, bones and brain. The diagnosis is made by performing multiple biopsies in different locations of the suspected lesion. The standard treatment is extended excision , possibly associated with radiotherapy, followed by grafting.

With this case report, the authors intend to alert for the importance of preventive care on this type of lesions, namely vigilance,

adequate early treatment and periodic review, as they have an aggressive evolution.

#### P03.33

#### Tuberculosis of neck lymph glands - A case description

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Aim. To show on early and right time diagnosis specific process, and thus on early

initiation of casual therapy.

Method. Medical record, medical documentation, interview with patient, years-long retrospective.

Results. The patient D.M., female, 61 years old, appeared in 2003. because of painless neck swelling. Clinicaly was observed several tumefactions in left submandibular region, painless, mobile, skin intact. Lab: SE 10/20; WBC 5,6; glycaemia 16,2; X-rays lung: normal; ultrasound of neck: in left submandibular region five oval, sharply limited anechogenic changes that corespond to cysts. Hypoglycaemic given orally, antibiotic therapy and oncologist consulted who direct MF surgeon whose response is to continue the antibiotic therapy and sent her to hematologist. During that year and 2004. laboratory analyses didn't deviate from the reference:SE 22/46···18/42; WBC 8,7···8,6; glycaema unregulated 8,7···9,2. During 2006, -7, -8 i -9. irregulary occures due to other problems stating that" glands doesn't bother her and were reduced".

In May 2010. states again neck swelling same characteristics. Lab:

SE 20/---; WBC 5,1; glycaemia 11,8 and for the first time changes in RBC 3,81; HGB118; X-rays lung: normal; ultrasound of neck:solid conglomerates, changed lymphoglandural structure, size 20-30mm which indicates neoplastic process by radiologist's report.

"Tumor" extirpation was done. Pathohistology verification was: tuberculosis lymphoglandularum caseoproductiva. It was started with initial hospital two months and extended ambulatory four months tuberculostatic's treatment. Now, she feels good.

Conclusion. Neck lymph glands tuberculosis without presence hearth on lung is rare disease. It manifests itself by increasing the non-sensitive lymph glands hard consistency which coalesce together and make cold abscess with possible fistulisation-scrofulosis. It wasn't come fistulisation in this case, but Mantoux tests was neglected which would probably have pointed to tuberculous infection sensitized organism.

Thus, in daily practice, we have to think about specific process, and never start diagnostic procedure by neck lymph gland biopsy if suspicion about malignant adenopathy. Sistematic searching for the primary tumor must be preliminary to biopsy.

#### P03.34

# Acute pancreatitis in a child: first manifestation of cystic fibrosis

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Cystic fibrosis (CF) is an autosomal recessive disorder caused by a mutation in the gene for the protein cystic fibrosis transmembrane conductance regulator (CFTR). Most carriers of the gene are asymptomatic.

The diagnosis of cystic fibrosis is based on typical pulmonary manifestations, GI tract manifestations, a family history, and positive sweat chloride test results. Pulmonary involvement occurs in 90% of patients surviving the neonatal period. End-stage lung disease is the principal cause of death. Case report

8-year-old girl that in August, 2011 following an gastroenteritis episode shows weakness, anorexia, muscle cramps and abdominal pain during 12 days.

Personal history: healthy patient without disease antecedents. Familiar history has not no clinical interest.

When she was admitted in hospital emergency she weighed 40,4 kg (p96) and measured 131,5 cm (p72), with signs of mild dehydratation and carpopedal spasm.

Analytical data: normal CBC, emphasing metabolic hipochloremic and hipokaliemic alkalosis, amylase 1499, lipase 8969.

After liquids replenishment hydration improves and spasm gone, persisting K: 2,2 mEq/l and metabolic alkalosis. EKG: repolarization abnormalities She was transferred to PICU for stabilization

On abdominal ultrasound was small amount of free subhepatic and subespleenic fluid, but no litiasis.

Acalculous acute pancreatitis was diagnosed. She spent 20 days in the hospital. Sweat test was positive (chloride: 107mmol/l and 94mmo/l). Cholangiography and abdominal NMR were normal.

A genetic study detected the W1282X/R334W mutation of CF.

Chest TC and spirometry were normal. Sputum culture was negative. Sinus TC reveled pansinusistis. Asymptomatic at the digestive level.

Nowadays she continues the follow-up in Departments of Gastroenterology and Pediatric Pulmunology (CFunit).

She only needs treatment with cholecalcipherol.

Conclusions

CF is a disabling and complex disease which can present with a wide range of clinical manifestations and can appear at any age. Because of it, is necessary to have a very opened mind to identify atypical forms.

Newborn screening for CF is universally offered in Andalusia (Spain) since 2011. This will allow a precocious diagnosis and improve its prognosis.

#### P03.35

#### Ocular cyst dermoid in children - Presentation of clinical case

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The ocular dermoid cyst is a benign congenital tumor and make up between 3-5% of orbital tumors.

They are rounded, painless and smooth masses, gray-yellow or rosy and with sluggish growth. They appear most frequently at the inferior temporal quadrant of the corneal limbus. However, they may occasionally present entirely within the cornea or may be confined to the conjunctiva.

According the location and the size, patients present double vision, poor vision, restriction of ocular movements, proptosis, or an enlarging ocular mass.

Associated ocular abnormalities include colobomata of the eyelids, ocular motility disorders, lacrimal anomalies, scleral and corneal staphylomata, aniridia, and microphthalmia.

Associated systemic abnormalities include preauricular appendages and auricular fistulae (in combination with limbal dermoids constituting Goldenhar syndrome). Other abnormalities include hemifacial microsomia, microtia, and vertebral anomalies.

Dermoids cysts are often removed before the 5th year of life to avoid traumatic rupture and in order to prevent visual defects. Excised tissue always should be sent to the pathologist for examination.

Case report:

2-year-old patient who came to pediatric consultation when he was one-month-old because his parents had detected a tumor in right eye.

Personal and familiar histories are not interesting.

He was referred to Ophthalmology for assesment. In the exploration there was an appreciation a 0.5 cm of diameter tumor, painless, smooth appearance, greyish color, located in inferior temporal quadrant of the right eye corneal limbus.

The complementary studies were normal.

Evolution:

Periodic assessments of the patient were realized and, in view of his sluggish growth, surgical intervention was decided when patient was 18-months-old. There were no incidents.

Is planned a ophthalmologist examination at 3-years-old in order to detect the development of refractive defects.

#### Conclusions:

Is necessary to suspect a ocular dermoid cysts in children in the presence of ocular tumors, proptosis or ocular movements restriction

Is necessary to rule out associated pathology.

Due to his sluggish growth it is possible to programme the surgery before the school age.

#### P03.36 Behind an infection...

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Introduction: Early diagnosis of Chronic Obstructive Pulmonary Disease (COPD) and proper treatment leads to improved symptoms and delays the decline in lung function. The general practioner has a key role in early diagnosis, treatment and follow up of patients with COPD.

Description of Case: Man of 61 years old, Caucasian, with accented smoking habits since age of 13, who requested for general practioner's consultation in his familiar health unit (FHU) by dyspnea, fever and cough, having been diagnosed with pneumonia who did not respond to azithromycin, amoxicillin and clavulamic acid and subsequently treated with levofloxacin, with its improvement. Then he was referred to pneumology for loss of 8 kg over a month, anorexia, persistent cough and changes on chest radiograph. The patient underwent imaging tests and respiratory function study that revealed emphysema, bronchiectasis, and pleural effusion. He also performed a bronchoscopy which was negative for neoplastic disease. Then the patient was treated with fluticasone and salmeterol. Patient's health condition worsened with the development of heart failure and worsening of COPD. Steroid was suspended by oral candidiasis and therapy was changed to indacaterol, tiotropium bromide, euphyllin and furosemide. The patient appealed to hospital's E.D. with new respiratory distress episode and pleural effusion. Patient underwent thoracentesis and was admitted for study. During hospitalization there was gradual improvement and it was discharged with the previous regimen plus systemic corticosteroid weaning, nitrate and avoidance of smoking. The patient remained stable without new acute exacerbations of COPD to the present

Discussion: The absence of symptoms at rest and the non-appreciation of these in one patient with a pronounced smoking history, will probably be behind the absence of recurrence to the family doctor for over 3 years, which led to late COPD detection in an advanced state. A series of crises and exacerbations led to clinical worsening and the development of co-morbidities. There was a significant improvement after hospitalization that would likely be related to smoking cessation.

The misuse of the device of inhaled corticosteroids may explain the failure of the first therapeutic approach to COPD and the appearance of oral candidiasis.

# P03.37

# Hiperfenilalinemia: a clinical case

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#### Background:

The Portuguese National Program of Early Diagnosis of the newborn commonly known as screening test, started in 1979 by the Institute of Medical Genetics, initially including only the screening of phenylketonuria (PKU). Since that time,

3 003 159 infants were screened, 274 of which resulted in the diagnosis of phenylketonuria, a hereditary disease being the second most common traceable metabolic disease. However, it is important to remember that there is a benign persistent hyperphenylalaninemia in which plasma levels of phenylalanine does not causes clinical symptoms and usually doesn't need treatment. The pregnancy of a woman with hyperphenylalaninemia brings the risk of fetal brain damage, because the levels of phenylalanine reach the fetal tissues. Therefore, it is necessary to know the implications of a positive screening, particularly in this pathology, in order to follow in the parents and clarify their doubts and anxieties.

#### Description:

Newborn male, Caucasian, included in a nuclear family in phase II of the life cycle of Duvall without a relevant family history. The obstetric history includes a dystocia by suction at 39 weeks of a event free pregnancy, born with Apgar scores of 10 both at the 1st and 5th minute, with 53 cm height, 3676 grams of weight and 37 cm head circumference. This baby presented a positive newborn screening test, and after harvest for quantification analysis, it was detected a hyperphenylalaninemia. Since the value did not exceed 6 mg / dl, did not require any dietary measure or drug, but new crop of programmed analysis is done, one week after the introduction of meat in the diet.

#### Discussion:

The hyperphenylalaninemia is the third most frequent diagnosis, with regard to traceable inherited metabolic diseases, directly behind the phenylketonuria. These are situations in which the values of phenylalanine, although higher than 2.5 mg / dl do not reach therapeutic levels, 6mg/dL. These are cases that must remain in surveillance, especially if they are female. The family doctor in this situation is in direct contact with the grieving parents, and it's up to him to explain this clinical situation and guide this family.

#### P03.38

#### When the neighbor thinks is a doctor

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#### BACKGROUND:

In daily clinical activity, the Family Doctor is often confronted with therapeutic challenges. After establishment of adequate pharmacological treatment a chronic disease such as diabetes mellitus (DM) type 2, there are several factors that can influence its effectiveness. This case report is intended to demonstrate the importance of a suspicion of mismanagement of insulin as a possible cause of poor metabolic control of diabetes.

# CASE DESCRIPTION:

Male patient, 72 years, caucasian, married, retired from farming, inserted in a nuclear family, in Phase VIII of the Duvall cycle, belonging to middle class of Graffar classification. History of type 2 diabetes mellitus diagnosed in 2009, with baseline glycosylated hemoglobin (HbA1c) of 14.1% and fasting plasma glucose of 253mg/dl. He was treated initially with oral antidiabetic drugs, but with poor glycemic control, so it was decided to associate insulin therapy, about one year after the diagnosis. Teachings were performed on insulin use, and the administration would be carried out by a patient's neighbor. He maintained, however, poor metabolic control with HbA1c values fluctuating between 10-12%, even with progressive units of insulin. In an attempt to identify possible causative factors for ineffective therapy, the patient was questioned about the technique of insulin administration. According to the patient, the insulin was carried out by his neighbor, who did not administered the full dose on the grounds that it was too high and could kill him. Given this fact, it was decided to make the teachings to his wife,an illiterate. After analytical control, there was a decrease in HbA1c to 6.5%, and he is currently a controlled diabetic.

#### DISCUSSION:

The Family Doctor is in a position to assess, at each follow-up visit, the correct course of therapy. This assessment requires a good doctor-patient relationship and this inquiry should be approached cautiously, insightful and often indirect. Thus, it is possible to avoid the unnecessary use of drugs and consequently iatrogenic and associated costs. Moreover, the training of the

patient and the family environment are determinant factors in therapy adherence, in which the Family Doctor has a crucial role.

#### P03.39

#### Erythema Infectiosum in adult

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Parvovirus B19 usually affects children from 4 to 10 years and causes the classic erythema infectiosum or "slapped disease '. But this virus can also infect healthy adults, causing in these, more exuberant clinical manifestations such as arthralgia, transient aplastic crisis, 'gloves and socks' syndrome, among others.

The arthralgia affects nearly 60% of adolescents and adults, with female being the most affected. It features a symmetrical pattern and polyarthicular, with the proximal interphalangeal and metacarpophalangeal joints most affected. This symptom lasts about 1 to 2 weeks but can persist for weeks, months and possibly years. Some people can test positive for rheumatoid factor and antinuclear antibodies.

In most instances, the diagnosis is clinical but may be necessary to determine the amount of Parvovirus B19-specific antibodies (IgM and IgG) in serum.

Usually, erythema infectiosum is self-limited and requires no treatment. But non- steroidal inflamatory or immunoglobulin can be used for symptomatic relief in chronic arthropathy.

Description of the case

Woman of 40 years, class IV Cycle Duval. Resident Famalicão. Previously healthy. Epidemiological context: outbreak of parvovirus B19 in the previous month.

Turned to their family doctor in July/2009 after already having resorted several times to ER last week. The patient was febrile, micro-papular rash on the limbs and trunk with saving face, with continued worsening of myalgia, arthropathy and swelling of the feet and ankles. From what has been sent to the Hospital Famalicão, indicating epidemiological study to etiology. He was hospitalized for 4 days, with improvement of the rash. Immunological study conducted, which proved inconclusive, but serology for Parvovirus.

On the persistence of arthropathies, decided to consult a rheumatologist in December 2009, performing serology confirming the diagnosis of Parvovirus arthropathy (IgM - IgG and 12.9 - 39.5) and performs treatment with NSAIDs and corticosteroids, with clinical resolution.

Currently holds occasional relapses and Rheumatology annual monitoring at a particular level.

This case underlines the clinical knowledge of primary health care and, as well as the community in which users are located, allows one to know one essential for good medical practice. This role being assigned to the Family Physician.

#### P03.40

#### Rare complications of acute otitis media in a diabetic elderly

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#### Introduction

Acute otitis media (AOM) is a frequent condition encountered in primary care. It often appears after an upper respiratory infection with rapid onset of pain and fever. Serious complications such as mastoiditis, meningitis and even intracranial abscesses are rare but can be life-threatening.

# Case report

A 82 year-old man with type 2 diabetes mellitus, high blood pressure and chronic obstructive pulmonary disease, consulted a GP for 5 days with left otalgia, fever and headache, physical examination led to a diagnosis of AOM, a treatment with amoxicillin 875 mg/ clavulanate 125mg every 8 hours was prescribed. Two days later, the patient developed facial palsy and antibiotic intolerance, for this reason the antibiotic was changed to

cefditoren and oral corticosteroids were given. Three days later due to the lack of response and deterioration, the patient was sent to the emergency department. A cranial CT scan revealed a bilateral AOM and left sphenoid and maxillary sinusitis. He was admitted to the hospital and broad-spectrum intravenous antibiotics were given, nevertheless, acute meningitis with ear and nose origin and bilateral otomastoiditis of torpid evolution appeared during hospitalization. After one month, the patient was discharged after full recovery.

#### Conclusions

- Diabetic and elderly people are at a higher risk of developing complications than the general population.
- An exhaustive physical examination and follow up are very important in primary care.
- A common condition like AOM can have rare but serious complications that GP should be aware of. Recognizing them and requesting specialist advice if necessary are crucial in the diagnosis process.

#### P03.41

#### Brucella spondylodiscitis: case report

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Brucellosis is an endemic zoonotic disease, especially in the Middle East and Mediterranean regions. Because it affects several organs and tissues, it may present in a variety of ways. Spondylodiscitis is a frequent and important complication of brucellosis, affecting the lumbar vertebrae, followed by thoracic and cervical involvement.

We report a patient affected by vertebral pain refractory to conventional analgesic therapy with a diagnosis spondylolysthesis and also the affects of a misdiagnosed brucellar spondylodiscitis. The absence of a positive response to analgesics, a suggestive medical conventional (epidemiologic data still show a high incidence of Brucella infections for Turkey), radiological findings and microbiological tests led to the correct diagnosis of brucellar spondylodiscitis. All symptoms improved after correct antibrucellar antibiotic therapy. Back pain is a relatively frequent symptom observed in primary care; in a zone in which Brucella infections may be considered endemic, brucellosis must be considered highly probable in the differential diagnosis of low back pain, including vertebral pain that could result from vertebral localization of Brucella infection. The role of the primary care physician is not only to treat the symptoms, but also to research and confirm the etiopathogenetic mechanisms before starting a correct treatment.

#### P03.42

# The role of primary care physicians in determining child abuse

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Child abuse is described as the physical, sexual, emotional mistreatment, or neglect of a child. Primary care physicians have a key feature in prevention of child abuse but a number of problems make it hard to notice the abuse and inform the legal authorities. In this poster presentation we introduce a 12 year old girl who was physically abused by her stepmother several times. Even though she went to her physician more than once for these injuries, she could not be recognized by the same doctor. She was diagnosed after she admitted the abuse and asked for forensic evaluation by prosecution office.

After the physical examination of the case, some cicatrices developing at different times were found on the forehead and nose due to the physical abuse. It was understood that she was taken to health institutions after her injuries healed and her stepmother gave different anamnesis to hide the findings of physical abuse. She was asked to not talk about the abuse and was told that her stepmother would be taken to prison and she would be sent to an orphanage. While physical examination of the case, her stepmother's over-protective trend and contradictory anamnesis was noticed. Physicians must have the knowledge of child abuse and be able to distinguish the early sign and symptoms of child abuse for early diagnosis and treatment of the victims. Legal notice is also required and has priority. With the presentation of this case, we aimed to emphasize the need to increase the awareness of primary health care givers about early diagnosis of child abuse, which is a common situation in many societies.

#### P03.43

#### An unusual case of shoulder pain in Primary care

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#### Case:

73 year old man with a history of hypertension, Type 2 Diabetes Mellitus and hereditary retinal dystrophy. Smoking 7 cigarettes per day over 16. Goes to the consultation by pain in left shoulder and triceps region of 2 months duration, with preserved mobility. Refers trauma 12 months ago. Normal physical examination. Analytical unchanged. NSAIDs are indicated and rest functional. At 2 months, the patient comes back with his wife, who demands a radiography of the pain. Refers mild asthenia without anorexia, weight loss or other symptoms. X-ray evidence is requested: homogeneous mass (7x8x11) at the apex of the left lung infiltrates of 2 to 4 rib, vertebra D3-D4 and intercostal muscles. Currently on palliative cancer treatment.

Shoulder pain is a common complaint in family practice patients. Self reported prevalence of shoulder pain is estimated to be between 16% and 26%; it is the third most common cause of musculoskeletal consultation in primary care.

The **four most common causes** of shoulder pain and disability in primary care are: rotator cuff disorders, glenohumeral disorders, acromioclavicular joint disease and referred neck pain. But do not forget extrinsic causes: neurological (nerve root compression C5-C6 cervical, supraspinatus nerve compression), abdominal (hepatobiliary disease, diaphragmatic irritation), cardiovascular (myocardial ischemia, thrombosis of the axillary vein) and thoracic (upper lobe pneumonia, apical tumor and pulmonary embolism). To rule out these causes we must question the patient about the existence of red flag indicators

History of cancer; symptoms and signs of cancer; unexplained deformity, mass, or swelling (tumour?).

- Red skin, fever, systemically unwell (infection?)
- Trauma, epileptic fit, loss of rotation and normal shape (unreduced dislocation?)
- Trauma, acute disabling pain and significant weakness, positive drop arm test (acute rotator cuff tear?)

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- Unexplained significant sensory or motor deficit (neurological lesion?)

**Blood tests and radiography** are indicated only if there are "red flag" indicators.

#### P03.44

#### Unusual diagnosis in a female adult with progressive dyspnea

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We report a case of a 45-year-old woman that presented a 2 year history of progressive dyspnoea, weight gain, edema of the lower limb and face, pleural effusion and elevated hepatic transaminases found to be caused by right heart failure. The abdominal

ecography showed hepatic congestion and the echocardiogram confirmed the presence of a very thick pericardium. Due to her past history of pulmonary tuberculosis at the age of 20 years old it was made the diagnostic of Tuberculous Constrictive Pericarditis that evolved with auricular flutter and calcification of the pericardium. Finally, after diagnosis and complete pericardectomy, the patient presented excellent recovery with complete improvement of the signs and symptoms.

Constrictive Pericarditis is present when a thickened and adherent pericardium restricts diastolic filling of the heart. The diagnosis of constrictive pericarditis requires a high degree of clinical suspicion, for the signs and symptoms of this disease can be falsely attributed to other causes such as chronic liver disease, restrictive cardiomyopathy and idiopathic cardiopathy. This case exemplifies the difficulty in diagnosing this condition, the investigation required, and the benefit of prompt treatment. Tuberculous pericarditis is on decrease along with tuberculosis, in general, but still is an important disease in geographic areas where tuberculosis is highly prevalent.

Key words: pericarditis, constrictive, tuberculosis

#### P03.45 Hepatitis B - in a pregnancy case

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**Background**: Hepatitis B is the worldwide most common and severe disease. Approximately 70% of hepatitis patients have subclinical or anicteric hepatitis, while 30% developed an icteric hepatitis. Fulminant hepatitis is rare, occurring in 0.1 to 0.5% of cases. All pregnant women should carry out a serological survey of hepatitis B, since the virus can be transmitted to newborns during pregnancy or during labor which can cause, in approximately 90% of cases, chronically infected if not taken preventive.

Case description: Caucasian, married, 37 years old wife, belonging to a nuclear family with three daughters of lower class, with moderate dysfunction in Phase V of the family life cycle. Bulgarian immigrant for about a year. Previous history unknown. Visited the GP for suspected pregnancy due to menstrual delay of 3 weeks. After confirmation of pregnancy, the woman wish only to follow the pregnancy if the was a boy. Additional tests were ordered for the first quarter and maternal health services were marked for the proper monitoring of the pregnancy. Laboratory tests revealed changes in viral markers of hepatitis B that were gathered by detailed history and demonstrated an enlarged family history of Hepatitis B (sister and brother). For this reason, pregnancy became unwanted and the patient was referred to secondary caretakers.

**Discussion**: The proper monitoring of the pregnancy in general practice is essential for a good outcome, because it makes it possible to identify clinical potentially dangerous situations for the fetus or the mother and conduct preventive or remedial measures to reduce risks. The family study has a place in this case, warning of the risks of personal health and community of non- surveyed immigrant populations. Particularly in this clinical case, the fetus will have 95% probability of not acquiring infection if in the first 12 hours of life two doses of anti-HBV imunoglobilina are administered. After thatm there is no second chance!

### P03.46

Peritoneal Pseudomyxoma - a belly asymmetric in respect of a fungus

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Background: The Peritoneal pseudomyxoma is a rare disease, with higher incidence in females, characterized by collections of

gelatinous mucoid material in the peritoneal cavity. Clinically, the symptomatology and semiology is very poor (increase in abdominal girth, ovarian inguinal hernia or mass), being its diagnosis, in most cases, a "incidentaloma" (found in 2 out of 10,000 laparotomies)! Inevitably it progresses to intestinal obstruction which, untreated, is fatal.

Case description: Patient is a 65 year old, Caucasian, retired, married male, belonging to a nuclear family, upper class, highly functional, phase VI of the family life cycle. No personal history of relief. Visits the General Practitioner (GP) by presenting changes in skin color at the groin rash, consistent with dermatophytosis. Physical examination revealed abdominal asymmetry and when questioned reported some abdominal discomfort in the past months while maintaining regular intestinal transit which did not value. Ultrasound scan revealed anechoic fluid in the bottom of bag unspecific features, suggesting further study. Abdominal CT showed lobulated, hypodense masses, with well defined limits. determining "lobulations" in hepatic and splenic margins by extrinsic compression secondary to peritoneal implants without organ invasion. He was referred to General Surgery. In a subsequent visit, the patient informed us that through personal knowledge, he was submitted to performed tumor excision and intraperitoneal chemotherapy in the Washington Hospital Center. Discussion: A complete physical examination is essential in clinical practice of Family Medicine, because only this way the minimal pathological changes, not valued by the patient, can gain meaning. The suspicion, timely referral of these changes, and the monitoring of new relapses, is possible through a doctor-patient relationship of closeness and trust are features of GPs, the first in line of heath

# P03.47 Case report -the patient with neurofibromatosis

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Neurofibromatosis /NF/ or Reclingenhouse disoder was described for the first time in 1882 by the pathologist Reklingehouse.

Neurofibromatosis is an autosomal dominant disoder, that means , just one copy of the affected gene is needed to develop the disoder.

The effected patients have variable expressivity of the affected gene, which couses nerve tissuse grows tuomors so cells melanocytes, Schwann cells and endoneurial fibroblasts excessively proliferate throughout the body of patient., so we can find out bumps, coloured skin etc.

Our patient ,58 , male,physical woker ,went to see GP after he was hospitalised and went through rehabilitation after he had stroke. Measuring his blood preasure, GP discaverd that he has NF as massive tumor on his left upper arm weing about 2 kg 30 x 40 cm. He claims that he has no problems with strenth of the arm or pain, and also before he had had a stroke, he felt healthy. Otherwise he went to see a doctor just a few times in his lifetime.

His childs and grandchilds , has no signs of the disoder..He did not like to talk much about tumor, but agreed with us to make a photo of the tumor hiding his face,

Considering the the size of tumor and location, he has been enduring considerable psychical and social suffering.

In may 2011 he had a stroke with polsy and spsticity of the left side of the body. After rehabilitation he regained almost at all muscle strenth of the left arm and also the full reignent of movment.

Key words: neurofibromatosis, tumor, stroke

#### P03.48

# Tuberculosis Presenting as Bilateral Gluteal Abscess: A Case Report

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Introduction: Tuberculosis is a chronic granulomatous infection with increasing prevalence in the developing countries due to the burden of HIV pandemic, poverty, war and rapid urbanization. Cold abscesses could complicate the infection and common sites include: The spine, hips, lymph nodes and genitalia. Cold abscess involving the gluteii in isolation is rare, we therefore present this case to highlight the peculiarities.

Objectives: 1. To Describe one of the rare manifestations of Tuberculosis.

2. To heighten the index of suspicion for extrapulmonary Tuberculosis.

Case Summary: 20 year old male who presented with:

Painful Swelling of Both Buttocks x 1year

Fever x 1year

Swelling was of acute onset, did not increase significantly and there was no preceding trauma. Pain was dull, aggravated by sitting down and relieved by standing.

Fever was low grade and continuous, with no chills and rigor.

He had no weight loss or drenching night sweats. He was continent and had no pain in the limbs. There was no cough or contact with anyone with chronic cough. He had not ingested unpasteurized milk.

He had received oral antibiotics with no improvement.

The significant examination finding was a diffuse fluctuant nontender swelling of the gluteal muscles bilaterally, extending over both gluteii. There were no abnormalities in the respiratory and nervous systems.

Investigation results were as follows: Mantoux test: 19mm, Erythrocyte sedimentation rate: 55mm/hr. Incision and drainage of the lesion was done, which revealed serosanguinous fluid with lumpy caseous materials. Histology done on the aspirate showed chronic granulomatous lesion.

He was subsequently commenced on Antituberculous medication viz: Rifampicin 600mg daily, Isoniazid 300 mg daily, Ethambutol 800mg daily, Pyrazinamide 1.2g. He also received daily Pyridoxine 25 mg and wound dressing. He was discharged after 9 days and had recovered completely when seen at a follow up visit after 4 weeks.

Conclusion: Tuberculosis remains a significant cause of morbidity and mortality in the tropics and its manifestations are diverse. A high index of suspicion is required when it occurs in unusual sites.

#### P03.49

#### Case report - a complex case

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Introduction: In General Practice (GP) asthenia and anorexia are very common symptoms. They are associated with a wide range of clinical entities with different severities. A careful history and physical examination are essential in diagnosis. The acessibility and proximity of Family Doctors (FD) with their patient enhances a faster clinical follow and diagnostic process.

Case presentation: A 61-year-old caucasian married man, employee of construction, illiterate, low Graffar, phase VI of Duval cycle. History of Pulmonar Tuberculosis (PT) at 25, smoker since 11 and chronic obstructive pumonary disease since 2008. Usually medicated with budesonide/formoterol and estazolam.

31st august of 2010 went to our center refering asthenia, anorexia, loss of weight (11 kg) and dyspnea for moderate exertion during the last three months.

We verified that he wasn't taking his inhalation therapy. We adjusted therapy and asked for analitical study and lung imaging. 17th september of 2010 - dyspnea was better but kept feeling asthenia and anorexia and started feeling night sweats. The lung X-ray showed changes consistent with pulmonary emphysema, sequelae of previous PT. With this clinical findings we asked for a pulmonar Computerized Tomography (CT) and referenced to the Pulmonary Diagnostic Center.

21st september of 2010 - began to feel epigastric pain with a feeling of fullness, dyspepsia and constipation. Physical examination revealed pain to deep palpation of the epigastrium. Was treated with domperidone and laevolac and it was requested abdominal ultrasound, endoscopy and colonoscopy.

Abdominal ultrasound revealed a solid hypoechoic nodule of 6.7 cm in the pâncreas. For further investigation and staging it was requested abdomino-pelvic CT that revealed: neoplasic lesion in the transition region of the head with the body of the pancreas.

29th september of 2010 - the patient was referenced for consultation of surgical oncology at the Institute of Oncology, where he performed percutaneous biopsy that revealed adenocarcinoma of the pâncreas.

Discution: In this clinical case, the period of time between the emergence of the symptoms and the diagnosis lasted less than a month. This case report highlights the person-centered care relevance, longitudinal continuity and holistic approach with acute and chronic problems integration that GP provides.

#### P03.50

# Doctor-patient communication: its importance in cancer diagnosis

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Context: One of the biggest causes of non-successful medical care arises from non-compliance or non-adherence of patients with the treatment plan their doctor established. Communication is one of the most vital components to influence the patient to become adherent of good self-care and shared values, goals and language must also be taken into consideration.

Description of the case: A 57 year old man (from a nuclear, middle class family, on the stage 5 of Duvall's cycle) had an episode of angina, on April 2011, while doing a cycling exercise. This event motivated a medical appointment with a General Practitioner, who decided to ask for a Cardiologist evaluation, after which, the patient was submitted to a coronary angioplasty and subsequently medicated with an antiaggregant. The postoperative hemogram revealed a normocitic normochromic anemia that was aggravated in the following blood test. Therefore, in June, the patient returned to his family doctor, who advised him to extend his temporary incapacity leave and to do a colonoscopy and endoscopy. The patient was reluctant with extending his leave and performing the exams. The next appointment, the doctor realized the patient hadn't done the imagiologic studies, and started to work, despite being advised the contrary. He decided, then, to investigate the reasons that led to the patient's non compliance, namely by applying a few family evaluation instruments. By discussing the motives that kept the patient from fulfilling his doctor's instructions, and by carefully explaining the importance of doing so, the patient agreed on performing the above mentioned exams. The colonoscopy ended up revealing the presence of a colorectal cancer, and the patient was immediately referred to the General Surgeon to perform a right hemicolectomy.

Discussion: This case can be set as an example of the importance of enabling patients to increase control over their health, improving their decision-making competencies, by discussing both the risks and benefits of a determined exam or treatment. This includes their involvement in the plan establishment and in the choice of behaviors leading to a desired outcome, and can only be possible with an effective communication and a good doctor-patient relationship.

#### P03.51

### Polyglandular autoimmune syndrome in a 6 year old child.

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#### Introduction

Polyglandular autoimmune syndromes (PAS) are multiple endocrine gland insufficiencies. PAS-I, usually occurs in children and includes candidiasis, hypoparathyroidism and adrenal failure. PAS-II, the most common, includes Addison disease in combination with thyroid autoimmune diseases and/or type 1 diabetes mellitus (DM1).PAS-III, is more frequent in middle aged women and includes autoimmune thyroiditis and another organ-specific auto-immune disease (except Addison disease, which is the main difference from PAS-II). In order to alert for the fact that the diagnosis of an autoimmune endocrine gland failure should be followed by the study of other related endocrine glands failure, the authors present a case of typical DM1 in which the further endocrine evaluation revealed the presence of an autoimmune thyroiditis raising the suspicion of PAS syndrome.

The authors present the case of a 6 year old girl who visited her general practitioner (GP) due to polyuria, polydipsia and loss of weight. Her personal and familial history was irrelevant. The GP noticed that she was thinned and requested blood and urine tests which revealed: glucose 258 mg/dl and HBA1C 15,2 %. She was referred to a pediatric endocrinologist who confirmed the diagnosis of DM 1 and further diagnosed an auto-immune thyroiditis. The symptoms resolved progressively after the institution of insulin. The complete endocrine study is still underway, which will able the author to classify the PAS (II/III, depending on the presence/absence of addison disease)"

#### Conclusions:

It is important to retain that in the presence of an autoimmune disease we should look up for other ones in order to do the accurate diagnosis which can affect the correct treatment and the prognosis of the disease.

#### P03.52

#### Medicine is a science of uncertainty and an art of probability.

R. J. Caiado, P. Figueiredo, A. Rodrigues; USF São Julião, Figueira da Foz, Portugal.

Pancoast Tumor or superior sulcus tumor occurs with na incidence of less than 5% of all lung cancers. Because it's a tumor with nonspecific manifestations and associated with musculoskeletal disorders the diagnosis is delayed. Pancoast tumor is highly invasive and therefore presents a poor prognosis. It is a rare tumor difficult to diagnose and the discussion of this case report reminds us for the importance of thinking of Pancoast tumor as before musculoskeletal manifestations.

Male, 75 years old, caucasian, married, retired, an ex heavy smoker, with a history of hypertension, vertiginous syndrome, and degenerative pathology of cervical spine, member of a nuclear family, in phase VIII of the Duvall cycle, and highly functional. He comes to a consultation in June 2011 because of cervical pain and to show routine exams. The physical examination was normal as well as the exams performed by him. Therefore, it was decided to medicate with an analgesic associated with a muscle relaxant. In September 2011, the patient returns for another consultation with general fatigue, dyspnea, productive cough with mucopurulent expectoration and now cervicobrachialgias that didn't respond to the analgesic. Physical examination showed a temperature of 37.5°C, blood pressure 162/91 mmHg, lower limbs edema and decreased vesicular at the left pulmonary field. A toracic and cervical spine CT where prescribed and started an antibiotic therapy for suspected of acute bronchitis and tramadol. One week later he came back with the results and shows an elevation of the sternal notch. Toracic CT shows Pancoast tumor with rapid evolution, and the patient was referred to the Hospital, where he is being followed.

This is a case of cervical pain in a patient with a history of degenerative pathology of cervical spine, however he had a Pancoast tumor.

### P03.53 Hyperhidrosis - When sweating is a problem

#### F. C. Santos:

CS S. Miguel - ULS Castelo Branco, Castelo Branco, Portugal.

Introduction: Hyperhidrosis is a condition characterized by sweating in excess of that required for thermal homeostasis, and it can affect the entire body (generalized) or a localized area (focal). Distinction is made between primary (or idiopathic) and secondary hyperhidrosis, and can impact heavily on a patient's quality of life. The intend of this poster is to report a case of primary focal hyperhidrosis, detailing its consequences in both social relationships and professional activity, and the importance of a correct Family Doctor approach when helping these patients. Case description: A 23-year-old woman, caucasian, veterinary nurse, part of a functional nuclear family in the first stage of the Duvall cycle, consulted the family doctor because of excessive sweating in both palms. The patient recalled similar events since her childhood, mainly following stress conditions and high temperatures, and denied involvement of other body areas or other additional symptoms (such as night sweats). The family history is irrelevant. When asked about the severity of her symptoms, she scored 3 in 4 possible responses, according to the Hyperhidrosis Disease Severity Scale (HDSS) of the Canadian Hyperhidrosis Advisory Committee. This indicates severe disease, which is barely tolerable and frequently interferes with daily activities. The patient clearly pointed out difficulties in professional activities and mentioned considerable efforts in hiding her problem, including avoiding some tasks; her ability to cope with this problem hasn't improve with time. On physical examination, sweating of palms and a slight skin maceration was noted. Laboratory analyses, requested to exclude a secondary cause, were normal. After the diagnosis several therapeutic options were discussed with the patient. She refused surgery and opted for acupuncture (an alternative therapy), since a former conservative treatment with topical agents was unsuccessful. At present acupuncture sessions have started but still without improvement of sweating. Discussion: This case demonstrates the impact of Hyperhidrosis in a patient's daily activities and its severe psychosocial consequences. It also illustrates the importance of the Family Doctor in the correct management of these cases, due to the difficulty in obtaining satisfactory therapeutic results and dealing with patients' expectations.

# P03.54 Choledochal cyst in adults - ultrasound diagnosis - a case report

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Learning Objectives: Choledochal cyst disease is a cystic dilatation at various parts of the biliary tree, with an incidence 1:100000, with a female: male preponderance of 4:1. Todani et al. described a classification into five types. The most common is type I: diffuse or segmental fusiform dilatation of the common bile duct. Clinical symptoms are nonspecific: pain in the upper abdomen and jaundice. The clinical triad: jaundice + a palpable mass + abdominal pain is found only in 1/3 of patients.

Our objectives: to describe the US findings of choledochal cyst type I in an adult patient.

Background: A 82 year-old woman with non-specific upper abdominal pain presented to a local health center for evaluation.

Laboratory values, including liver function tests, were within normal limits. An abdominal ultrasound was performed with a convex transducer 5 MHz.

Imaging Findings: Our ultrasonography findings are a hypoechogenic, homogenous formation with a smooth contour which communicate with the biliary system, most compatible with a discrete fusiform dilatations of the extrahepatic bile duct, which involve a segment of the duct without intrahepatic dilatation of the biliary tree.

Conclusions: Ultrasonography is usually the first examination and is very sensitive in the detection of cystic structures. To prevent cost-intensive and potentially life-threating complications, a choledochal cyst must be considered in the differential diagnosis

#### P03.55

Giant cell tumour of tendon sheath (localized nodular tenosynovitis) of the lower limbs. A clinical case in a Primary Care Minor Surgery Unit

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Our Minor Surgery Unit, formed by 3 family doctors, 3 trained nurses and 1 clinic auxiliary, provides this service to all the inhabitants of Sant Cugat del Vallés (nearby Barcelona, pop. 75.000) from 2003. About 350 surgical procedures are performed per year.

We expose a 27 years old woman case with no relevant pathological antecedents, who was referred to our unit to evaluate a 3 week-history lump in pretibia area of her right leg. The lump was painful at palpation, it was about 1.5cm and it was not apparently stuck to deep layer.

Due to the discomfort of the patient, an x-ray exploration was taken which did not show bone cortical affection and an ultrasound examination (US) was performed. The US showed a 7.7 x 7.8 x 4.1 mm hypoechoic image compatible with epidermal cyst, sebaceous cyst or solid nodule. Extirpation under local anesthesia was decided. The Pathology Anatomy Service reported the sample as a Giant cell tumor of tendon sheath, localized nodular tenosynovitis, (GCTTS). Our patient had a recurrence of the tumor, just two months after the intervention. A reoperation must be performed. This time it will be done by our referral general surgeon, due to the high risk of recurrence.

The GCTTS are the second most common type of benign tumours of the hand, where appears in the 80% of cases, but it is relatively uncommon in the lower extremities. It consists of a proliferation of synovial cells arising from a tendon sheath. It has a high recurrence rate up to 45%. The treatment of choice is surgery, but complete removal can be difficult due to its adhesion to the tendon sheath, which increases the likelihood of recurrences. Several studies recommend the application of radiotherapy in patients where complete extirpation is not possible.

The clinical presentation can be similar to other pathologies so biopsy should be performed to determine the histopathological diagnosis. Imaging studies can help us, but, as seen in this case, they are not determinant, so differential diagnosis must be done. We also present a review of this pathology, etiology, classic presentation and treatment.

# P03.56 Charcot foot - a silent complication

**C. S. Jorge**, M. F. Neves, M. P. Rocha; USF Serpa Pinto, Porto, Portugal.

Introduction

The Charcot foot is a serious diabetes mellitus complication, described as a bone and joint disorganization. Its pathogenesis is uncertain but is probably due to a combination of factors: distal peripheral neuropathy, trauma and bone metabolism disturbances. It is primarily seen between the  $3^{\rm rd}$  and  $6^{\rm th}$  decades, and its

evolution is directly related to the metabolic control and to the amount of time that the disease has been progressing. Charcot foot diagnosis implies a high degree of suspicion and it is confirmed by clinical history, physical examination and radiographic findings.

Clinical Case

Male patient, 60 years old, caucasian, part of a functional and extended family. His multiple medical conditions included Klinefelter Syndrome, arterial hypertension and type 2 diabetes diagnosed in 1998, under insulin therapy but with poor metabolic control. The patient had diabetic nephropathy, distal sensorimotor neuropathy and bilateral Charcot foot, with history of infected diabetic foot ulcers. His last hospital admission, in March 2011, was due to right foot chronic osteomyelitis in an infected Charcot foot, with severe sepsis; and during his last medical consultation (September 2011) he had an ulcer located in the 5<sup>th</sup> metatarsal, which had developed over a period of about 11 months. During the treatment performed by the nurse, a bone piece of 4 cm in length was extracted, which was confirmed radiographically as being the 5<sup>th</sup> metatarsal bone. Debridement was done with complete bone removal and empirical antibiotic therapy was started.

If not suspected, the Charcot foot diagnosis can remain unnoticed until a late irreversible state of joint deformity and rigidity, leading to a greater susceptibility of new ulcers and infections. Therefore, this clinical case reinforces the need, in primary care, of a systematic foot evaluation as well as the importance of the suspicion of this particular complication in a neuropathic foot.

#### P03.57

#### Cold Urticaria - "Does cold do any harm?"

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#### Introduction

Cold urticaria is a subtype of physical urticaria. Its diagnosis, mainly clinical, is based on the clinical history of urticariform exanthema and/or angioedema after skin exposure to cold stimuli, confirmed by the "ice cube" test and by the exclusion of other diseases.

Clinical Case

Female patient, 9 years old, caucasian, part of a functional and nuclear family. She had a personal history of asthma and allergic rhinitis from the age of 5, controlled with inhaled corticosteroid, montelukast and salbutamol treatment in crises. She had a family history of asthma in her aunt and grandmother. At the age of 7 the patient presented generalized urticariform exanthema with dyspnoea, pallor, nausea and dizziness, after cold sea water exposure. These symptoms disappeared spontaneously after 30 minutes. In addition to these clinical manifestations, a positive "ice cube" test (in the 3<sup>rd</sup> minute) and analytical tests with no relevant changes (except the presence of peripheral eosinophilia (1100/µL) and an increase in the IgE (310 KU/L)), led to the diagnosis of acquired idiopathic cold urticaria. It was recommended that she avoid exposure to cold and undergo pharmacologic treatment with a second generation antihistaminic, to which she showed good response. At age 9, the patient presented recurrence of the symptoms (one episode of lip angioedema and face exanthema after rain and cold exposure and another one of urticaria with dyspnoea after exposure to cold sea water). In both situations, the patient was not taking the prescribed medication.

Conclusion

Although most of the cases are usually considered benign and self-limited, cold urticaria can be associated with severe systemic symptoms. With this case, it is intended to emphasize the importance of the early diagnosis of this disease, which is often undervalued or left undiagnosed, in order to prevent potential life-threatening situations.

#### P03.58

#### Parotid Tumour - a case report

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#### Introduction

Most head and neck cancers occur after age 50, although they can appear in younger patients. The parotid gland is the most frequent site of the salivary gland affected by those tumours, and about 80% of them are benign.

#### Clinical Case

We report a 44-year-old man, part of a functional and nuclear family, who presented an indolent right mandibular mass (3.5 cm larger diameter). The further research with Fine Needle Aspiration Biopsy (FNA biopsy) determined it to be a benign tumour - Warthin tumour. The patient was submitted to partial sialoadenectomy due to the increase in tumour size. As postoperative complications the patient presented a facial palsy sequela.

#### Conclusion

In conclusion, the anamnesis and physical examination have a primary role in the differential diagnosis. Biopsy should be considered for neck masses with rapid progressive growth. Other clinical signs of malignancy include bleeding, airway compromise due to larger sized tumours, and nerve dysfunction (eg, paresthesia).

#### P03.59

#### Concerns and causes of adult bed-wetting

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### Concerns and causes of adult bed-wetting

**Aim(s) or purpose:** Nocturnal enuresis (NE) is the involuntary voiding of urine during sleep. Studies show that at least 2% of adults have a lack of control of urination during the night. Bedwetting that starts in adulthood (secondary enuresis) is uncommon and requires medical evaluation. The aim of this study was to study about adult bed wetting.

Design and method: The study is presented of 40year-old man, who was admitted to our health centre of Amfikleia with bedwetting. Middle-aged participant who was stably employed but became unemployed during economic recession was very nervous. After Physical examination, Urine tests, Urologic examinations, tests Neurological evaluation and renal ultrasound were not found the underlying cause of the secondary enuresis. Bladder cancer, Diabetes Neurological disorders, Obstructive sleep apnea, Prostate cancer, Prostate enlargement, Urinary tract infection, Urinary tract stones were excluded after appropriate medical tests.

Results: The patient reports that was consumed large quantities of coffee and he suffered of acute anxiety and emotional disorders due to economic crisis in Greece. We advised him to reduce the consummation of alcohol and caffeine and to ensure sleep calm; enuretics sleep "harder" or are more difficult to wake. He revisited us after three months and he reported that after finding work, changing his behaviour improving the quality of sleep he had no more episodes of nocturnal enuresis.

**Conclusions:** The impact of the financial and economic crisis in Greece on the mental health of citizens can influenced the quality of sleep calm. A number of treatment options are available to **help treat bedwetting, including behavioural changes**, drug treatment, psychotherapy, and natural remedies.

#### P03.60

# Doctor, my back hurts! - The importance of a careful clinical history

M. F. Neves, M. P. Rocha, C. S. Jorge; USF Serpa Pinto, Porto, Portugal.

The cardiac ischemic disease can have a typical or an atypical presentation, and a good clinical history is the first step towards the suspicion of a correct diagnosis

A 68 year old Caucasian woman, who is part of a functional and nuclear family, isdiabetic and has arterial hypertension. She went to the hospital 3 times complaining of back and left shoulder pain. The exams showed bone and joint degenerative disturbances at the cervical level and a calcified tendinitis of the left supra-spinal and biceps. Analgesics and anti-inflammatory drugs were prescribed and she was told to go to her Family Physician for further investigation, who in turn prescribed physiatrist treatment. Because she felt worse, the patient went to the hospital emergency room, where a good clinical history revealed that she had episodes of dorsum-lumbar back pain with dyspnoea for progressively smaller efforts. She had tachycardia, bilateral pleural effusion and congestion of the lower half of the lungs. The electrocardiogram showed sinus tachycardia, intra-ventricular unspecific conduction disturbance and ventricular repolarisation disturbance. A rise in the myocardial necrosis markers was detected, with high levels of pro-BNP.

The diagnosis of rapidly progressive class III heart failure (NYHA) was made, and she was admitted to the Cardiologic Service for further study and therapy, which in turn was effective in controlling symptoms.

The echocardiogram showed severe mitral and light aortic insufficiency, inferior, posterior and lateral akinesia, with slight to moderate depression of the left ventricle systolic global function. At the catheterization, a 3-vessel cardiac disease with surgical indications was found.

For any further diagnosis and correct treatment, a careful clinical history is of utmost importance, especially in individuals with a personal history that predisposes them to atypical presentations of diseases.

# P03.61

# Three Times Exchange Requiring Although Intensive Phototherapy the Congenital CMV Infection - A Case Report

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#### Introduction

The incidence of cytomegalovirus (CMV) in newborns between 0.2-2.3 %. The congenital CMV can cause symptoms such as microcephaly, intrauterine growth retardation, hepatomegaly, splenomegaly, hyperbilirubinemia, hypotonia, skin rushes and neurological problems etc. Case: The baby who borned at 36th week from 23 years old mother. Accepted to newborn intensive care unit because of purpuric skin rushes. The weight of female baby was 2770 gr, the high of her was 50 cm and the heat circunference was 38 cm. Her blood type was A Rh (+) while her mother O Rh (+) and direct coombs test was (-) negative. At first day: The laboratuary some findings of her was as follows: WBC: 10.3, Hb:12.8, Hct:36.2, PLT: 139000, ALT:179 mg/dl, AST: 682 mg/dl, Total Bilirubin: 25.4 mg/dl, LDH: 1995 mg/dl, APTT: 171.2, PT: 29.1, INR: 2,34, Anti CMV lg M:(+) positive. The Cranial computirised tomography reveled widespread calscfic plaque thouse had tendency to connection atsome area in periventricular zone. Patent Ductus Arteriosus (PDA) was detected in Echocardiography. In the light of datum and physical examinationcongenital CMV infection had diagnosed.Gansyclovir and ulsofalc therapy began to the patient. In spead of intensive phototherapy, with Blisphere-360 machine, begining from the birth the bilirubin level exceed the exchange limit so blood exchange had been made and intensive phototherapy was continued. At the second day: The bilirubin level again exceed the exchange limit and blood exchange was made for the second time, also the intensive phototherapy had go on. At the third day: Again the bilirubin level exceed the exchange limit so for the third time the

patient had undergone to blood exchange. Additionally eritrocit suspention, was given tree times to the patient. At the fourth day: The bilirubin and hemoglobin level were at the normal ranges. Conclusion: In newborns while congenital CMV infections generally cause hyperbilirubinemia that does not exceed blood exchange limits. It must be in mind that CMV may also cause agresively increased hyperbilirubinemia which can be requared exchange and for this reasons preventive measures have to be taken previously.

#### P03.62

Patient with extremely high combined hyperlipidemia in primary care practice - a case study.

**J. Gawryś**, M. Matyjaszczyk; Zaklad Medycyny Rodzinnej, Lodz, Poland.

This case report describes a history of a patient who admitted to a family physician several times due to abdominal complaints within a few years. The patient suffered from abdominal pains, persistent vomiting, belching, diarrhoea and constipation alternatingly. The patient had been operated on urgently due to pancreatic necrosis a few years before. The patient had been taking NSAIDs for a few years due to osteoarthrosis and several injuries that she underwent. Time after time the patient's state improved as she was managed with conservative treatment. Once the patient was hospitalized due to persistent biliary vomiting and diarrhea, acute gastritis, deformation and dysfunction of pylorus were diagnosed and the test for Helicobacter pylori was positive. Standard eradication was employed. In the meantime diabetes mellitus type 2 was diagnosed. The patient was referred to metabolic disease consulting unit where she had basic laboratory tests done. The tests were repeated due to the results obtained: extremely high levels of TGA around 8000 mg/dl, total cholesterol exceeding 900mg/dl, LDL exceeding 500 mg/dl and significantly elevated liver enzymes levels. Introduction of pharmacological treatment led to improvement of the patient's general state. The patient was discharged after a week to a follow-up hypoglycemic and hypolipidemic treatment in primary care practice and recommended further investigation in metabolic disorders unit.

#### P03.63

10-year survival in patient with limited disease small cell lung carcinoma - a case study.

M. Matyjaszczyk, O. Zebrowska, J. Gawrys; Zaklad Medycyny Rodzinnej, Lodz, Poland.

This case presents a 72-year-old patient who was admitted to a primary care physician due to symptoms of infection.

The patient was diagnosed with small cell lung carcinoma in state of limited disease (LS-SCLC). Following concurrent chemioradiotherapy resulted in clinical and histological complete response for nearly 10 years without further treatment. The patient underwent careful monitoring for the development of a second primary tumour. Due to asthenia of the limbs and occurrence of head's injury, he was referred to computerized tomography of the head. The CT scan revealed a pathologic mass in cerebral parietal area, surrounded by extensive oedema. Now the patient is treated with brain's radiotherapy.

This patient represents a rare case of long term survival in LS-SCLC. New therapeutic strategies evaluated in clinical practice have not been shown to increase survival at large and the prognosis still remains poor.

Therefore cases with long survival should deserve special attention as they can provide valuable information on factors that modify or delay progression of the disease.

#### P03.64

Polycytemia vera with long survival - a case study.

**M. Matyjaszczyk**, O. Zebrowska, J. Gawrys, J. K. Jaczewska-Matviaszczyk:

Zaklad Medycyny Rodzinnej, Lodz, Poland.

Polycythemia vera is a chronic myeloproliferative disorder characterised by trilineage hematopoietic cell

hyperplasia with particular expansion of the red cell mass, which is the most prominent cause of most serious complications. An overproduction of circulating red blood cells inclines thromboembolic events that remain the main cause of death. In about 10% of patients with polycythemia vera progression to myelofibrosis or acute leukemia is observed.

This case study presents the history of a 78-year-old patient who was diagnosed polycytemia vera 18 years ago. A 60-year-old patient was admitted at that time to a family physician due to cyanosis. On examination splenomegaly was revealed. Basic laboratory tests showed erythrocytosis and thrombocytosis. The patient was diagnosed polycythemia vera according to the Polycythemia Vera Study Group criteria.

Hydroxycarbamide was introduced initially. After about 15 years skin lesions appeared on dorsal sides of both hands. Due to it the patient was switched to pipobroman. Over the years the patient developed consequences of erythrocytosis - he underwent several phlebotomies, 4 myocardial infarctions, 7 times PCI and CABG and had a pacemaker implanted, suffered from ischemic heart disease, hypertension and respiratory insufficiency requiring oxygen concentrator, and gout. The patient is now undergoing ambulatory treatment with regular follow-ups with primary care physician, haematologist, cardiologist and pulmonologist.

#### P03.65

#### A high thrombotic risk case

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#### Introduction

Hereditary thrombophilia is a situation that gives to patients a predisposition to the occurrence of thrombotic events such as venous thrombosis, the third most common cardiovascular disease.

Resistance to activated protein C is considered the more prevalent coagulation abnormality associated with venous thrombosis. A point mutation in the Factor V gene, known as Factor V Leiden, makes it partially resistant to inactivation by activated protein C. This mutation, which has a relatively high prevalence in the general population, is responsible for 85 to 95% of cases of activated protein C resistance. In high-risk's cases, definitive oral anticoagulant treatment (OAT) is recommended.

OAT was for many years confined to secondary health's care. Recently (May 2010), the control began to be made in the Primary Health Care improving the patient accessibility.

### Case description

GRT (37-years-old male, Caucasian, born and resident in Cabeceiras de Basto (Braga, Portugal), single, inserted in a nuclear family, functional, life cycle of Duvall IV, class IV of Graffar, chronic alcoholic and father with a history of stroke and repetitive deep vein thrombosis (DVT)) presents recurrent thrombophlebitis and DVT since 2006 which worsened last year (3 episodes in 6 months) with several unsuccessful attempts to achieve anticoagulant target due to his non-cooperation (repeated absences to consultations of Vascular Surgery and Immunohematology). During the last episode (July 2010), he was diagnosed with thrombophilia with need to OAT and decision to do the follow-up by his Family Physician (FP).

#### Discussion

In this case, the Health Care's proximity and availability of FP has secured patient's presence in the consultations, allowed his adherence to therapy and modification of his harmful habits

(alcohol cessation), resulting in appropriate therapeutic management .

The acessibibility of Immunohematology's Service gave security to the FP to do the follow-up of this risk patient.

#### Conclusion

The cooperation between the secondary care and the primary health care led to the successful patient's treatment, who has been presenting for the last 17 months an INR within the therapeutic range without new occurrence of thrombotic events.

#### P03.66

# Interesting case of pulmonary mycetoma on immunocompetent male adult

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#### Aim and Background

Several cases of pulmonary mycetoma due to aspergillum infection can be manifested in primary health care in patients presenting with a non typical clinical picture consisting of cough, mild chest pain and a general semiology of lower respiratory tract infections with frequent relapses. Management of patients with aspergilloma may require particular diagnostic manipulations for the identification of disease and the achievement of the most proper therapeutic approach. Aim of the present study is to review the morphological imaging characteristics of mycetomas, the criteria for evaluation of the severity of disease and the study of the therapeutic options emphasising on the particularities of the perspective patients' clinical profile.

Material and methods

The study of an interesting case of a 53 year old, immunocompetent male adult, with a medical history of bronchiectasis related to a previous surgical intervention for treatment of pulmonary echinococcus cyst, who presents for medical examination complaining for productive cough, mild chest pain and constant relapse of his illness. Progressed clinical findings of the patient's latest examination comprised of blood sputum. Clinical examination findings were evaluated and an effort of differential diagnosis of the present clinical manifestation was conducted with repeated medical imaging techniques, including chest x-ray and computer tomography (CT) scanning of the thorax, as well as laboratory investigation.

#### Results

Initial imaging testing with chest x-ray and two consecutive CT scans of the thorax did not reveal any underlying pathology. Conduction of a third thoracic CT scanning with the usage of multislice scan technique revealed a cavity formation of 21mm containing a moving formation of soft tissue (specifically highlighted in supine and prone positioning of the patient), constituting an image compatible with aspergillum formation in the lung.

Conclusions

Thorough imaging study combined with clinical and laboratory profile of patients who may have developed aspergillum infection is of critical importance for early diagnosis with obvious usefulness to the good outcome of the disease.

#### P03.67

### Sialorrhea - a venlafaxine side effect?

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Introduction: Sialorrhea is excessive production of saliva. It has also been defined as increased amount of saliva in the mouth, which may also be caused by decreased clearance of saliva. The most common cause is neuromuscular dysfunction. Other causes of hypersecretion include side effects from medications such us

tranquilizers, anticonvulsants, gastroesophageal reflux, toxin exposure. Venlafaxine is an antidepressant of the serotonin-norepinephrine reuptake inhibitor (SNRI) class, used as a treatment for generalized anxiety disorder, and comorbid indications in certain anxiety disorders with depression. It's side effects are well known. Despite dry mouth is recognized as one of the most frequent side effects, signs of an allergic reaction, including unexplained rash, hives, itching, unexplained swelling, wheezing, or difficulty breathing or swallowing.

Case description: Female, 65 years old, Portuguese, Went to her family doctor presenting sialorrhea since one year. At that time Venlafaxine 150mg/day was prescribed by her psychiatrist for generalized anxiety disorder. Nowadays sialorrhea for her is social problem, she become more isolated. Physical examination shows no dental caries, and oral cavity infection or Malocclusion. Venlafaxine was reduced for 75mg/ day, and it was requested some blood test to exclude some other pathologies.

Discussion: Physical and psychosocial complications of sialorrhea range from mild and inconvenient symptoms to severe problems that can have a significant negative impact on quality of life. Treatment of sialorrhea is best accomplished by using a team approach. The primary care physician usually focuses on the complete history and physical examination of the patient, with special attention to the impact of drooling on quality of life and the potential for improvement.

#### P03.68

#### Acute presentation of a Leriche syndrome case

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We report the case of a male aged 63 who consulted the emergency room. He presented a 30 minutes long hypoesthesia, as well as an acute pain and weakness in both lower extremities legs. Neither fecal nor urinary incontinence were present. Medical history:

Allergic to penicillin and caffeine. Smoker of 20 cigarettes per day. Hypercholesterolemia. Coronary artery disease with two vessels affected, known from 2002. Chronic obstructive pulmonary disease, colonic adenocarcinoma extirpated on 1989 and free of disease currently, cervical discopathy under opioid treatment and a long-term depressive syndrome. Current medication: Aspirin 300 mg per day, Mirtazapin 30 mg per day, Amlodipine 5 mg per day, Atorvastatin 20 mg per day, Ipratropium Bromide 2 inhalations/12h, Carvedilol 12'5 per day, Fluticasone propionate / Salmeterol 1 inhalation/12h and Buprenorphine Hydrochloride patch every 72h.

Physical examination:

Patient sweaty, mucocutaneous paleness. Blood pressure 117/71. Heart frequency 110. Paraparesis in both legs, which were cold and pale. Femoral pulse non palpable. The abdomen was soft and palpable, without pain, with no palpable masses.

Aortic dissection was suspected, and an abdominal TC was taken, showing an artherial occlusion of the infrarenal aorta, with no distal circulation. Aneurismathic dilatation of the thrombotic area.

Due to the clinical stability we sent the patient to our referral hospital, where a Vascular Surgeon was available, for preferent surgical treatment.

Conclusions:

The Leriche syndrome (aortoiliac oclusive disease) belongs to the group of lower extremities arteriopathies, associated with intermittent claudication and erectile dysfunction. It affects preferently at 35 to 60 year-old man. Sudden presentation like the presented case, is not so frequent, and an aortic dissection must be considered. Traditional surgical treatments for the Leriche syndrome are aortoiliac endarterectomy (TEA) and aortobifemoral bypass.

#### P03.69

Lactose intolerance: report of a case

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Irritable bowel síndrome (SII) and lactose intolerance (LI) are very common conditions in the adult population. Abdominal symptoms overlap considerably, present the case of a 39 year old male patient labeling of irritable bowel syndrome from infancy by frequent episodes of colic and soft deposiones adominales. For several years, has episodes of hypoglycemia during the day, has sought to address with the appropriate distribution of carbohydrate slow absorption without much success. About a year ago worsening of symptoms with great abdominal distension (increase in the pants two sizes) and Metor done so progressive restrictions of certain foods if it could be the cause. Meanwhile he performed analytical endoscopy (history of gastroesophageal reflux), and even a abdominal tomography and colonoscopy were normal. Advised by his doctor performed restriction of dairy products was improving the clinical picture markedly. To confirm the diagnosis and because testing is not intolerance in referral hospital, we administered 20 grams of lactose content in milk powder and glycemic response value at 45 minutes (no significant

changes) and the appearance of symptoms (these did appear). Other days administered 50 grams of glucose and the glycemic response was normal.

Conclusion: The combination of both tests and the presence or absence of symptoms may be useful for the diagnosis of lactose intolerance in those places where there is no more sophisticated tests, in addition is also important for the differential diagnosis of irritable bowel syndrome, as in the first case is the nutritional treatment safety restrictions and the SII requires addressing multiple aspects and not just the dietary.

#### P03.70

# Bilateral diaphragmatic paralysis: a rare complication of herpes zoster

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The bilateral diaphragmatic paralysis (BDP) can be considered an extreme form of diaphragmatic weakness characterized by a restrictive ventilatory defect and serious respiratory failure. The diagnosis of BDP secondary to acute neuritis can be done in the absence of a history of trauma, previous cardiac surgery or neuromuscular disease. BDP may be an expression of herpes zoster, as a result of spread of infection from the root adjacent dorsal and lateral spinal cord and anterior horn cells. A 58-years old patient had the main complaint of progressive dyspnea with small-moderate efforts and orthopnea from 2 months of evolution. He was forced to resume sitting position after only 1,5 h of lying down. Fatigue, daytime sleepiness. History of herpes zoster 8 months ago, right chest. Post-herpetic neuropathy. Physical examination resulted normal with the exception of a respiratory rate of 20/min and decreased breath sounds in both lung bases. Percussion dullness in bases of both hemithorax. Arterial oxygen saturation 96% and decreased to 92% on lying down. After changing body position from sitting to supine, there were noticed paradoxical chest wall movements and an increase of respiratory rate from 17/min to 28/min. The blood test was normal. Chest Xray revealed an elevation of both hemidiaphragms and basal laminar atelectasis above the right diaphragm. Respiratory function tests corresponded to a restrictive ventilatory pattern: %of forced vital capacity (FVC) 48 %, forced expiratory volume in one second (FEV1) 46%, FEV1/FVC 71%. Chest computed tomography (CT) showed no intrapulmonary lesions. Diaphragmatic Ultrasonic showed marked elevation and hypomotility of both diaphragms. The electrophysiological study revealed no response in the diaphragm by stimulating the phrenic nerve. The needle EMG showed denervation in trapezius and right diaphragm with the presence of motor units in both muscles, suggesting the root origin in the context of herpes zoster radiculitis. With the diagnosis of bilateral diaphragmatic paralysis secondary to thoracic herpes zoster and chronic respiratory failure, the treatment was started with ventilation support of intermittent positive pressure ventilators Bi-PAP at night and whenever he was supine, bronchodilators and

pulmonary rehabilitation with improved daytime hypercapnia and patient's quality of life.

#### P03.71 Skin lesions and intra-dermal injections

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We present a 42 year-old Moroccan male living in Europe since 2002. After having spent summer holidays in his homeland, the patient consults for several skin lesions he developed during his stav.

Examination reveals a total of 7 lesions on his hands and forearms which consist of violet circle plaques with a central depression that has become a black scab. At the time of the consultation, the patient is asymptomatic and working. He is told it is probably a cutaneous leismaniasis and is proposed for a dermatologist referral to perform a skin biopsy for confirmation. The patient refuses the test, reason for which pictures are taken and sent to the specialist, who later on confirms the diagnosis.

The patient is advised to undergo a treatment, since the symptoms could develop into a more serious desease (kala-azar). Prescription for an antimonial solution is provided. A second appointment to administer intra-lesional injections is scheduled, which the patient wouldn't subsequently attend.

One month later, the patient returns to the clinic. The lesions had worsened and he asked for treatment. He brought the medicine: he had attempted topical treatment himself.

After a series of local injections, the lesions disappeared.

It is of remarkable importance that, in spite of the patient having been thoroughly informed about the diagnosis, the social and cultural factors limited the approach of the disease. Thus, responsibility for effective treatment rests on the family physician, who is accustomed to deal with uncertainty and the "treat to test" basis. Clinical skills featured in this case were inter-cultural knowledge, understanding of the labour situation, treatment negotiation and ability to administer intra-lesional injections.

# P.04 - Reviews/Meta analyses

#### P04.01

Screening of thyroid disease in pregnancy an evidence-based review for Primary Care

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Introduction: The presence of thyroid disease during pregnancy has multiple deleterious impacts. Abortion, preterm delivery, postpartum thyroiditis, and visual-motor deficiencies in the offspring are the most frequent complications. However, the impact of thyroid dysfunction screening during pregnancy on maternal and fetal outcomes is not clearly understood.

Objective: To evaluate the indications for thyroid disease screening during pregnancy, in the context of Primary Care.

Data sources: MEDLINE database and evidence-based medicine sites

Methods: A systematic review was performed for papers published between January 2000 and March 2011, in Portuguese, Spanish English languages, in the medical databases Medline/Pubmed, Library, Cochrane National Clearinghouse, Clinical Knowledge Summaries and evidencebased medicine sites, using the MeSH keywords "Thyroid Disease", "Pregnancy" and "Mass Screening". The Strength of Recommendation (SOR) Taxonomy of the American Family Physician was used to evaluate the quality and the strength of recommendation.

Results: Seven articles matched inclusion criteria (2 clinical trials, 2 systematic review and 3 guidelines). Most articles concluded that systematic screening of thyroid disease is not recommended, according to the actual evidence. However, the screening must be considered in high-risk pregnant women (such as those with

previous personal or familiar history of thyroid disease, or if in presence of clinical signs and/or symptoms) (SOR A).

Conclusions: There is insufficient evidence to recommend the systematic screening of thyroid disease in low-risk pregnant women. However, further patient-oriented, high quality studies are needed to evaluate mass screening impact on major clinical outcomes, and the cost-effectiveness of its generalization.

#### P04.02

#### Garlic in hypertension treatment: what evidence?

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#### Introduction

Hypertension (HT) is the principal risk factor for cardiovascular diseases, especially stroke and ischemic heart disease. The prevalence of HT in Portugal is 43,7% and its early detection and appropriate treatment by the GP are essential. Dietary factors have a fundamental role in the development of certain diseases. Diets rich in fruits, vegetables and spice are associated with a lower risk of cardiovascular disease. Garlic (Allium sativum) has been used for a great variety of diseases. The association between garlic consumption and decrease of cardiovascular morbidity and mortality has been suggested, by its antihypertensive properties.

Goal

The goal of this review is to assess garlic's effectiveness in the reduction of blood pressure's values in hypertensive patients, when compared to placebo.

#### Methods

Researches were performed on databases Tripdatbase, National Guideline Clearinghouse, Guideline Finder, Cochrane Library, Dare, Bandolier e Medline using the MeSH terms "garlic" and "hypertension". The researches were limited to the articles published in the last 18 years in English, Spanish and Portuguese. To evaluate the results, the taxonomy SORT (Strenght of Recommendation Taxonomy) of American Family Physician was used.

#### Results

From the research resulted 150 articles, from which were selected 11: 3 meta analysis, 1 randomized clinical trial and 7 systematic reviews. From their analysis, we conclude that supplementation with garlic has an hypotensive effect, when compared to placebo, particularly in individuals with HT, being the result insignificant in normotensive. However, the arterial blood pressure decrease is not statistically significant so the garlic supplementation could have some clinical relevance only in individuals with mild HT. Conclusion

The evidence is actually insufficient to recommend for or against garlic supplementation in hypertensive patients (SORT A), as a therapy in hypertension treatment, for the reasons mentioned below. A great heterogeneity between the methodologies of the studies analyzed was verified. It is necessary more studies about garlic supplementation, oriented for hypertensive, controlled and randomized, of long duration, with larger samples, garlic preparations more clearly defined, as well as studies with high

### P04.03

quality.

#### Management of Pruritus in the Elderly

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Introduction: Pruritus is one of the most common dermatological symptoms and represents the most common cutaneous complaint in the elderly, in whom it can have a profound long term impact in their quality of life. The cutaneous changes related to aging, such

as diminished epithelial barrier repair function, with subsequent xerosis, immunosenescense and neurodegenerative processes, all represent risk factors for pruritus in the elderly. It is necessary for clinicians that deal directly with this age group to have updated scientific evidence on the approach and management of pruritus.

Objective: To review the scientific evidence of the diagnostic and therapeutic management of pruritus in the elderly.

Methods: A systematic review was performed for papers published between January 2000 and August 2011, in Portuguese and English, in the medical databases Medline/Pubmed, Cochrane Library, National Guideline Clearinghouse, evidence-based medicine sites and text books, using the MeSH keywords Pruritus and Aged.

Results: The approach to pruritus can be divided according to the existence or absence of visible primary skin lesions. When they are absent, they may actually be very subtle, in which case xerosis is most common, or a consequence of systemic disease, drug reaction or of psychogenic origin. When there is a visible rash, scabiosis, xerosis, stasis eczema and bullous disorders are common etiologies. It may be useful to subdivide this category according to an eczematous or papular pattern, though these can occur simultaneously. Neurodegenerative conditions are often accompanied by paresthesias.

Treatment should focus on the inciting factor, whenever identifiable, though often the cause is multifactorial. Xerosis frequently responds to emollients. First generation antihistamine therapy, though effective, has greater risks in the elderly, because of sedation and subsequent risk of falls. Polymedication, common and also a potential inciting factor, should always be considered. In neurodegenerative disorders, medications usually used in neuropathic pain may be necessary.

Conclusions: In the elderly, co-morbidities and polymedication are frequent, and as such, a detailed diagnostic approach and focused treatment are necessary, while simultaneously taking into account the specific circumstances of this age group. Adequate cutaneous care is fundamental.

# P04.04

# Treatment of Obstructive Sleep Apnea in the prevention of cardiovascular events - What is the evidence?

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Introduction: Obstructive Sleep Apnea (OSA) is characterized by intermittent episodes of upper airway collapse during sleep, associated with an increase in respiratory effort and cardiac demand for oxygen, as well as a low oxygen reserve due to lack of ventilation. As such, can untreated OSA be accompanied by an increase in cardiovascular events?

Objective: Review the evidence related to the benefit of OSA treatment in the occurrence of cardiovascular events.

Methods: A search for meta-analyses, review articles, randomized controlled clinical trials, observational studies and guidelines was performed in Pubmed, evidence based medicine sites and Portuguese Medical Journals Index, as well as revision of references of selected articles and UptoDate®, published between 01/2003 e 10/2011, in english and portuguese, using Mesh keywords: obstructive sleep apnea; myocardial infarction; acute coronary syndrome. Evaluation of evidence levels and strength of recommendations was performed using the National Institute for Clinical Excellence (NICE) classification.

Results: Of the 406 articles found, 6 complied with inclusion criteria: 4 observational studies, 1 guideline and 1 system (UptoDate®). All articles consistently supported the reduction in cardiovascular risk with treatment of OSA, independently of age and pre-existing comorbidities. Untreated serious OSA significantly increased the risk of fatal and non-fatal cardiovascular events in comparison with healthy participants. Patients with treated OSA had a statistically significant reduction in the number of cardiac deaths during follow-up, and a tendency for diminished mortality by any cause, in comparison with non-treated OSA.

Discussion: OSA treatment can result in reduction of cardiovascular events and mortality - strength of recommendation C. However, given that only observational studies were available, the risk of bias should be stressed. The results from a randomized

clinical trial on the effect of OSA treatment in cardiovascular events will provide new, better quality evidence. This new data will be very relevant in the decision to investigate and subsequently treat subclinical OSA in patients with coronary pathology.

#### P04.05

# Topical versus systemic antibiotic therapy in the treatment of Acute Otitis External

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Background: Acute otitis externa (AOE) is an inflammation of the external auditory channel (EAC), with or without infection, lasting less than 6 weeks. Symptoms may include itching, ear pain, discharge and decreased hearing. The most frequent microorganisms are *Pseudomonas aeruginosa* and *Staphylococcus aureus*. Both can cause infections in EAC for which the use of broad-spectrum antibiotics is necessary for an effective treatment. In recent years, several authors reported the use of topical antibiotics (TABs) as an alternative to systemic antibiotics (SABs) with high success rates.

Objective: To determine the effectiveness and advantages of TABs, or a combination therapy with TABs and SABs, comparatively to SABs alone, in the treatment of AOE in pediatric and adult populations. Methodology: We conducted a survey of clinical practice guidelines, systematic reviews, meta-analysis and randomized controlled clinical trials (RCTs) in Pubmed, evidence-based medicine (EBM) databases, Portuguese Index of medical journals and references from selected articles, published between 01/2003 and 04/2011 in English and Portuguese languages, using the MeSH terms: "otitis externa" and "anti-bacterial agents". Assessment of levels of evidence and strength of recommendation was established using American Family Physician's Strength of Recommendation Taxonomy (SORT).

Results: 45 articles were retrieved: 6 of which met the criteria for inclusion: 1 System, 3 guidelines and two systematic reviews (SR). All articles consistently supported isolated TABs for the treatment of uncomplicated OAE, as a result of its effectiveness and lower potential for side effects or development of bacterial resistances. TABs permits antibiotics' lower doses and shorter courses, with additional advantages in terms of adherence, costs, and, especially, lower ototoxicity. In contrast, SABs exposes patients to the risk of developing resistances. SABs, alone or in combination, increase costs and the occurrence of adverse systemic side effects, while decreasing adherence to treatment.

Discussion: Available evidence indicates that TABs are the first-line treatment for the treatment of mild to moderate AOE (SOR B). TABs permit lower resistance rates, side effects and costs, compared with SABs or combined therapy (SOR B). Heterogeneity was an issue in selected studies. Further high quality studies are needed for the evaluation of interventions in the AOE.

# P04.06

# Inflammatory neck masses

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Introduction: Family doctors frequently come across, in their daily clinical practice, with neck masses as a presenting complaint from their patients. This finding often represents a diagnostic challenge since a broad spectrum of conditions, with different approaches and specific treatments, can justify its presence. It is useful to divide neck masses etiology into three categories: inflammatory, congenital and tumoral. Inflammatory/infectious causes are the most common in children and young adults.

Objective: Review the existent information on diagnostic and therapeutical approach of neck masses with an inflammatory/infectious origin.

Methods: Research original papers and review articles, published in the last decade, on the MEDLINE/PubMed database, in English and Portuguese, using the terms "inflammatory neck masses", "cervical adenitis" and "cervical abscess".

Discussion: A thorough medical history and a detailed physical examination are the starting point of the diagnostic investigation, that allow to narrow the possibilities to take into consideration and, therefore, help to determine the appropriate complementary exams. A correct knowledge of the neck anatomy and its structures is also important. Relevant factors that must be inquired are, among others, the patient's age, duration of onset, rate of growth, associated symptoms, personal habits, as well as the mass location, size and consistency. Several inflammatory processes can cause neck masses, nodules or swelling, namely viral, bacterian and parasitic infectious diseases, such as the ones reviewed: reactive viral linfadenopathy, infectious mononucleosis, toxoplasmosis, purulent adenitis, tularemia, brucellosis, cat-scratch disease, actinomicosis, cytomegalovirus, HIV, mycobacterial and deep neck spaces infections.

Conclusion: Neck masses are common reasons for primary care visits. The number of differential diagnosis is large and the inflammatory/infectious causes are frequent, by which is essencial to have a systematic approach that leads to an accurate diagnosis and to the most appropriate treatment.

### P04.07 Sweet hypertension

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Background: Hypertension is a known cardiovascular risk factor worldwide. Cocoa products such as chocolate may play a role in the management of this condition due to its high content of plant-derived flavonoids.

Aim: The aim of this review is to assess chocolate effectiveness in the improvement of blood pressure control.

Methods: Researches were performed on Trip Database, National Guideline Clearinghouse, Canadian Medical Association InfoBase, Guideline Finder, Cochrane Library, Dare, Bandolier e Medline using the MeSH terms "cacao" and "hypertension". The researches were limited to the articles published since January 2005 until November 2011 in English, Spanish or Portuguese. To evaluate the results, the taxonomy SORT (Strength of Recommendation Taxonomy) of American Family Physician was used.

Results: From the research resulted 120 articles, from which were selected 11: 6 randomized clinical trials, 2 meta-analysis, 2 systematic reviews and 1 case-control study. From their analysis it appears that the ingestion of chocolate has a blood pressure lowering effect. Nevertheless, we notice that some of the trials have a small set of participants and have a high risk of bias. Not only but also, there is not an established most effective dose and there is no long-term side effects profile.

Conclusion: The findings are consistent with the hypothesis that the ingestion of chocolate may be associated with a reduction in blood pressure (SORT B). However, there is still some inconsistence among results and important questions are left unanswered. This leads us to the necessity of further investigation before chocolate can be strongly recommended as an option in the management of hypertension.

#### P04.08

Evidence behind non-steroidal anti-inflammatory drugs' cardiovascular adverse effects

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#### Introduction

Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used in many clinical situations presenting simultaneously multiple action mechanisms and a not less important part of adverse effects. Besides representing one the world's most prescribed drugs, they are usually taken chronically by multi-pathology, polimedicated patients, frequently disregarding the risks associated with these drugs.

#### Objectives

Investigate and outline the cardiovascular (CV) adverse effects of NSAIDs used in therapeutic doses, trying to raise family physicians awareness to the risks of this therapy.

#### Methodology

Research of clinical guidelines (CG), systematic reviews (SR) and original studies (OS) in the National Guideline Clearinghouse, Guidelines Finder, Canadian Medical Association Infobase, Cochrane Library, Bandolier, Database of Abstracts of Reviews of Effectiveness, Evidence Based Medicine Online, Pubmed and the Portuguese General Directorate of Health, Portuguese Association of General Practitioners and the Index of Portuguese Medical Magazines.

MeSH terms used: Non-steroidal anti-inflammatory agents, adverse effects, cardiovascular system. The search was limited to articles published between 2006 and 2011, in accordance with the objectives and applying exclusion criteria: repeated articles, no CV adverse effects.

#### Results

237 CG were found, three were selected. From 59 SR, ten were selected. Of the 294 OS identified, 48 were selected. In Portugal two guidelines were identified. Regardless of whether non-selective NSAID or selective inhibitor of COX-2 (Coxib), there is consensus that NSAIDs are associated with an increased risk of CV events, including myocardial infarction and stroke. They are responsible for exacerbation of pre-existing CV disease such as hypertension and heart failure. The CV risk may be directly related to the dose and duration of treatment, especially in Coxibs. There seems to be consensus that naproxen is the safest NSAID.

#### Discussion

The authors conclude that the use of NSAIDs should be reserved for wisely chosen situations where no other drug with better safety profile may be used. The risk profile for CV events should always be taken into account. Therefore it is important to adapt the posology to the patient, determining the lowest possible dose and therapy duration, being watchful for any arising adverse effects.

#### P04.09

Self-monitoring blood glucose and glycemic control in type-2 diabetes mellitus: what is the evidence?

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**Introduction** Diabetes mellitus is a significant and growing global health problem. Currently, in many countries, people with diabetes have a significantly decreased life expectancy.

Uncontrolled diabetes is associated with debilitating microvascular and macrovascular complications. Intensive management of glycemia and other risk factors have been shown to reduce the development and/or progression of those complications.

**Goal** The goal of this review is to assess self-monitoring blood glucose (SMBG) effectiveness in type-2 diabetes mellitus (T2 DM) glycemic control.

**Data sources** National Guideline Clearinghouse, Guideline Finder, Cochrane Library, Dare, Tripdatabase, Bandolier and Medline.

**Methods** Practice guidelines, systematic reviews, meta-analysis and randomized controlled trials were searched using the MeSH terms self-monitoring blood glucose and type-2 diabetes mellitus. The *Strength of Recommendation Taxonomy* (SORT) of the American Family Physician was used to classify the articles. The researches were limited to the articles published in the last 10 years in English, Spanish and Portuguese.

Results One hundred fifty-five articles were found and twelve met the inclusion criteria for this review: four meta-analysis, four guidelines, two randomized clinical trials and two systematic

We found inconsistent data to suggest that SMBG did conferred benefit in improving glycemic control in people with T2 DM on oral agents, or diet alone, and is therefore unlikely to be cost-effective. For T2 DM patients not using insulin who have poor glycemic control, SMBG could be beneficial in some circumstances (for example, as an educational tool).

**Conclusion** Evidence is actually insufficient to support the efficacy of SMBG (SORT B) in the T2 DM glycemic control. Although the use of SMBG is recommended in T1 DM and insulin treated T2 DM individuals, there is no consensus on the utility of SMBG in people with non-insulin-treated T2 DM.

Given the significant and increasing prevalence of diabetes worldwide and the economic costs associated with SMBG use, primarily due to an increase in T2 DM in developing countries, there is a clear need to evaluate the clinical, metabolic and cost-effectiveness of SMBG.

#### P04.10

# Molluscum contagiosum - therapeutic intervention in children: an evidence-based review

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**Introduction:** Molluscum contagiosum is a viral skin infection most frequently encountered in children between 2 and 5 years old. In most of the cases the disease is self limited and resolve within 6 months and 2 years, but may persist up to 5 years. The therapeutic intervention is intended to alleviate symptoms, control the spread of the lesions, prevent scaring and secondary infection, and may be used for cosmetic and social reasons.

Aim: Determine the evidence of the efficacy and potential adverse events of therapeutic intervention strategies in molluscum contagiosum in immunocompetent children.

Data sources: Medline, Cochrane Library, Dynamed, National Guideline Clearinghouse and Evidence Based Medicine Guidelines databases.

Review methods: It was performed a survey of clinical guidelines, systematic reviews, meta-analysis and clinical trials, published between January 2001 and September 2011, in portuguese, english, french and spanish, limmiting age to ≤18 years old, using the MeSH term *molluscum contagiosum*. Exclusion criteria: sexually transmitted molluscum contagiosum and immunocompromised children. The SORT scale of the American Family Physician was applied to grade the evidence.

Results: Twenty two studies were found but just five were selected: a systematic review, a Dynamed summary, two guidelines and a randomized clinical trial.

Conclusions: There is limmited evidence to recommend therapeutic intervention in molluscum contagiosum in children. Additional well-designed, prospective studies are needed on therapeutic options against placebo or watchfull waiting. Withouth good evidence about the efficacy and safety of the treatments, watchfull waiting must be considered.

#### P04.11 The Caregiver's face

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Background: The informal caregivers of dependent patients on self-care with incurable disease must manage multiple emotional challenges, because they are confronted with the responsibility to assist emotional, physical, therapeutic and possibly financial. However, this assistance may interfere with personal, familiar and social aspects of their life.Goals: To understand what are the main needs of informal caregivers of terminally ill patients and review the role of palliative care in support of these people. Data sources: Medline database, evidence-based medicine sites and bibliographic references of the selected articles. Review methods:

Research of systematic reviews (SR), meta-analysis (MA), randomized controlled trials (RCT) and guidelines (G), from 2001 to 2011, in portuguese and english, using the keywords: informal caregivers, palliative care, burden. Results: The "caregiver burden" is a disorder resulting from the contact with physical dependence and inability to care the patient that usually has a familiar relationship and strong emotional bond with the caregiver. Thus, all "stressors" factors that underlie this disorder, can lead to isolation and avoidance of personal caregivers, deteriorating relationship with the patient and quality of care provided. According World Health Organization (WHO) should be the objectives of Palliative Care support informal caregivers / families of these patients in order to decrease their emotional vulnerability and promote self-efficacy, hope and care in a consistent and integrated into the interdisciplinary team. The results of some studies showed that the relative's satisfaction could depend on the attitude of the professional as well as on good communication. good listening and good information. This can also be viewed as a prerequisite for the professional to get to know the family and to provide 'care in the light'. Conclusions: Healthcare professionals have a great deal of responsibility for assuring relatives involvement based on the family's wishes and limiting the stress and difficulties experienced by the family. The "caregiver burden" can be minimized in those who have support and take an active role in healthcare team

# P04.12

#### Dementia in the elderly - the role of Primary Health Care

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Introduction and Objectives: Dementia is a brain disease, usually chronic and progressive affecting multiple higher cortical functions. It affects particularly the elderly and, it is estimated that its prevalence should double every 20 years until 2040, following the ageing of the population. The General Practicer (GP) will face new challenges, so this work aim is to review the existing literature and to establish guidelines, adjusted to the Primary Health Care in the approach of Dementia amongst the older people.

Methodology: Classical review based on literature in textbooks, articles and guidelines published in scientific databases, in English and Portuguese between 2006 and 2011 using the MeSH terms "Dementia" and "Primary Health Care".

Results: Most causes of Dementia are irreversible, being the causes Alzheimer's Disease and Vascular Dementia the two most common. The GP should recognize the main clinical differences between both, without neglecting the reversible causes of Dementia (5%): infectious, metabolic, toxic, endocrine, iatrogenic, vitamin deficits, among others. The diagnostic includes a careful clinical history, physical examination with neuropsychological evaluation and the interview with cohabiting people. If necessary, use the help of auxiliary diagnostic tests. The ruthlessness quantification of the disease can be done using several validated scales, being the most evident the Global Deterioration Scale. The therapy aims to reduce disability, to keep the capacity remaining as long as possible, to relieve the symptoms associated with coexisting medical problems, to control the agitation, delusions and depressive symptoms. For most patients, there are no preventive or curative strategies with confirmed efficiency and only symptomatic treatment can be used with some expectation of Symptomatic treatment improvement. includes pharmacological and pharmacological strategies in three areas: cognitive, functional and psychological. The referral criteria are presented to the specialist consultation at the hospital.

Discussion: Dementia is common among older people and tends to rise with the increase in life expectancy. The Primary Health Care has a key role in the detection and exclusion of treatable causes, minimizing disability, prevention, treatment, hospital referral, access coordination and support to caregivers.

#### P04.13

#### Child with gastroenteritis - does diet reduce the duration of diarrhea?

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Acute gastroenteritis is a major cause of morbidity and mortality throughout childhood. A therapeutic diet is often recommended by health professionals in order to reduce diarrhea, but its scientific evidence is commonly unknown. The family doctor usually contacts first the child with gastroenteritis, therefore it is mandatory to have a better understanding of the diet to perform an effective and appropriate intervention.

Objective:

To determine if diet therapy reduces the duration of diarrhea in children (0-18 years) with acute gastroenteritis without need of hospitalization.

Methods:

Literature searched in Medline, Scielo, Cochrane Library, Dare, Bandolier, Trip Database, BMJ Best Practice, Up to date. Search restrained to articles published between 2007 and 2011 in English, German, Spanish, French, Portuguese and Romanian

MeSH Terms: diarrhea, gastroenteritis, diet therapy

68 articles were identified, of which 10 were selected - 6 reviews, 1 randomized controlled trial, 2 guidelines, 1 review protocol. Most studies show that breastfeeding should be continued during the episode of diarrhea, that the usual milk should be given without any dilution or replacement of the formula and that the usual diet, age-appropriate, should be introduced straight away.

Discussion / Conclusion:

Diet therapy doesn't seem to reduce the duration of diarrhea. There are not many studies on this topic and the existing ones aren't very recent, and some have contradictory results. The reduced / adapted diets and changes in milk formulas in acute gastroenteritis may have a negative impact on the child because of their risk of causing malnutrition and food intolerance, so further studies are lacking to bring better scientific evidence to our practice.

# P04.14 Dementia - diagnosis algorithm

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Introduction: With increased life expectancy increases the prevalence of dementia. Today this disease has a worldwide prevalence of 24.3 million, recorded as 4.7 million new diagnoses yearly. The prevalence doubles every 5 years after 60 years, reaching 1 in 3 people aged 90-94 years. It is therefore crucial for early diagnosis of a good clinical interview, physical examination (PE) and appropriate complementary exams (CE).

Purposes: Review and systematize the diagnostic approach of dementia; Create a diagnostic algorithm for these conditions, aimed at Primary Care.

Methodology: Research in the PubMed, UpToDate, Guidelines Finder, MedLine databases and Index of Portuguese Medical Journals in English, Portuguese, Spanish, with the MeSH "Dementia" and "Dementia and Primary Care" keywords.

Results: The memory changes and dementia are frequent reasons for consulting the general practitioner (GP). In approaching the patient with suspected dementia is important to bear in mind the possible etiologies, including reversible and irreversible causes of dementia, as well as the primary dementias. There are two health conditions that might pose a question that should be excluded by the holding of a detailed anamnesis and performed a directed treatment; these are pseudo- dementia and delirium. The clinical interview of patient, relatives and caregivers is a critical piece in the gathering of information associated with the use of pre-defined tests such as the Mini Mental State Examination which evaluates the patient's mental status, and Functional Activities Questionnaire to assess functional repercussions on the patient's life. The use of brief screening tests is useful in early diagnosis of mild cognitive impairment or dementia. The request for CE must be judicious and

guided by clinical interview and PE. The evolution of the decay is an important step that can guide us to a certain diagnosis. Given the suspicion of the diagnosis, the patient should be referred to secondary care (SC) for the establishment of diagnosis and

Discussion: In situations of cognitive changes it is essential that GPs have a systematic approach to diagnosis in clinical practice, as they are well placed for early detection of cases and timely referral to SC.

#### P04.15

### The general practice in eyelid problems

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Introduction: Vision has a featured place in health as one of the five senses. So, eyelid problems are important for the patient not only because cause clinical symptoms but also the social issues due to physical alterations.

Aim: Review the published data about the main eyelid diseases in primary care and referral criteria.

Methods: Literature review, based on the consultation of articles published in the database Pubmed/Medline, National Guideline Clearinghouse and The Cochrane Library between January 2001 and November 2011 in English, Spanish, French and Portuguese. Results: Eyelid is the external eye structure which function is lubrication and protection of the environmental care. Musculature, vasculature and innervation allow opening and closure of the eye. In its constitution there also are lacrimal, sweat and sebaceous glands. Meibomian are the deepest sebaceous glands and Zeiss and Moll are the superficial ones. On the insertion of the eyelid are eyelashes. Main palpebral diseases are hordeolum, chalazion and blepharitis. They have a high recurrence rate but are not contagious. Hordeolum is a staphylococcal inflammation of Zeiss gland causing pain and hypersensibility of the eyelid, tearing and photophobia sometimes are associated. Chalazion is a Meibomian gland inflammation and is less frequent than hordeolum, They have an insidious increase and become often a chronic process. Both can be associated with blepharitis. Blepharitis is a chronic disease of the eyelid border. It is divided in inflammatory and seborrheic, possibly including a systemic disease like seborrheic dermatitis or rosacea. Its clinical manifestations include sloughing and suppuration of the eyelashes, itching, tearing, foreign body sensation, pain and eyelid erythema and edema. The treatment of these entities is similar and quite simple: warm compresses, antibiotic and steroidal topical ointment. It is important to avoid predisposing factors like dust, smoke or air-conditioned rooms and an effective lid cleaning. Refractory and relapsed cases should be referred to ophthalmologist for surgical treatment.

Conclusion: Hordeolum, chalazion and blepharitis are very frequent entities affecting vision and the patient life quality. General practitioner intervention in eyelid main diseases is appropriate due to the continuous contact with the patient, referring the refractory and relapsed cases.

#### P04 16 Carpal tunnel syndrome

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Background: Carpal tunnel syndrome (CTS) is the most common neuropathy in the upper limb and results from compression of the median nerve. It seems to be associated with repetitive motion. It is a major cause of activity limitation and disability for work, affecting approximately 3 to 6 percent of the population.

Aim: Analyze the published information about CTS in the context of primary health care.

Methodology: Literature review, based on the consultation of articles published in the database Pubmed/Medline, National Guideline Clearinghouse and The Cochrane Library between January 2001 and November 2011 in English, Spanish, French and Portuguese.

Review: The classic symptoms of CTS are pain, tingling and numbness in the distribution of the median nerve and are usually worse at night. In severe syndrome patients may develop decreased grip strength and thenar muscle atrophy and can awaken patients from sleep. The most common cause of CTS is nonspecific flexor tenosynovitis, however, despite no consensus, it can be associated with other conditions: female sex, infectious, inflammatory and metabolic diseases and anatomical changes. Diagnosis is clinical and based on classic signs associated with positive clinical tests (Tinel and Phalen). Treatment options are based on disease severity and can be conservative or surgical. Surgery should be considered in patients with severe CTS and symptoms that do not respond to conservative measures. Conservative treatment includes general measures (lifestyle modifications and ergonomic devices) and wrist splints. Oral corticosteroids therapy and local corticosteroids injections have been shown to be more effective than anti-inflammatory drugs. Conclusion: CTS is a common disease in primary health care.

Approximately 80 percent of patients respond to conservative treatment, but symptoms recur in 80 percent of cases.

P04.17 Approach to plantar fasciitis

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Background: Plantar fasciitis (PF) is a common and debilitating pathology whose chief complaint is acute plantar heel pain. It affects more than 1 million persons per year, and two-thirds of patients with plantar fasciitis will seek care from their family practitioner.

Aim: Analyze the published information about PF in the context of primary health care.

Methodology: Literature review, based on the consultation of articles published in the database Pubmed/Medline, National Guideline Clearinghouse and The Cochrane Library between January 2001 and November 2011 in English, Spanish, French and Portuguese.

Review: PF is a painful inflammatory process caused by collagen degeneration at the origin of the plantar fascia at the medial tubercle of the calcaneus. The cause of the degeneration is repetitive microtears. The principal risk factors are: obesity, excessive foot pronation, excessive running, prolonged standing foot deformities (pes planus or pes cavus). Diagnosis is primarily based on history and physical examination. X-ray is normal or reveals only a heel spur. PF is a self-limiting condition. 90% of patients respond favourably to conservative care (rest, ice massage, nonsteroidal anti-inflammatory, reduction of body weight, activity modification, arch supports and orthotics and stretching exercises).

Conclusion: PF is a common disease in primary care which can be treated successfully with conservative care effective management of individual's risk factors by the family practitioner.

P04.18 Bell's palsy

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Background: Bell's palsy (BP) is an acute paralysis of the seventh cranial nerve of unknown aetiology. Has a benign prognosis but can cause serious sequelae, both social and psychological. Aim: Analyze the published information about BP in the context of primary health care.

Methodology: Literature review, based on the consultation of articles published in the database Pubmed/Medline, National Guideline Clearinghouse and The Cochrane Library between January 2001 and November 2011 in English, Spanish, French and Portuguese.

Review: The incidence of BP is 20 to 30 cases per 100,000 people per year. The gender is affected equally and BP occurs more often on adults, diabetics and pregnant women. The cause of BP is not clear, however can be secondary to viral and/or autoimmune diseases. Clinically BP is characterized by paralysis or paresis of all muscle groups on one side of the face. Other symptoms are: aching of the ear or mastoid, decreased tearing, taste disturbances, otalgia, hyperacusis. The diagnosis is clinical and laboratory testing is not usually indicated. Approximately 70 to 80 percent of patients will recover spontaneously. The treatment of BP remains controversial. There are important measures: eye protection and topical ocular lubrication to prevent corneal abrasion and corneal ulcers. The most widely accepted treatment is corticosteroids, although recent trials demonstrated full recovery with an antiviral drug in combination with corticosteroids. Physical rehabilitation also is important in the recovery of patients.

Conclusion: Patients with BP generally have a good prognosis, although some have incomplete recovery or permanent neurologic sequelae that have a significant negative impact on patients' quality of life. The family practitioner has an important role in diagnosis and management of these patients.

P04.19 Quality evaluation of psychosocial dimension in family medicine

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#### Background:

Most modern healthcare is based on a biomedical model of illness. The bio psychosocial approach takes into account more coinfluencing factors: individual personal factors, physical environment, social environment and time. The aim of our review was to make a systematic overview of published literature on psychosocial dimensions of family medicine.

### Method:

While searching online (PubMed, Google scholar, EBSCOHost, JStore, Cochrane Library, Ovid Medline, Embase, All EMB Reviews and PSYCInfo) with bulling operators, selecting criteria was that article needs to contain something about holistic medicine, quality indicators, family medicine, patient-centered care and/or bio-psycho-social model of the treatment. We did not include articles which were not related to family medicine, did not have the quality indicators, papers about education and educational programs and those related to palilative nursing and about alternative medicine. From all those 743 hits, 68 articles concerning the prevention methods, communication between the doctors and the patients, holistic approach and holistic healing, chronic disease management and evidence based medicine were selected.

## Results:

For quality health care, understanding and trust between doctor and the patient must be achieved. Findings are telling us that adult respondents who reported a primary care physician rather than a specialist as their regular source of care had lower mortality and lower health care costs.

### Conclusions:

The themes on about patient-centered, behavioural medicine or psychosocial medicine are rather good presented in several papers. But there is little evidence about the quality of those approaches to patient and family medicine.

### Points for discussion:

What is the main issue in being more psychosocially centered in comparison to biomedicine approach?

Do you think that patient centered, wholistic approach and health as well-being are all included (or can be included) in bio-psychosocial model?

#### P04.20

#### **Dermatitis artefacta**

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Introduction: Factitious disorders are self-inflicted skin lesions and include the creation of physical or psychiatric symptoms in oneself. Their diagnosis is often challenging. Dermatitis artefacta is a type of factitious disorder and is defined as the deliberate production of self inflicted skin lesions to satisfy an unconscious psychological or emotional need.

The aim of this work was to study the main epidemiological, clinical and therapeutical aspects of dermatitis artefacta.

Methods: A bibliographic research was carried out using the MeSH terms factitious dermatitis, factitial dermatitis and dermatitis artefacta. Data was collected if published between January 2000 and August 2011.

Results: The prevalence of dermatitis artefacta is more common than typically thought because it is poorly recognized and underreported. Most patients with dermatitis artefacta are females (3:1 to 20:1). The highest incidence of dermatitis artefacta occurs between late adolescence and early adulthood.

Psychiatric conditions, such as major depression, personality disorders and obsessive-compulsive disorder, are often coexistent in patients with dermatitis artefacta.

The self-induced skin lesions may be present continuously or may be episodic, occurring during periods of heightened psychosocial stress.

The morphology of the dermatitis artefacta skin lesions is variable and is typically dependent on the mechanism of injury. Dermatitis artefacta must be distinguished from other dermatological and psychiatric conditions.

Dermatitis artefacta is a challenging condition that requires dermatologic and psychiatric expertise. Many of these patients often refuse a psychiatric evaluation. In these cases, the assess of the risk of self-harm and the treating of the underlying psychiatric disorder must be done by the dermatologist or family doctor.

Discussion: Dermatitis artefacta is a challenging disorder, both on diagnosis and treatment. Patients with dermatitis artefacta require both dermatological assessment and psychosocial support. The role of the family doctor is central, both on diagnosis and long term follow-up.

### P04.21

## Management of anxiety before surgery: systematic literature review

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Strong preoperative anxiety may worsen the results of treatment, because the perception of information is more difficult for the anxious patients, it is more difficult for such patient to associate and to co-operate with the staff of the health- care institution before, during and after the operation. The aim of this investigation is through systematic literature review to define the most effective consultative intervention in reducing preoperative anxiety.

**Method (Methodics)** - the research of publications was made in websight PubMed, included articles publicized during 10 years period (2000- 2010), using key- words: *operation, counseling, anxiety, surgical intervention.*8 articles from 125 selected corresponded with requirements, chosen for systematic review.

Results. Components of preoperative anxiety reducing intervention were determined: procedural- [i]informative, sensual, emotional, educational, informing about potential risk. The effect in reducing preoperative anxiety differed for the interventions applied, but all of them were valued positively by the patients and had additional positive effects: the direct contact with the staff, working in the hospital, helped to create more emotionally friendly atmosphere for the patients, increased knowledge about procedure and the significance of it for personal health, reduced negative sensations during operation and after it, induced active participation recovery processes and further health- care procedures.

**Conclusions.** Methods used to reduce preoperative anxiety still remain the object of discussion. The main premise to reduce preoperative anxiety is the use of poly (multi)component informative intervention adapted maximally to the needs of concrete patient. Even interventions, that do not reduce preoperative anxiety, have many other positive effects and are appreciated by the patients.

#### P04.22

### Escitalopram: new ally against menopause hot flashes?

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Introduction: menopause is a major challenge in the physical and emotional life of the woman. The hot flashes are amongst its symptoms, affecting 80% of the women in that condition. The growing concern with the risks associated with hormone replacement therapy (HRT) and with the increasing costs associated with climacteric symptoms are reasons to search for alternative therapies. Known the pathophysiology of the symptom, the selective serotonin reuptake inhibitors are a target of recent interest in this area and escitalopram, specifically, profiles as a promising non-hormonal strategy against the hot flashes during menopause.

**Objective:** to review the most recent evidence on the effectiveness of escitalopram against placebo in reducing the frequency and intensity of hot flashes in healthy menopausal women.

**Methods:** the authors searched for guidelines, systematic reviews, meta-analysis and randomized controlled clinical trials, in Pubmed, evidence-based medicine websites, index of portuguese medical journals and bibliographical references of the selected articles published between 2003 and 2011 in English and Portuguese, using the following MeSH terms: "menopause", "hot flashes" and "escitalopram". The Strength of Recommendation Taxonomy (SORT) of American Family Physician was used to asses the evidence levels and strength of recommendation.

**RESULTS:** Of the 28 articles identified, 11 met the inclusion criteria: 3 clinical decision support system, 2 guidelines, 1 systematic review and 5 original articles

**Conclusion:** The authors recommend the stand alone use 10-20 mg of escitalopram in healthy menopausal women during the climacteric (SORT A) or in association with HRT (SORT B). The authors found evidence of a statistically significant reduction in frequency and intensity of hot flashes with, at least, a 8 weeks long treatment (SORT B). However, it's necessary higher quality studies to clarify long-term effects. Also, the heterogeneity of studies included, few trials specifically targeted for escitalopram and short follow-up are limitations of the review.

#### P04.23

Use of topical capsaicin to relieve post-herpetic neuralgia, what is the evidence?

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Introduction: the post-herpetic neuralgia (PHN) is a complication of herpes zoster virus infection, occurring with an incidence of 20% of cases. It's characterized by onset of pain, often debilitating, that persists after resolution of rash. Since the incidence of PHN after 50 years is 15 times higher, the most important risk factor appears to be the age. The treatment of this condition can include multiple interventions. Topical capsaina may be an interesting non-systemic therapeutic.

**Objective:** to review the available evidence on the role of topical capsaicin for symptomatic relief of PHN.

### Methods:

We conducted a search of guidelines, systematic reviews, metaanalysis and randomized controlled trials in Pubmed and evidence-based medicine websites, published between 2006 and 2011 in English and Portuguese, using the following MeSH terms: "capsaicin", "postherpetic" and "neuralgia". The Strength of Recommendation Taxonomy (SORT) of American Family Physician was used to asses the evidence levels and strength of recommendation.

### Results:

We found 88 articles, nine of which were selected: six guidelines, one systematic review and two randomized controlled trials. The articles refer, in sum, a beneficial effect in the symptomatic relief in PHN with different doses and formulations of capsaicin. Despite having observed some side effects, these did not limit significantly the studies.

#### Conclusion:

The authors recommend the use of topical capsaicin as second-line treatment for symptomatic relief of PHN, when occurs failure of the primary interventions (SORT B) and is not recommended for stand-alone use as first-line therapy (SORT B). Between the comercially available formulations the authors recommend a daily topical patch with capsain at 8% for 60 minutes during 2-12 weeks (SORT B). Local stinging and redness are posible side effects. The recommendations were harmed by the heterogeneity of the time interval used to define PHN as a nosologic entity. Therefore, more high quality studies are necessary to reach a consensus not only on that subject but also to clarify the dosage, formulation and duration of treatment.

#### P04.24

The efficiency of primary care "production": state of the art of data envelopment analysis

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There is a gap between the demand and supply of efficiency analyses within primary care (PC), despite the threatening financial sustainability of health care systems. This research aims to provide a systematic literature review on PC efficiency analysis using Data Envelopment Analysis (DEA).

We reviewed 30 DEA applications in PC, to understand how methodological frameworks impact results, and influence the information provided to decision makers. This paper reports data for each efficiency analysis on the: 1) evaluation context; 2) model specifications; 3) application of methods to test the robustness of findings; 4) presentation of results.

Even though a consistent number of analyses aim to support policymakers and practice managers in improving the efficiency of their PC organizations, the results indicate that DEA -at least when applied to PC- is a methodology still in progress; it needs to be further advanced to meet the complexity that characterizes the production of PC 'products'.

We suggest a number of considerations to academics and analysts to optimize the utility of efficiency analyses for the decision making purposes. The main recommendation for academic researchers and analysts is to undertake joint efforts to encourage consistency and standardization of methodologies, in order to foster the utility for the final consumer (e.g. policy-makers and clinical managers) of their efficiency analyses. Further research is needed to fill the gaps in some measurement areas, such as health outcomes as outputs or capital resources as inputs. For consumers of efficiency analyses in PC it is recommended to integrate the efficiency evidence with the other relevant factors of the overall performance of their organizations, such as equity, responsiveness and effectiveness.

#### P04.25

Screening for colorectal cancer in the elderly - what is the evidence?

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Introduction and objective

Worldwide, the colorectal cancer (CRC) is the second most frequently diagnosed cancer in women, and the third in men, being an important cause of cancer death. Its incidence increases with age, hence the geriatric population is particularly vulnerable to this disease. Since early detection has positive effects in terms of survival rate, and life expectancy is increasing, it is appropriate to clarify the characteristics of a CRC screening in the elderly. The aim of this review is to evaluate the age limit from which the risk of CRC screening outweighs the benefits.

Methodology

Research of clinical practice guidelines (CPG), evidence-based reviews (EBR) and meta-analysis (MA) in English, French and Portuguese, in the last five years, in the databases: Cochrane Library, PubMed, National Guideline Clearinghouse, DARE, Bandolier and UpToDate using the MeSH terms "Colorectal Neoplasms", "Mass Screening" and "Aged".

There were obtained 192 articles, of which six were selected: 2 CPG and 4 EBR. All the articles analyzed consider the existence of an upper age limit for screening of CRC, however this limit is not always the same in all the articles. The best evidence indicates, however, that screening must continue until the average life

rowever, that screening must continue that the average me expectancy for that particular patient, is estimated to be less than 10 years, which for most individuals will be between 75 to 85 years.

Discussion

CRC screening in the elderly is often not suited to the individual characteristics of each patient, with some elderly with higher life expectancy not being submitted to screening tests, and others with severe co-morbidities being tracked. It is essential that the GP is aware of the problem of the CRC screening of the geriatric population in order to provide better care to a growing age group.

### P04.26

Vaginal cytology after hysterectomy for nonmalignant disease: is there evidence?

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#### Introduction

A significant proportion of women are subjected to hysterectomy during their lifetime, in most cases by pathology other than cancer. The vaginal vault cytology is often held in women that perform a hysterectomy for benign pathology, as a method of detection of gynecologic cancer, with the aim of reducing morbidity and mortality.

Objective

Review the available evidence on the cytology of vaginal vault in histerectomized women with nonmalignant disease.

Methodology

Was conducted a survey of clinical practice guidelines (CPG), evidence-based review (EBR) and meta-analysis (MA) in the last 10 years, and of original articles between 01/2007 to 05/2011 in the databases: Cochrane Library, PubMed, National Guideline Clearinghouse, DARE, Bandolier and UpToDate, using the MeSH terms "Histerectomy" and "Vaginal Smears." Strength of Recommendation Taxonomy (SORT) was used to present the results

Results

We found 190 articles, of which six were selected: 2 CPG, 3 EBR and 1 MA. All the analyzed articles state that there is no evidence for the Pap smear of the vaginal vault, in women with total hysterectomy for benign pathology. In the case of sub-total hysterectomy, screening should be continued. The CPG recommends screening for women with a history of CIN2 / 3 before the hysterectomy, or those in which a CIN2 / 3 cannot be excluded. The in utero exposure to diethylstilbestrol is an indication for further screening.

Discussion

There is no evidence for the Pap smear of the vaginal vault in: women undergoing hysterectomy for benign disease, with no history of CIN 2 / 3 or exposure to diethylstilbestrol in utero (SORT B). The use of this cytologic exam, that has not proven efficacy, may cause marked anxiety for women. The resources spent in this type of testing may be directed to other priority areas.

#### P04 27

## Monoclonal Gammopathy of Undetermined Significance (MGUS)

**M. P. Rocha**, C. Jorge, M. F. Neves; USF Serpa Pinto, Oporto, Portugal.

#### Introduction

The majority of patients in whom an M-protein is detected will initially be under the care of a general practitioner or clinician other than a haematologist. People with MGUS are asymptomatic and have an increased risk of developing malignant disorders, most often multiple myeloma, and other paraproteinaemias or lymphoproliferative disorders.

#### Áims

Review and systematize information about MGUS in order to provide Family Physicians with clear guidance for the practical management of patients with MGUS.

#### Methods

A systematic search for publications from 2008 to 2011, in English and Portuguese was made in text books, MEDLINE, PubMed, Blood Journal, British Journal of Haematology and American of Family Physicians site.

#### Results

The vast majority of M-proteins are detected in routine practice. Prevalence rises with age and is low in individuals younger than 50 years. The diagnosis criteria consists of a limited and stable monoclonal plasm proliferation (serum M-protein lower than 3 g/dL) in the absence of clinical evidence of others paraproteinaemias or lymphoproliferative disorders. There are parameters that can separate patients with MGUS according to their risks of developing multiple myeloma, which is important for further follow-up. Patients should be re-referred to hospital care if the concentration of the M-protein increases by more than 25% (a minimum absolute increase of 5 g/l), if symptoms compatible with a diagnosis of myeloma or lymphoma appear, or if unexplained anaemia, other cytopenias or abnormal renal function or hypercalcaemia develop.

### Conclusions

MGUS is a highly prevalent disorder, mainly in elderly people. This study will provide important information to the family physicians in order to improve their ability to recognize high-risk patients and provide better management in future.

#### P04.28

### Kikuchi disease - a review

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#### Aims:

Kikuchi -Fujimoto disease (KFD) also known as histiocytic necrotizing lymphadenitis is a rare self -limited condition that causes persistent lymphadenopathy and has a characteristic histological appearance. It presents predominantly in young women from the Far East in their 20s and 30s. The etiology of Kikuchi's disease is not entirely known. The majority of patients with KFD present with cervical lymphadenopathy usually of 1 - 4 cm in diameter, the posterior cervical triangle being the most commonly affected site. Other less common signs and symptoms include splenomegaly, fever and weight loss, also one third of patients have a rash at present.

The epidemiology of Kikuchi's disease is widespread, spanning the globe from Japan, where it was first described in 1972, to the United States, including Europe, Middle East, and South America. Although KFD was initially characterized as occurring exclusively

in the cervical lymph nodes of young Asian women, it has been observed in patients of any age, sex, and race.

#### Methods:

A PubMed search has been conducted in order to find relevant studies on Kikuchi disease. Available data was summarized and recommendations were formulated for family doctors' practice. Results:

Despite the low incidence, KFD should be considered in patients with persistent lymphadenopathy and an early diagnosis from biopsy findings can prevent unnecessary investigations and treatments.

### Conclusion:

Although KFD is uncommon process with an excellent prognosis, its accurate clinicopathologic recognition is crucial, due to the fact that it can be easily mistaken for melignant lymphoma and thus family doctors should be well informed about Kikuchi disease.

#### P04.29

#### **General Medicine or Family Medicine?**

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From several years, the medical specialty with the highest contact within the community, has been struggling with the apparent dichotomy between clinical care of individuals or the various elements composing a family. As the concept of family is changing, more biopsychosocial emphasis on learning and gaining skills in several areas of family therapy and resource management have been perceived as a need for training of junior doctors, as well as continuity in formation of a GP/FM specialist. Thus, with more or less consciousness, the various doctors in the community who regard their patients within a family, accept as a strong work tool the acquisition of scientific knowledge and gaining competences in this field. However, published articles in this subject have been scarce in the last decades. A research in Pubmed, made in March 2012 for the matching of the MeSH terms "Family", "Family Physicians", "Family Practice", "General Practice" e "General Practitioners" reveled few articles in "Family Therapy" within this fields, most of them during 1970-1990s. (example of results: "Family Practice" = 98158 articles with 8892 reviews and "Family Practice AND Family Therapy"= 83 with only 7 reviews; "General Practice" = 125792 articles with 13101 reviews and "General Practice AND Family Therapy" with 84 articles and 7 reviews.) Discussion: There is a lack of representativity on the total number of articles regarding family therapy, its theories, instruments, or strategies used in GP/FM. The existing articles refered mostly to validation and explorations of its ideias towards the medical approach, mostly on psicossocial problems. There are few articles regarding validation of instruments designed to primary care, results and end-points of efficiency in using this approach on a daily basis in routine consultations or on the more challenging ones. The authors conclude that there may be a need for refocusing research studies on this field in Primary Care.

## P.05 - Clinical research

#### P05.001

Association Between Infant Breastfeeding and Early Childhood Caries in Bosnia and Herzegovina

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**BACKGROUND:** The mouth contains a wide variety of <u>oral bacteria</u>, but only a few specific species of bacteria are believed to cause dental caries: <u>Streptococcus mutans</u> and <u>Lactobacilli</u> among them . Breastfeeding is recommended by pediatricians and other health care professionals to be continued for at least the first year of life and maximum two years for as mutually desired by mother and child.

**OBJECTIVE:** The objective of this study was to assess the potential association of breastfeeding and other factors with the risk for early childhood **caries** among young children in the United States

**METHODS:** Pediatricians targeting requires identification of those children who were at increased risk of developing dental caries. Information about infant feeding was obtained from parents of children during an in-person interview based on retrospective recall . Prevention, were analyzed for ten thousands children from two to six years of age with information on both infant feeding and oral health.

**RESULTS:** There were significant differences in the distribution of age and no difference of gender by region of origin were detected. Prolonged and unrestricted breastfeeding more than two years, has been reported to be a potential risk factor for early childhood caries similiar as shorter breastfeeding than six months and bad food habits, too.

**DISCUSSION:** However, why some children are particularly vulnerable to decay is poorly understood. The effectiveness of community water fluoridation in preventing dental caries prompted rapid adoption and optimal breastfeeding of this public health measures in cities throughout of Bosnia and Herzegovina.

**CONCLUSIONS:** Pediatricians are in a unique position to contribute to the dental health of their young patients because of the early age at which children are brought to their offices and because mothers are accustomed to accept their recommendations for breastfeeding. Dental caries among children aged two to six years through ten years was studied using data from 2000 to 2010, and significant association was found depends from longer or shorter breastfeeding habits.

#### P05.002

Early detection of Diabetes Mellitus in primary settings in Uzbekistan

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Background: Incidence of diabetes, particularly, that of Diabetes Mellitus (DM), has been increasing over the recent decades. Quite often patients with abnormal metabolic exchange do not know that they have increased serum glucose levels. Therefore, they are frequently diagnosed with diabetes only when they develop complications. General practitioners in primary care can play a significant role in early detection of DM cases and hence prevention of diabetic complications.

Objective: to estimate the prevalence of diabetes in two primary care settings in Uzbekistan

Methods: Two primary care units, Family Practice Clinic #37 in Tashkent city and Rural Primary Care Clinic in Ferghana region, were included into the study. In total, 1690 individuals of 35 years and older that were not previously diagnosed with diabetes were attached to these two clinics (eight registered diabetes patients in two clinics). Of the individuals with no diabetes, 1540 agreed to participate in the study: 750 in Tashkent and 790 in Ferghana region. Individuals were screened for diabetes by combination of history taking, physical examination and laboratory investigations such as fasting glucose levels and glucose (75g) tolerance test (WHO, 1999). History taking and examination had an aim of detecting signs and symptoms of DM as well as risk factors. These included specifically focusing on complaints of thirst, frequent urination, itching, furunculosis, as well as family history of DM, obesity and history of high serum glucose levels. Body mass and abdominal indices were measured.

Results: Among the participants in Tashkent, 11.9% yielded abnormal glucose tolerance test results and 2.1% met the criteria for diabetes. In Ferghana, the numbers were 14.5% and 2.9% respectively.

About 30% of participants in Tashkent clinic and 19% in rural Ferghana clinic had normal BMI, while 21% and 33% were obese respectively in these two locations. Blood pressures above the threshold of 140/90 were observed among 22% of participants in Tashkent and 32% in Ferghana.

Conclusion: Efforts directed at early detection of DM in the setting of primary (both rural and urban general practices) could be effective in detection of undiagnosed diabetes cases and individuals at high risk.

#### P05.003

The Role of the Flushing Response in the Relationship between Alcohol Consumption and Insulin Resistance

#### J. Juna

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**Background** Facial flushing responses to drinking, due to intolerance to alcohol, are observed in some people, especially Asians. This study examined the role of flushing responses in the relationship between alcohol consumption and insulin resistance (IR)

Methods Participants in this cross-sectional analysis included 624 Korean men (80 non-drinkers, 306 non-flushing drinkers, and 238 flushing drinkers) who were free of cardiovascular disease and diabetes. Data on the flushing response to drinking and alcohol consumption were collected from medical records. IR was estimated using the Homeostasis Model Assessment (HOMA<sub>IR</sub>). On the basis of comparisons with non-drinkers, the risk of IR according to the quantity of alcohol consumed per week was analyzed among non-flushers and flushers.

Results After adjusting for age, exercise status, smoking status, BMI, waist circumference, blood pressure, high-density lipoprotein cholesterol, and triglycerides using a logistic regression model, we found a low risk of IR among non-flushers who consumed ≤4 drinks (1 drink = 14 g of alcohol) per week (OR 0.3). In contrast, a higher risk of IR was associated with non-flushers who consumed > 20 drinks per week (OR 3.5). On the other hand, only a higher risk of IR was associated with flushers who consumed > 12 drinks per week (> 12 to 20 drinks: OR 4.7; > 20 drinks: OR 3.5).

**Conclusions** The amount of drinking associated with the development of IR in flushers was lower than in non-flushers. Additionally, no positive effect of moderate drinking on IR was observed in flushers. The findings support acetaldehyde-derived mechanisms in the development of alcohol-related IR.

## The frequency of diabetes mellitus type 2 among the patients with BMI higher than 30

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While carrying out programs for prevention and control of noninfectious diseases, it has been noticed that large number of patients has increased BMI (Body Mass Index). Considering what BMI is associated with (hypertension, cardiovascular and cerebrovascular disorders, diabetes mellitus type 2)

Aims: To assess the frequency of diabetes mellitus type 2 among the patients with BMI>30.

Method: We randomly selected medical records of 200 patients from two health centers in Bosnia and Herzegovina. Of those, 100 patients had BMI<30 (50 males and 50 females) and other 100 patients had BMI>30 (50 males and 50 females). Data achieved were analyzed and statystically processed with regard to age and gender.

Results: Diabetes mellitus type 2 was found in 6% of patients with BMI<30 (5 female and 1 male) and in 18% of patients with BMI>30 (10 female and 8 male). Diabetes mellitus type 2 was more frequent in female patients in both research groups. Average value of BMI in male patients was 33,4, and in female patients 32,2.

Conclusion: Results showed that obesity is a significant risk factor for the occurence of diabetes mellitus type 2, and that is necessary to pay more attention to patient education about regular nutrition and risk factors. Screening for hyperglycemia should be done regulary among the the patients with increased Body mass index.

### P05.005

## Incidence of dementia among the elderly patients with diabetes mwllitus type 2

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**Background:** Dementia and mild cognitive impairments are disorders of aging population and represent a significant economic burden for society, family practice and caregivers. Diabetes is important risk factor that can lead to the cognitive disorders.

**Objective:** To investigate the relation of diabetes to dementia in the elderly primary health care patients.

**Methods:** This study included 409 diabetic patients, older than 65 years of age, registered with two family medicine practices, in the region of Sarajevo and Banja Luka, BiH. As a part of annual screening for chronic complications of diabetes, the screening for dementia was conducted, using MMSE, with the scores adjusted for age and education. Questionnaires were evaluated, and the patients with the score < 26 were invited back to the clinics for additional clinical evaluation.

**Results:** 33 % of diabetic patients reached the criteria for vascular dementia and 44 % for mild cognitive impairment. A close relationship between A1C and the score on MMSE was found. 10% of the patients with either MCI or dementia reached A1C lower than 7%, 30 % lower than 8 % and 60% >9%

A close relationship between the level of glycemia and the score on MMSE was found. 75 % of the patients with cognitive impairments had blood glucose >8 mmol/l.

Length of the disease was not significantly correlated with the score on MMSE. Gender was not significantly correlated with the score on MMSE.

**Conclusion:** Diabetes increases the incidence of mild cognitive impairments and vascular dementia. In order to prevent this, primary health care physicians should provide effective management of diabetes, as well as the management of other associated cardiovascular risk factors. Decline in MMSE score can be the first sign of the cerebrovascular complications of diabetes, so the cognitive assessment tests should be done annually on all diabetic patients.

#### P05.006

#### Osteoporosis screening in family doctors' surgeries

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This study shows the results of the screening tests performed in a family doctor's surgery on a sample of female patients with risk factors for osteoporosis. The women underwent quantitative heel ultrasound screening. Thanks to this study osteoporosis was detected in some patients who might have escaped early diagnosis, so it pointed out the importance of simple diagnostic medical tests performed at the family doctor's surgery.

Materials and methods

In our study we screened a sample of 181 women aged 31-90. They all presented with one or more of the following risk factors:

- early menopause
- age
- long-term use of corticosteroids
- inactive lifestyle
- tobacco smoking
- low body weight
- diet low in calcium
- vitamin D deficiency
- malabsorption syndrome

Quantitative Ultrasound of the heel (QUS) was performed on the patients. Actually QUS parameters showed to be capable of predicting osteoporotic fracture risk to the same extent as DXA. Furthermore QUS is a mobile, relatively inexpensive, easy to perform and radiation-free method, so it is particularly suitable for epidemiological investigation and first-level screening.

The study showed the prevalence of osteopenia and osteoporosis in the patients of the sample. 40 women (22.15 %) were "normal"; 66 (36.45%) were affected by osteopenia and a good 75 (41.40%) were osteoporotic.

Considerations

Results

The study confirmed the role of malabsarption syndromes in the origin of osteoporosis and made it posible to begin the right treatment for the restoration of normal BMD. Furthermore in some of the patients osteoporosis would have remained undiagnosed and untreated owing to bureaucratic hindrances and long waiting lists. Together with adequate drug therapy and healthy behaviour (smoking reduction, exercise, correct eating habits, etc), early diagnosis can help prevent bone fractures over time.

Conclusions

The results of this study, which was appreciated by the patients, show how important it is to do simple tests at the family doctor's surgery. Besides having an inherent value for disease study and treatment, these tests help family doctors improve patient care.

#### P05.007

#### Incidence & outcome of Amebic liver abcess

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Amebic liver abscess is a common infection in third world countries like ours due to poor sanitary arrangements. It presents with severe pain and high grade fever and if not diagnosed and treated promptly, may lead to complications and mortality.

Materials & Methods

All patients suspected of the diagnosis of liver abscess whether presenting to physicians or surgeon was referred for ultrasonography for the confirmation of the diagnosis. Basic biodata, coexisting medical or surgical diseases and relevant investigation were recorded, and patient was assessed for the need to aspirate the abscess. After initial treatment patients were reassessed for the need to aspirate the abscess on third day. Patients were followed clinically and ultrasonically on third, tenth and twentieth day.

Results

We had 188 cases in the study period of two years, from January, 2007 to 31st December 2008. This number is quite high keeping in view that our respective centers are not a big referral centers. We are only a poly clinic with monthly combined consultation load of 1000 patient for the physician and surgeon. There were 128 (68%) males and 60 (32%) females. Majority, 156 (76.6%), of the

abscesses were singly, 40(21%) had double and 4 (2%) had three abscesses.166 (83%) were situated in the right lobe, 28(15%) in the left lobe and 4 (2%) had abscess in both lobes. 16 (9%) were aspirated at presentation due to their size or position. Only 4 (2%) were aspirated at first follow-up on third day due to non resolution of pain or fever or increase in size. All the patients who were not lost from follow up responded to standard treatment of metronidazole.

Discussion

Amoebic liver abscess is a common diagnosis in our setup. Patients presents with right upper quadrant pain and fever. Clinical background and ultra sonogram give a reasonable suggestion about amoebic etiology. If initial aspiration is not indicated due to size larger than 5cm. or proximity to surface or non resolution of symptoms or lesion in left lobe, conservative treatment with oral or intravenous treatment is successful.

#### P05.009

Comparative epidemiology of viral infections causing influenza-like illness. A survey in France during winter 2010-2011

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Introduction: Influenza like illness (ILI) can be caused by many respiratory viruses. Apart influenza or respiratory syncytial viruses (RSV), little is known about the comparative epidemiology of these viral infections

Objective: To compare the demographic and clinical characteristics of patients with ILI according to viral aetiology. Methods: Molecular detection of 18 respiratory viruses was performed using microarray by three virological centres in patients seeking for medical advice for ILI definition. Nasal pharyngeal swabs, as well as demographical and clinical data were collected from each patient.

Results: The study was carried out over 14 weeks, from January to April 2011. We obtained complete demographical clinical and virological data in 587 included patients (93.5%). Four hundred and thirty five (74%) were positive for at least one virus and coinfections were detected in 90 (21%) of positive patients. Influenza viruses were the most common viruses (82%) with influenza B and A/H1N1 2009 detected in equal proportions. Overall, positivity to any tested respiratory virus decreased with age (P=0.004) except for human metapneumovirus which increased from 4 to 6% in children and adults under 45 years of age to 13-15% in older adults and the elderly (P=0.0008). Among clinical symptoms, conjunctival hyperhemia was associated with a positive influenza B diagnosis, headaches with a negative rhinovirus diagnosis and rhinorrhea with a positive diagnosis to at least one virus.

Conclusions: These results contribute to a better understanding of the dynamic of respiratory viruses during an ILI epidemic. It also gives insights on the associations between a virological diagnosis and clinical or demographical characteristics of patients.

#### P05.010

Body weight, height and BMI in patients aged sixty-five and over in the Health care centre "Novi Sad"

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**Introduction:** According to the 2002 census in Serbia, 17,02% of the Serbian population was aged sixty-five and over; one of the highest percentages in the world. Changes that happen in the body during the ageing process can lead to malnutrition, while overeating and reduction in physical activity lead to obesity.

Aim of the trial was to evaluate the levels of body nourishments in patients aged sixty-five and over in Health Centre "Novi Sad" and also to find out if there was a gender difference.

**Method of work:** We analysed body weight, height and BMI of all patients aged sixty-five and over in our clinics from their clinical records.

**Results:** We analysed the measurements of 8851 patients in total (5274 female and 3577 male). There was 0,71% in the underweight category, 29,49% in a healthy weight range, 46,13% in the overweight category and 23,67% were obese. The highest numbers in both the male and female categories was overweight (50,68% and 43,04% respectively). In a healthy weight range there were 28,74 males and 30,00% females, while in the obese category there were 20,24% males and 26,00% females. 0,34% of males and 0.97% of females were in the underweight category.

**Conclusion:** Results of the trial showed that the average BMI was 27,37kg/m² (from min.13,11 to max. 27,37 with SD 4,3 kg/m²). Less than half of all participants were overweight. A third of them were in a healthy weight range, while less then a quarter were obese. Less then 1% of participants were in underweight category. Looking at the results from a gender perspective, there are more women than man in the overweight range. These results show that it is necessary to pay special attention to people with high BMI and for them to be encouraged to participate in individually tailored treatment for their weight ,that will take into account any comorbidity and social support needed.

#### P05.011

Evaluation of cardiovascular preventive management in patients with chronic obstructive pulmonary disease in primary care

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The aim of this study was to assess the adherence to guidelines on cardiovascular (CV) prevention and target attainment for patients with chronic obstructive pulmonary disease (COPD) in general practice.

Methods: 62 family physicians registered all patients with diagnosis of COPD during regular office visits. All physicians performed detailed physical examinations and completed the special designed questionnaire. Blood samples were taken for lipid profile and glucose level. We used data from paper medical record about cardiovascular risk factors and their treatment.

Results: We studied 928 patients (457 males and 471 females). Mean age 61.9±8.7 years. COPD patients remain undertreated with statins (46% treated), even so those with a cardiovascular history (64% treated). Although more patients received antihypertensive treatment (84%) compared to hypolipidemic medication (58%), the proportion of patients attaining targets for total cholesterol (TC) (30%), HDL-cholesterol (HDL-C) (61%), and LDL-cholesterol (LDL-C) (39%) exceeded far those attaining blood pressure control (18%). The primary endpoint of reaching the goal for LDL-cholesterol (<100mg/dL) was attained by 37% of patients, of which only 9% reached the more stringent target of LDL-C<70 mg/dL. Only 9.2% of patients were non-smokers and had optimal control of blood pressure and cholesterol level. About half of the patients (37%) attained glycemic control (HbA1c<7%) and 48% had triglycerides<150 mg/dL. The pharmacotherapy of risk factors in COPD by family doctors was found in some instances not to conform to recommended guidelines.

Conclusions: The majority of COPD patients are treated for hypercholesterolemia and hypertension, although, there is still under treatment, especially in patients with cardiovascular disease.

Therefore, wider implementation of process and outcome indicators, which proved to be related, and continuous evaluation of their result, is needed. Controlling hypertension, diabetes mellitus, body weight, lipid profiles and also educating people not to smoke, will help to reduce the cardiovascular risks and prevent the development of cardiovascular complications.

#### P05 012

## The effect of education and follow-up using peak flow meter based on asthma action plan on asthma control

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**Background:** asthma is one of the most prevalent chronic diseases in worldwide. About 6.5 million people suffer from asthma in Iran. Effective asthma control is dependent on education. Self management is very important in the standard educational program. The aim of this study was to investigate the effect of education on using peak flow meter based on asthma action plan on asthma control.

Material and Method: the study is a quasi-experimental controlled clinical trail. The samples (n=98) were selected from the pulmonary clinic in Tehran, Iran. The patients were randomly assigned into the experimental (n=47) and the control (n=51) groups. The experimental group received two educational sessions that including asthma, peak flow meter and asthma action plan. The patients in the experimental group have sent SMS about peak flow rate to the researcher in a period of 12 weeks. Also, the researcher provide feedback to the patients about their asthma control weekly. People in the Control group did not receive education. In both groups, asthma control test and asthma attack form were obtained before and after study (3 months) in two groups. Independent test, chi-square, mann-whitney, Kolmogorov-Smirnov and McNemar were used to compare the groups.

**Result:** there was a significant difference in ACT scores (p= 0.002) and asthma attacks score (p= 0.04) between two groups.

**Conclusion:** the education and follow-up using peak flow meter base on action plan has beneficial effect on asthma control and attacks.

#### P05.013

## Prevalence of Proximal Humerus Fracture in patients with Osteoporosis in a Health Center of Castilla y León (Spain)

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AIMS: Using the records of the Medical Record Informatics (MRI) to determine the prevalence of Proximal Humerus Fracture (PHF) in patients with osteoporosis (OP) to promote Preventive from the Primary Care Consultation.

DESIGN: Most PHF occur in elderly patients with OP, consuming significant resources, health, social and economic in the process of diagnosis and treatment. The authors conducted a descriptive cross-sectional study of patients with PHF in patients with OP record in the MRI of the PILARICA Health Center.

METHOD: From the list of selected patients with MRI 753 with a diagnosis of OP, we studied the OP prevalence and FHF prevalence . We analyzed the causes of the fracture. The data is collected on an Excel spreadsheet and analyzed using SPSS 9.0 for Windows..

RESULTS:

- -Patients with OP in our health center corresponds to 20% of the population over 50 years.
- -Of the 753 patients with OP: 687 women and 66 men. Ratio of woman OP / men OP: 10 / 1.
- -Of the 687 women with MRI in the diagnosis of OP: 35 cases of PHF. OP-PHF women Prevalence: 5.8%

- -Of the 66 men with MRI in the diagnosis of OP: 1 case of PHF. OP- PHF men prevalence: 1,5 %
- -Falls at home was the cause in 82% of cases. For defects of vision, collision with obstacles and falls from ladders.

CONCLUSIONS: 20% of the population over 50 years of our health center, has recorded in his MRI OP the clinical process, with Ratio of woman OP / men OP: 10 / 1 and OP-PHF Prevalence of woman / men: 3 / 1, which justifying the implementation of a Health Improvement Plan, including Education Program for Health aimed at groups and the development of preventive activities in primary care consultation.

#### P05.014

## The practice of hormone replacement therapy(HRT) in women of Borneo Island

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Objectives: To determine the hormone replacement therapy (HRT) usage among women of Borneo Island.

Methods: A prospective study using a face-to-face interview was conducted on 365 randomly selected women aged between 40 to 65 years.

Results: The mean age of respondents was 50.83±6.30 years and mean age of menopause was 51.28±2.28 years. Twenty three percentage of women were premenopausal, perimenopausal and 37.4% postmenopausal. Only 36% of the respondents aware of the existence of HRT, this is especially among those who were younger women, better educated and working. The main sources of information on HRT were friends and relatives (92.2%), newspaper/magazine (89.1%) and television/radio (64.1%). HRT usage among respondents was low (8.1%), mainly for menopause symptoms relief: night sweat (100%), mood swing (93.1%), irritability (93.1%), hot flushes (86.2%) and only 24.1% for prevention of osteoporosis. All women on HRT had taken HRT for less than 3 years. Main reason given for not on HRT was: not recommended by their doctors (56.6%), only 8.3% worried about the side effect and 4.3% were on other form of treatment.

Conclusions: Knowledge and usage of HRT among menopausal women of Borneo Island were found to be low in our study. Main source of information about HRT is from friends/relatives and mass media. Health care providers should play an important role in promoting, counseling and health education regarding HRT needs to rectify these problems.

#### P05.015

## Epidemiology of Ankle Sprain in a Health Center in Castilla y León (Spain)

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Assistance Gerency, Valladolid, Spain.

AIMS: To evaluate the care of patients with Ankle Sprain (AS) in our Health Center in order to promote an Improvement Plan in the care of these patients in daily clinical practice.

DESIGN: Retrospective and descriptive study of 228 patients with AS that had records in the Computer Medical Record (RMR) in PILARICA Health Center (Valladolid).

METHOD: Of the 16.294 patients over 15 years, with 8634 women and 7660 men with clinical records were selected with 228 diagnosed AS, we studied the age, mechanism of injury, days lost, treatment and complications. The data is collected on an Excel spreadsheet and analyzed using SPSS 9.0 for Windows. RESULTS:

- 1- AS Prevalence: n=228 cases (102 men, 126 women). AS total prevalence: 1.39%. AS-men Prevalence: 1.33%. AS-women Prevalence: 1.4%.
- 2- Age: 90-100: 1 men, 0 women, 80-90: 3 men 5 women. 70-80:3 men, 9 women. 60-70: 16 men, 18 women, 50-60: 12 men, 18

women. 40-50: 9 men, 24 women, 30-40: 38 men, 23 women, 20-30: 8 women, 23 women, 15-20 years: 12 men and 6 women.

- 3- The most common mechanism of injury: twisting of the foot by 33.9%.
- 4- The greatest day of this pathology consultation was Monday with 25%.
- 5- In 90.1% of the chaos was compromised lateral ligament
- 6- The initial treatment was performed in 40% of the health center with elastic bandage and 55% of patients in plaster having been referred to sevice and traunmatológica Ortoódeica Surgery.
- 7- The 99'5% of patients developed no complications. Only 0.4% had chronic pain.
- 8- The average high was 11 work days.
- 9- X-ray study were asked at some point in their evolution to 56 percent of the patients, 97.2 per cent negative radiographs.

CONCLUSIONS: The prevalence of Ankle Sprain in daily clinical practice has a Prevalence of 1.39% in our Health Center, the patients were referred to a specialist 55% of Orthopaedic Surgery and Traumatology, which recommended the establishment of a Plan Improvement in clinical practice daily care of the consultation, which increase the response capacity of primary care.

#### P05.016

Investigation of the presence of chondromalacia patellae in patients with anterior knee pain

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Background: Anterior knee pain is one of the most friquent patient group for physician who deal with musculesceletal system. Purpose of this study is to evaluate chondromalacia patellae which is contribution to anterior knee pain.

Material and methods: This prospective study was performed on 121 outpatients with anterior knee pain. Patients, had diagnosed disorder previously, excluded Clarke, stutter, patellar bowstring, anterior drawer,

lateral varus, medial valgus tests were performed. The presence of chondromalacia patella was investigated with MRI.

Results: The mean age of the patients were 23.47±4.11 years. While participants VAS was 6.08±1.33, right Q angle was 14.57±2.59 and left was 14.62±2.66. Positive examination findings were frequently, Clark's, McMurray and Anterior Drawer Tests, 40.5%, 13.3%, 10.7%, respectively. Although only 4.1% (n=5) of patients were diagnosed as CMP by MRI; 85.9% (n=104) had normal knee MRI.

Conclusion: In this study, only a small part of the patients with anterior knee pain was diagnosed as chondromalacia patella. For this reason, patients with anterior knee pain, don't have serious physical exam findings, don't need further examination with MRI

Table 1: General characteristics, Q angle and VAS of patients

with anterior knee pain					
Age (year)	23.47±4.11				
Height (cm)	175.09±6.48				
Weight (kg)	71.42±9.40				
Right Q angle (degree)	14.57±2.59				
Left Q angle (degree)	14.62±2.66				
VAS	6.08±1.33				

Table 2: Causes of anterior knee pain according to magnetic resonance imaging

roconance imaging							
Causes of anterior knee pain	Percent of patients	Number of patients					
Chondromalacia Patellae	%4.1	5					
Meniscus Rupture	% 3.3	4					
Os good Schlatter	%0.8	1					
Quadriceps Fat Sign	%3.3	4					
Plica Syndrome	%2.4	3					
Healty Knee	%85.9	104					

Most patients with anterior knee pain had regular magnetic resonance imaging.

Table 3. Knee examination findings of patients with anterior knee pain

	NEGA	NEGATIVE		OSITIVE
	Number	Percent	Number	Percent
ADT	108	%89.3	13	%10.7
LVT	119	%98.3	2	%1.7
MVT	119	%98.3	2	%1.7
Lachman Test	109	%90.8	12	%9.2
McMurray Test	105	%86.7	16	%13.3
Clarke's Test	72	%59.5	49	%40.5
Patellar Bowstring Test	116	%95.8	5	%4.2
Stutert Test	110	%90.9	11	%9.1

Clarke's test had positive for majority of patients with anterior knee pain.

#### P05.017

The Effect of Angiotensin II Receptor Blockers and Beta-Blockers on Pentraxin-3 Levels in Hypertensives

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BACKGROUND: It has been recently shown that the levels of pentraxin-3 (PTX3) are related to endothelial dysfunction and an important cardiovascular marker in several diseases. Therefore, we investigated a possible relationship between the therapeutic effects of AT II receptor blocker and beta-blocker on hypertension and the relationship of PTX3 levels in patients recently diagnosed with hypertension.

METHODS: 80 patients, between 40-61 years old, with stage I primary high blood pressure, according to the criteria set forth by the JNC VII, were included this study. Patients were randomly separated into two groups and valsartan therapy was administered to one group while nebivolol therapy was given to the other group. Blood was drawn after the patients were diagnosed with hypertension for whole blood measurements of liver and kidney functions, thyroid hormone levels, fasting blood glucose and serum PTX3 levels.

RESULTS: We didn't detect significant differences between the two groups in Plasma PTX3, CRP and sedimentation levels (p>0.05). It was observed that PTX3 levels became normal after 12 weeks of treatment of valsartan or nebivolol (p<0.001). A preference to either medication was not determined, as both effected PTX3 levels similarly (p>0.05).

CONCLUSIONS: Our data suggest that with both nebivolol and valsartan, PTX3 expression is down regulated, a likely contributor to improved disease outcomes, likely mediated by an at least partial reversal of endothelial dysfunction.

Table 1. Values between the time of diagnosis and post treatment.							
	V	'alsartan		N	lebivolol		
	Diagnosis	12 <sup>th</sup> week	Р	Diagnosis	12 <sup>th</sup> week	Р	
SBP (mmhg)	149.55+3.6 7	127.12±8.7 6	<0.001	150.00+3.5 8	129.37±6.6 2	<0.001	
DBP (mmhg)	93.57±3.12	81.5±6.71	<0.001	94.78±2.23	81.00±8.10	<0.001	
CRP (mg/dl)	10.18±6.00	4.95±3.50	<0.001	9.88±5.69	4.95±3.78	<0.001	
PTX3(ng/m l)	34.16±5.39	0.13±0.17	<0.001	36.34±5.35	0.15±0.20	<0.001	

After treatment, a significant difference was observed in blood pressure and acute phase reactants in both groups.

Table 2. Comparing the decrease of PTX3 levels with percentage variables.						
	Valsartan	Nebivolol	р			
PTX3 amount of decreased (ng/ml)	34.03±5.33	36.18±5.43	>0.05 <sup>a</sup>			
PTX3 amount of percentage (%)	99.63±0.44	99.51±0.79	>0.05 <sup>a</sup>			
Changes in systolic blood pressure (mmHg)	22.42±8.56	20.62±5.33	>0.05 <sup>b</sup>			
Changes in diastolic blood pressure(mmHg)	12.07±6.65	13.77±8.11	>0.05 <sup>b</sup>			

There was no difference between neither blood pressure nor decreases of PTX3 levels at the end of the therapy in either group.

#### P05.018

#### Is the economical crisis influencing our health?

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#### Aim:

To study the real impact of the economical crisis in health issues and it's consequences in our patients' quality of life. According to recent studies, the 44% of the population suffers more stress than 2 years ago due to this crisis.

#### Method

A sample of 1500 patients from two health centers: 60% women,40% men average age 45 years, 57% married, 29% single, 8% divorced. 6% widowed.

A clinical interview and protocolized inquest were performed, as well as Hamilton test, Cattel 16PF personality questionnaire, blood test (hemogram and standard biochemistry), audit of health problems at their clinical records. **Results:** 

Prevalent health problems were, in this order: anxiety, alcohol intake and depression. At the 48% the personal status is the same as 2 years ago, worse for the 24.3%. The wealth status became worse for the 44% due to unemployment and lower incomes.53% changed their habits. 23% refer poorer health and 28% lower life quality. The 32% changed their dietary habits, which has modified problems related to diabetes, dyslipemia, etc. Psychiatric consultations became 15% more (the most were adaptation disorders: 70%). The 45% concern a possible worse healthcare delivery in the future. Alcohol intake has become 8% higher, cocaine and other drugs a 2% (by CAGE test).

#### Conclusions

The economical crisis has increased psychiatric disorders.

The children and the elderly are the most vulnerable groups. The consequences of deprivation scores in children will follow their whole life.

The health status in women is worse than in men, maybe due to a higher family overload.

The crisis has increased psychopharmaceutical intake.

80% of the adolescents have no perception of the crisis.

The public sector has a key role in the crisis management by means of the health policies, which determine direct or indirectly our health.

In order to improve our patients' quality of life we recommend a wider research for crisis-bound health disorders and so avoid their impairment.

#### P05.019

#### The relationship between Vitamin D levels and chronic pain

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#### Aims

To study the relationship between vitamin D levels and chronic pain, the effect of vitamin D intake and the intake of analgesic drugs: recent research evidences that, in chronic pain, we can

reduce the drug amounts to the half if we pursue adequate levels of vitamin D.

#### Method

A study performed in 102 women older than 50 years, performing and audit of clinical records and blood test, who were included in 2 different groups according their vitamin D levels (higher or lower than the normal levels)

#### Results

42% had low levels, and this group displayed a 22% more headache, 79% more muscle-skeletal (fibromyalgia, joint pain, etc), 40% more fatigue. After the intake of vitamin D: 8% of headaches, 21% muscle-skeletal pain, 19% fatigue, diminishing the intake of analgesic drugs 59%.

#### Conclusions

Those who had vitamin D deficit suffer more from pain, and need more stupefacient and analgesic drugs than patients who show normal levels. Those with deficit also referred a worse broad health status. Vitamin D intake improved the pain, muscular strength and the neuromuscular function: in the case of headache the improvement was evident.

So, the achievement of adequate vitamin D levels improved the patients' pain, mobility and quality of life. In order to attain this, it became enough the performance of a simple blood test and validated pain-scale tests.

#### P05.020

Analysis of the risk factors of falls in the elderly in the rural environment

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Aims and background: To analyse the existence of the causes of the risk of falls in people over 65 in rural areas.

Material & method: Transversal descriptive study with the study of households of the over 65s, carried out in Valdeprado (Spain) until 2010.

Results: 100 households were studied. The average age of the subjects was  $76.88 \pm 6.86$ años (>75 years 68%), predominantly female (60%). 15% were living alone. The aspects analysed were visual problems (18%), hearing problems (19%), balance disorders (41%), problems walking (31%), the up & go test was carried out (62%), taking >5 medicines (42%), previous falls (26%), a history of osteoarthritis (69%), diabetes (28%), dementia (10%), CVA (4%), cardiovascular problems (19%), taking hypertension medicines (64%), hypnotic medicines (29%), previous hospital admittance (<1 year) (21%), adapted bathroom (45%), with handles (63%), using a walking stick (36%), poor illumination (47%), rugs (39%), inadequate chair (27%), inadequate furniture (54%), wires (21%), bed (26%) and adapted kitchens (49%), stairs (64%), with handrails (58%).

Conclusions: The elderly living in a rural environment have a great risk of falls, most of which are easily avoidable, such as removing wires and rugs. The houses are generally old with stairs, bathroom and kitchen poorly adapted. One in four had suffered a fall in the previous year, and this means a high risk of fractures, particularly to the hip. They have difficulty moving mainly due to osteoarthritis, but few use walking sticks for support. It is recommended that the medicines being taken are checked frequently, reducing as far as possible hypnotic and hypotension treatments.

## Analysis of household first aid kits in two areas; one urban and one rural. Are there differences between them?

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<sup>1</sup>CS Centro, Santander, Spain, <sup>2</sup>CS Zapaton, Torrelavega, Spain, <sup>3</sup>CS Alisal, Santander, Spain.

AIMS: To analyze the features of the first aid kits patients have in their homes and the concept they have of them, in order to find differences between the rural and urban environments.

METHODOLOGY: A transversal descriptive study carried out in Mataporquera and Santander (Spain) from 2009 to 2010 by examining the first aid kits in patients' homes.

RESULTS: 110 first aid kits were examined with free medicines For 57.8% of the rural population medicines are free vs. 42.2% of the urban population. Copayment figures stand at 37% vs. 63% respectively. In the rural environment, there was an average of 11.39 medicines, and 82.5% of the population had duplicate medicines and an average of 0.79 were out of date. Only 40.7% had no medicines which were out of date; of these, 46.2% were antibiotics and anti-inflammatory medicines (26.9%). 55.6% kept the first aid kit in a drawer in the kitchen, 24.1% in a drawer in the bedroom and 20.4% in a cupboard in the bathroom. To dispose of the medicines, 71.4% used the household rubbish and 28.6% used a household waste recycling centre. When comparing the two groups, there were only significant differences with regards to the amount the patient has to pay

CONCLUSIONS: The first aid kits mainly contain acute illness treatments and the main means of disposal is still the household waste bins. There is a high percentage of patients who have medicines which are out of date, which is a risk, and there is an accumulation of antibiotics. Those people who co-pay for the medicine recycle the medicines better, possibly because they are younger, although the difference is not significant. They also have fewer medicines and do not accumulate duplicate medicines as much as those whose medicines are free.

The population should be educated in the need to reduce accumulation of medicines and to use household waste recycling centres to dispose of them.

#### P05.022

### ECG monitoring of psychotropic medication

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### Problem or issue:

Psychotropics affect cardiac re polarisation and the corrected QT interval (QTc) has been revealed as an accurate gauge of their effects on the heart. Prolongation of the QT interval is known to indicate a predisposition to the cardiac arrhythmia 'torsades de pointes' and other malignant tachyarrhythmias. The association between neuroleptics and cardiac events is widely acknowledged. Definition of criteria & standards:

Maudsley Prescribing Guidelines 10th edition for the standard of ECG monitoring of inpatients on neuroleptic medication. This standard was also applied to antidepressants.

Audit of current or baseline practice:

This audit was conducted at the The Royal Glamorgan Hospital Mental Health Unit during March 2010. Recent discharges from four inpatient wards for whom notes were available were considered.

These were searched for the following:

- 1. Pre-existing cardiovascular disease;
- 2. Psychotropic medication;
- 3. Baseline ECG;
- 4. ECG after dose change;
- 5. ECG prior to discharge;

Comparison of performance with criteria and standards:

There were 11 males and 13 females in the sample with an average age of 44.5 years. Schizophrenia and mood disorders were the commonest diagnoses. Quetiapine, Olanzapine, Mirtazapine and Fluoxetine were the most common psychotropics.

Seven patients were on two or more psychotropic drugs. In all there were 14 recorded dose increases and 14 ECG recordings. However eight of these recordings were accounted for by three patients and not all clearly linked to a dose change.

Implementing change:

This audit highlights the absence of ECG monitoring. This could also be accounted for by missing ECG traces in case notes. The findings of this audit are relevant to the current development of a local "High Dose Antipsychotic" pathway.

Re-auditing & sustaining improvements:

The intention is to close the audit cycle by re-auditing after the implementation of the local High Dose Antipsychotics pathway in 2012.

#### P05.023

## Prevalence of hypercholesterolemia in Portuguese young adults: PHAJ study

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Introduction: The main cause of death in Portugal is cardiovascular disease. It is also an important cause of morbidity and years of potential life lost. About 75% of cardiovascular disease can be attributed to several modifiable risk factors such as hypercholesterolemia. The prevalence of hypercholesterolemia in young adults is little known and its importance and need of screening and control are still controversial.

Objectives: To determine the prevalence of LDL hypercholesterolemia and hypertriglyceridemia in young adults; to test the association between the value of total cholesterolemia and gender and body mass index (BMI).

Methods: Cross-sectional analytic study. Invitation letters were mailed to every patient, registered at our practice, with ages between 19 and 24. Every participant's weight and height were measured and a rapid test for determining the cholesterol level was performed. Every patient who had a cholesterol level, measured by this method, higher than 200 mg/dl took further blood analysis at a local lab to determine their lipid profile. Statistical tests used: Student's t-test and Spearman's rank correlation coefficient (level of significance = 0.05). Software used: PASW

Results: A participation rate of 12% was achieved. The study had 86 volunteers, 87.2% female and an average age of 21.6 years. Both the prevalences of LDL hypercholesterolemia and hypertriglyceridemia were 6%. There was no statistically significant association between total cholesterolemia and gender and BMI (p>0.05).

Discussion: The prevalences found in our study were lower than in others. Over one third of the participants had a BMI over 25 Kg/m2, which may be due to participation bias. Information bias, measurement bias and type II random error must also be considered. The fact that cholesterolemia was not related to BMI alerts that not only the overweight are at risk and that every person should be involved in preventive measures to improve lyfestyles, including regular exercise and healthy eating. The present population will be included in a cohort to follow-up cardiovascular status and the authors intend to widen the population sample through a multicentric study.

#### P05.024

Do General Practitioners (GPs) have time to share decision with their patients?

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#### Background:

The general practitioners (GPs) are backbone of any health system of any country and now paradigm shift in consultation and communication skills they require to share decision with their patients. However they always complain about time constraint seem in hurry. This study is an effort to indentify the Hurry

Sickness in general practitioners (GPs) and present a hypothetical combine effect of GPs and Patients hurries make a barrier in informed shared decision making .

Method:

It is a cross-sectional study conducted during a training session of GPs from January 2011 till April 2011 in six regions of Saudi Arabia.

Results:

This study highlighted that almost more than half general practitioners (GPs) in Saudi Arabia are affecting severely with Hurry Sickness. However, except in gender difference (<0.05), no other variable have any significant difference as regard to hurry sickness.

Conclusion:

The study concludes that the general practitioners (GPs) have the hurry sickness and literature supported that patients also suffering with this dilemma so it doubles the effect and the quality of communication and consultation suffer and require training and administrative measures urgently.

#### P05.025

## Patients forget to seek the advice programmed hypertension - ¿Uncontrolled or forgetful?

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Purpose of study:

Analyze compliance and the degree of control of blood pressure in hypertensive patients who do not attend for three consecutive visits scheduled visit of hypertension.

Methods used:

Is an observational study conducted in hypertensive patients that are included in the program of hypertension.

50 hypertensive patients were selected who did not attend for three consecutive visits scheduled appointment. They determined the adherence and blood pressure figures.

A) In the group of hypertensive patients did not attend visits therapeutic compliance was very good in 10% of patients, good in 12%, fair in 18%, 42% bad and very bad in the 18%.

The figures for blood pressure in this group showed or = 24% 160/100 mmHg.

B) In the group of patients that if they went to the regularly scheduled visits, therapeutic compliance was very good in 20% of hypertensive patients, good in 32%, fair in 16%, poor in 24%, and very bad at 8%.

The figures for blood pressure in this group showed figures or = 160/100mmHg in 14% of patients. (p<0.05).

Conclusions:

Compliance and blood pressure control in our hypertensive patients who fail to attend scheduled appointment is poor.

### P05.026

## Detection of Pentraxin 3 Levels in Hypertensive Patients With Complications

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**Background**: The role of Pentraxin 3 in endothelial dysfunction and used as a marker of cardiovascular risk are shown in the studies. It was aimed to investigate the levels of pentraxin 3 in the hypertensive patients with complications in this study.

Material and Method: 65 healthy volunteers and 65 hypertensive patients with complications were included to the study. The patients with renal failure, neuropathy, nephropathy, retinopathy, stroke developed due to hypertension were accepted to the study

group. Blood samples were obtained from all participants for the determination of the level of pentraxin 3.

**Results**: The mean age of the participants was found as 56.66±10.09 year. When two groups were compared in terms of biochemical parameters, although a difference was found in urea and fasting blood glucose (p=0.048 and p<0.001, respectively), no difference was found in others (p>0.05 for all parameters). Pentraxin 3 levels were found much higher in hypertensive patients with complications (451.28±244.39, and p<0.001).

**Conclusion**: In our study, the levels of Pentraxin 3 was found extremely high in hypertensive patients with complications than in healthy volunteers. The high of Pentraxin 3 levels may be an indicator of endothelial injury which occurred.

**Table 1:** Comparison of Sociodemographic and Pentraxin 3 levels in patient and control groups

	Group of Study	Group of control	p	95% CI
Age (years)	57.87±13.11	55.46±5.54	0.175	-1.09-5.92
Height (cm)	165.09±9.62	166.29±3.44	0.397	-3.99-1.60
Weight (kg)	80.57±12.78			-1.25-6.66
Pentraxin 3 (ng/ml)	451.28±244.39	0.27±0.26	<0.001	391.02- 510.98

Although no difference was found in age and body indices between two groups, a significant difference was found in Pentraxin 3 levels.

**Table 2:** Comparison of the biochemical parameters in patient and control group

Control group	Group of Study	Group of control	p	95% CI
FBG (mg/dl)	105.58±22.91	92.96±10.27	<0.001	6.45- 18.77
Urea (mg/dl)	40.16±26.15	28.61±7.38	0.048	0.078- 23.02
Creatinine (mg/dl)	1.07±0.91	0.98±0.56	0.491	-0.17- 0.35
HDL (mg/dl)	45.87±11.73	47.16±16.57	0.618	-6.41- 3.22
LDL (mg/dl)	131.65±29.51	125.42±34.42	0.281	-5.15- 17.63
Total Cholesterol (mg/dl)	207.31±39.51	194.47±54.57	0.084	-1.73- 27.41
Trygliceride(mg/dl)	146.80±54.57	140.58±74.20	0.597	-17.00- 29.43

There was a difference in biochemical parameters between the patient and control groups as expected.

#### P05.027

### Hypertense athletes: description and management

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Purpose: Extract basic clinical findings to identify patterns, diagnoses and therapeutics, in subjects under competitive exercise conditions.

Material and methods:

Design: Longitudinal descriptive. Location: Internal medicine clinic.

Subjects: Patients with hypertension who compete in any sport and are followed and treated in internal medicine consultation.

Methods: We performed a comprehensive search of secondary HTA (basic analysis,Rx-Thorax,electrocardiogram,thyroid profile,cortisol and ACTH, PRA and aldosterone,PTH,24-hour urine metanephrine,MAP,abdominal ultrasound). For those patients who required it, we performed a Gammagraphy/isotopic nephrogram and renal artery angio-RMN/arteriography.All exercise

testing was performed with monitoring of TA sports and oxygen consumption at baseline and after pharmacological control. We propose a stepwise treatment with the following steps: 0-hygienic dietary measures; 1-RAA axis inhibitors, 2-non-dihydropyridine antagonists, 3-Alpha-blockers, calcium antagonists 4dihydropyridine, thiazide diuretics 5, 6-Beta-blockers

Findings: 41 patients.37 males(90.24%), age 33.5 +5,65, in 15 patients(36.58%) was found at least one cause of secondary hypertension,7 cases were for renovascular hypertension. 32(78.2%) were receiving pharmacological treatment, with an average of 1.25 +1,41 drugs by drug class, other lifestyle modifications alone, 14(34.2%) were contraindicated or prohibited drugs specifically for sports specialty. The initial TAS was 142.5 mmHg +21,21,and TAD was 84.46 and 10.6 mmHg.On his last visit, patients had a TAS 135.7 +7.07 mmHg and TAD 84.75 + 21.21 mmHg.30 subjects received drug treatment (73.2%), with an average of 1.07 +0.7 drugs by drug class,other lifestyle modifications alone.In the 4 years of median follow-up has seen a statistically significant decrease in the reduction of the sample mean TAS(p <0.01) and decreasing the number of drugs per patient(p < 0.05)

11 patients(26.8%) could be controlled with lifestyle modifications, or adding small amounts of enalapril(3 patients was 5-10 mg of enalapril). 17 patients(41.46%) could be controlled medium, or high dose ARA-II(160-320 mg valsartan). 6 patients(14.61%) required combination therapy with calcium antagonists or antag-a. In 6 cases(14.61%) was explained the use of diuretics, but only in non-competitive periods.

Conclusions: The direction towards a treatment based on lifestyle modifications and inhibitors of the renin-angiotensin system in competitive sports can lead to a decrease in TAS and the use of fewer drugs. The competitive athlete needs less medication than the general population.

#### P05.028

#### Resistant arterial hypertension as a manifestation of unknown secondary cause

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Purpose:. To study possible cause of secondary RAH in patients with RAH, referred to specialty care.

Material and methods:

Design: prospective study.

Location: internal medicine, monographic hypertension in a tertiary

Subjects: Patients who are derived from primary care to CARE consultation under the heading of RAH.

Methods: We included patients with resistant hypertension being considered as TA values above 140/90 despite the implementation of antihypertensive treatment with three or more drugs. We excluded patients with a dose of diuretic equal or less hydrochlorothiazide 12.5 mg or 2.5 mg of torasemide or 20 mg of furosemide. Second, was performed in all patients a standard test battery the same day they came to visit. (Abdominal ultrasound, EKG, chest x-ray and laboratory tests of blood and urine). Third, we conducted a series of specific studies focused on the suspected problem (hormonal study, TSH, PTH, cortisol, ACTH, ARP, aldosterone, urinary metanephrines), echocardiography, polysomnography, MAP, nephrogram isotopic angiography, arteriography.

Findings: 180 patients. 1) Drugs: 88 (17.6%). Aines 64 and 24 by other drugs (corticosteroids, anabolic steroids, contraceptives, HRT, cyclosporine, bupropion).

- 2) Kidney Disease: 91 (18.2%). IRC 48 cases, 16 solitary kidney, 15 renovascular, 6 glomerulonephritis, polycystic 4, medullary sponge kidney 2, 1 other.
- 3) Central: 65 (13%). Morbid Obesity 39. Saos 15. SNC 10 (intraparenchymal hémorrhage, intracranial hypertension). Asthma. 4) Endocrine-metabolic 36 (7.2%). hyperaldosteronism hyporeninemic 7. Cortisol producing adrenal adenoma 1. Bilateral adrenal hyperplasia 1. Licorice Abuse 1. Poisoning 1. Hypothyroidism 18. Hyperthyroidism 5. Hyperparathyroidism 2. 5) Other: Coarctation Aorta 2. Pregnancy 6

Conclusions: A model of high-resolution specialist consultation, coordinated with primary care, can decisively influence:

- The optimal selection of patients with hypertension who are referred to specialized care.
- The diagnosis of secondary hypertension and to identify factors of decompensating.
- Optimum utilization of resources, using them in a selected population with high probability of secondary hypertension.

#### P05.029

### Study on the evolution of items in the Goldberg Anxiety and Depression Scale (GADS) in Relaxation First Aid

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### Objetive

Measure the evolution of the 18 items of the Goldberg Anxiety and Depression Scale following the group sessions on relaxation and cognitive techniques carried out in the health centre.

Material and Methods

Design: Longitudinal description: pre- and post-workshop evaluation

Scope of study: Urban Health Centre with two country consultancies.

Selection Criteria: People with anxiety problems, forwarded from general practitioners, clinics, social workers, or mental health

Subjects: Patients following the workshops between February 2007 and December 2010 (with over 80% participation in the sessions), (N=148).

Workshops: Weekly group sessions (10-12 people, 8 sessions, during 2 months), led by the centre's social worker, including respiratory control, relaxation techniques, (Jacobson's progressive relaxation method, and Schultz relaxation), and cognitive techniques (stress management and problem solving). Form GADS-18 was filled out before and after the workshops.

Measurements: 18 GADS items were measured before and after each session, 9 for anxiety, 9 for depression. We studied the change in the 18 items via chi-2 (p<0.05). Age, sex. We also compared the Goldberg Anxiety and Depression scores pre- and post-sessions via t-tests, alpha 0.05 Results

148 patients were included, 71'6% female; average age 50'8 years old (standard deviation 12'72); The average reduction in anxiety pre- to post-workshop in GADS was

2'37 points (2'05-2'69) (p<0'001) in the depression sub-scale. Over 50% of the patients that answered "yes" to all the questions on anxiety and depression answered "no following the workshops (p<0.05). There are some questions where a large percentage of patients answered "no" before the workshops, and answered "yes" . afterwards.

Conclusion

Relaxation technique workshops can be useful to reduce anxiety and depression in first aid. The workshops could be focused in less efficient areas

#### P05.030

#### Use of automatic oscilometry to measure peripheric arteriopathy

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Purpose: eexternal validation of the calculation of ankle-brachial index (ABI) using automatic oscillometry.

Material and methods:

Design: Longitudinal descriptive.

Location: internal medicine visits about vascular risk.

Subjects: 195 patients were evaluated with high vascular risk or very high on the SCORE scale.

Methods: We completed three consecutive measurements of systolic blood pressure (SBP), by Omron M-7 by the characteristics of the sleeve, in the forearm and then three measurements in both ankles, using standard procedures. Of the three measures the largest of the three was chosen as valid. Disease was considered an ABI less than 1. The comparison was made with Haddico-Bidop Doppler sound and graphic signals. The Doppler device was used in conjunction with a mercury sphygmomanometer Riester nova Presametric. We also evaluated sex, age, cardiovascular risk factors and any organ damage. Findings:

58.1% female. The mean age was 64.76 years (SD 10.56). 74.9% had sedentary lifestyle and hypertension was diagnosed. 76.5% were smokers. 62.4% had dyslipidemia, 53.3% were obese and 42.3% had diabetes. 46.2% of the patients had suffered a cardiac process. 35.1% had renal involvement and 19.1% had established cardiovascular disease.

The right leg intraclass correlation was 0.67 (p <0.01) and left leg was 0.71 (p <0.01). The prevalence of the disease was 48.2% with a sensitivity of 90.4% and a specificity of 77.2%. Predictive Value of Negative Test (PVNT) 0.89. Predictive Value of Positive Test (PVPT) 0.789

Conclusions: The oscillometric method shows a high PVNT, so it can be used as a screening method highly interesting for ambulatory screening of peripheral arterial disease.

# P05.031 Use of delayed release doxazocin in resistant hypertension associated with obstructive sleep apnea syndrome

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Purpose: to evaluate the response to the administration of nocturnal delayed release doxazocin in patients with hypertension secondary to SAOS

Material and methods:

Design: descriptive longitudinal.

Location: internal medicine clinic, HTA monograph, a third level hospital

Subjects: hypertensive patients with clinical characteristics of strength, showing that clinical criteria of OSA prior to diagnosis of HTA had an Apnea Index/hipoapnea greater than 10 queries. In all patients, we studied the existence of other possible secondary cause of HTA. All the patients with TA above 140/90 or with a nocturnal MAP pathological pattern we added prior treatment of 4-8 mg doxazocin before bed.

Methods: we analyzed variables of sex, age, length of treatment, and assessed antihypertensive treatment according to prescribed corrective recommendations, Body mass index (BMI), sedentary lifestyle, other cardiovascular risk factors (diabetes, hypercholesterolemia, smoking), presence of enolism, presence of renal damage and of ischemic heart disease. Figures and basal blood pressure monitored during 3 years.

Findings: We reviewed 40 patients (29 men, 72.5%). Los patients have an average age  $49.5\pm7.5$  (range: 31-66), and an average length of HTA at the time of diagnosis of  $11.57\pm7.31$  years. 80% obese and 20% overweight (BMI  $33.6\pm4.25$ ). 87.5% were sedentary, 46.2% diabetics, 59% hypercholesterolemia, 53.84% smokers, only 1 enolism, 2 patients with organ damage in kidney 2 and 4 patients with ischemic heart disease.

At he time of the visit, 42% of patients were receiving correct treatment according to current recommendations, with an average of  $2.8\pm1.3$  drugs.

Initial TAS was  $150.55 \pm 22.6$  mmHg and TAD was  $89.17 \pm 12.69$  mmHg. We considered 12 patients with acceptable TA (30.79%). On average, follow-up after 3 years of treatment, data on tension were under 140/90 in 25 patients 64% (p <0.01). 2 newly diagnosed patients responded acceptably to the introduction of CPAP

Conclusions: Secondary HTA to S of Apnea, sleep is difficult to control with 3 drugs The effect of delayed release doxazocin is highly effective to control this type of RAH

#### P05.032

Comparison of the efficacy of oral and transdermal estrogen treatments on menopausal symptoms

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**Objective:** Comparison of the effect of oral and transdermal estrogen use in surgical menopause patients with the Beck Depression Index (BDI), and Menopause symptoms Rating Scale (MRS).

Materials and Methods: 52 patients with surgical menopause were included to this prospective study. Patients were randomly divided into 3 groups the first group received oral (n = 18), the second group of transdermal estrogen (n = 17) treatment, any treatment is not given to the third group (n = 17). BDI and MRS were performed to all participating patients before surgery, 12 weeks after surgery, and 28 weeks after surgery in the study.

**Results:** No statistically significant difference of the mean age, weight, height, BMI was observed between oral, transdermal estrogen groups and without treatment group (p> 0.05). In Oral estrogen group statistically significance between the mean BDI change in 3th and 7th months was observed (2.28 ± 1.09, 0.86 ±

Abstinence						
	Abstinence	;				
	Yes/No	N	%			
Abstinence after one year	Yes	60	62,5			
	No	36	37,5			
	Total	96	100			
Include program	Yes	67	69,8			
	No	29	30,2			
	Total	96	100			
Abstinence after one year.Include program	Yes	31	46,3			
	No	36	53,7			
	Total	67	100			

0.83, p = 0.013, respectively), no similar change observed in the other groups (p> 0.05). Statistically significant change was observed between the MRS psychological (hot flashes, irritability, sleep disturbances, fatigue, anxiety, decreased concentration) means in Transdermal group's 3th and 7<sup>th</sup> months results (4.53  $\pm$ 2.7,  $3.06 \pm 1.82$ , p = 0.005, respectively). No statistical differences were observed between other groups (p> 0.05). A statistically significant change was observed between urogynecologic (vaginal dryness, burning, itching, dyspareunia) means in Transdermal group's initial, 3th and 7th months results (1.59  $\pm$  1.42, 2.12  $\pm$  1.41, 1.12  $\pm$  1.05, p = 0.022). Conclusions: Detections of effective improvements were observed BDI of the group receiving oral estrogen, and psychological and urogynecologic symptoms of the group receiving transdermal estrogen. For this reason, expectations and outstanding complaints of the menopause patients should be well evaluated while evaluating treatment methods to be used.

#### Motivation and dependence on smoking cessation

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ntroduction: The tobacco is main cause of illness, disability and avoidable mortality, primary health care the adequate environment to help smokers to quit. Smokers have an excess mortality of 70% compared with non-smokers, seeing their life expectancy shortened from six to nine years. Smoking prevalence is 35%.

Objectives: Study to motivation, dependence and grade of abstinence in smokers.

Design and Methods: Cross descriptive study by survey. We include derivated patients during one year from different consultations of the health center, compile data of tabaquism, test of Fagerström (NDFT), test of Richmond (RMT), test of Glover Nilssón of psychological (GNPST)-social-gesture dependence. It was offered pharmaceutical and psychological treatment.

Results: They included ninety-six patients who are  $46.9\pm12.5$  years old are involved and 58% males and 42% women. The mean of NDFT is  $5.2\pm1.9$ , RMT  $8.9\pm1.2$ ,  $29.5\pm11.6$  smoking years, beginning age  $17.27\pm3.30$ , pack of cigarettes/year  $36.13\pm21.25$ ; GNPST was 43.9% slight, 27.2% moderate and 28.9% severe, with a statistically significant difference (p=0,003), like with sex (greater in males p=0,046); the anxiety is the main reason of relapse (45%), 42.7% was worried about weight, 83.3% had smokers in their environment, 49% smoked twenty cigarette a day, 63.6% smoked first cigarette  $\le 15$ ; the nicotine dependency was the most important reason to continue smoking, followed by pleasure and stress; among the reasons to stop smoking health was the most important. The abstinence after one year was 37.5%, 69.8% date to stop smoking and went on with the program (achieving this goal 53.7%).

Conclusions: In our study the high grade of motivation and the moderate dependence have relationship with the results of abstinence.

There is a higher percentage of abstinence in males than in women.

The abstinence after one year was 37.5%.

Summary Scores							
	Total	Men	Women	Р			
Sex	67	41	26	0.04 6			
Cigarette/day	23.33±8.45	24.88±9.47	21.18±6.27	NS			
Pack cigarettes/year	36.13±21.2 5	43.41±21.7 5	25.95±15.1	NS			
NDFT. Fagerström	5.24±1.97	5.04±2.03	5.53±1.88	NS			
RMT.Richmond	8.96±1.24	9.04±1.06	8.85±1.47	NS			
GNPST.Dependenc e psychological	7.67±5.01(0 -16)	7.98±5.72(0 -20)	11.93±7.50(0 -28)	0.00			
Beginning age	17.27±3.30	17.29±3.43	17.25±3.15	NS			
Tries to quit smoking	2.79±2.73(0 -20)	2.79±2.07(0 -7)	2.80±3.48(0- 20)	NS			

#### P05.034

## Prevalence of diabetic complications in family medicine practice

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### Background

Diabetes mellitus is associated with a significantly increased risk of morbidity and mortality.

#### Aim

Aim of this study was to assess prevalence of acute and chronic complications in patients with diabetes type 2 in family medicine team at Family Medicine Teaching Centre (FMTC) Tuzla through a medical audit.

Material & Methods

This retrospective analysis included 139 medical records of patients with diabetes mellitus treated by family medicine team at FMTC Tuzla. We evaluated prevalence of acute (hypoglicemia, hyperglicemia) and chronic complications (macro and microvascular) in diabetic patients.

Results

Results of this study showed that prevalence of diabetes mellitus in family practice was 7,24%. Mean age of all participants was 65,24±11,5 years, while mean duration of diabetes was 7,51±6,86 years. Significantly more patients had diabetes mellitus type 2 than type 1 (5,1% vs 94,9%; p<0,0001) and significantly more women had diabetes mellitus than men (64,7% vs 35,3; p<0,0001). Acute diabetic complications were present in 11,27% patients, and hypoglicemia was statistically more prevalent than hyperglicemia (p=0,0035). The most prevalent chronic complications of diabetes mellitus were diabetic neuropathy (26,6%) and coronary heart disease (25%). Cerebrovascular disease was present in 16% patients, diabetic retinopathy had 17,7% patients, while 6,4% of diabetic patients had perifery artery disease. Diabetic foot was present in 4% patients with diabetes mellitus.

Conclusior

Results of this study showed a high prevalence of diabetic complications in family medicine practice, especially chronic macrovascular complications that indicates more effective intervention in primary health care in order to reduce cardiovascular morbidity and mortality.

#### P05.035

#### Evalutation of state of change in smoking patients

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**INTRODUCTION** Smoking is the most important cause of premature death and disability in western countries.

Family physicians can do much in their clinic to help smokers.

**AIMS** Estimate the state of change in which are smokers that go to family physician, assess the degree of nicotine dependence and evaluate patient response to therapeutic proposal of the family doctor.

MATERIALS AND METHODS This study involved 7 family doctors and 140 patients. Interviews have been conducted

by asking general questions (with personal data, such situations that influence smoking, what benefits they expect to obtain and questions about their own family doctor), Fagertrom test for nicotine dependence, motivational test to assess motivation to change, and the little MAC-T, useful test for evaluating the stage of change in which the patient is, self efficacy and inner fracture.

**RESULTS** Most start smoking in adolescence with friends.

They smoke particularly to address anxiety and stress and 68% think getting relaxation by smoking.

Only 20% of their family doctors tried to help them through drug therapy or other.

50% have a high and very high dependence on nicotine.

The majority of patients have a medium to high motivation to quit smoking and the motivation for 77% of patients is concern for their health.

54% of patients who participated in the study is in the contemplation stage, 14% in precontemplation, only 16% in stage determination and 16% in stage action, that are the only two stages in which family doctor can help patient.

**CONCLUSIONS** The study highlights the need for a dual action: prevention in schools (where there are teenagers who start smoking with friends), most interest from the family doctor to identify, treating and following smoking patients. The majority of patients do not think having an adequate support from family doctors or because he has always short of time or because he himself smokes. Therefore we need also to change the idea that most of patients have on their family doctors.

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#### Diseases of the endocrine system in the work of family medicine doctor

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Diseases of the endocrine system are becoming an increasing challenge in the work of family doctors because of: increasing participation, co-morbidity with other chronic diseases, chronic, the possibility malignant alteration and disability.

Purpose:

Display frequency and individual representation of endocrine diseases in order to plan prevention, development of diagnostic procedures and therapies of modern education. Methods:

Four-month retrospective analytical study examined four patients with a family medicine physician in January April 2011.

In this period 12 116 patients examined 869 or 7% had a disease of the endocrine system, the (month 5.5%, 6.1%, 6.75%, 7.7%) By type of disease

6.55% E 03, E 04 3%, 4% E 05, E 06 3 E 07 0.85%, 5.5% E10, E 11 23.5%

E 66 E 78 1.5% 34% 73 0.7% C

Conclusion: Diseases of the endocrine system require a comprehensive prevention: Education about the importance of healthy eating and increasing physical activities to reduce obesity and disorders of lipid status.

The introduction of statin therapy in primary prevention.

Control of iodine salt and water.

The possibility of modern diagnostics at the primary level (Health); The technical competence of laboratories to determine the fraction of cholesterol and hormones

The availability of diagnostic ultrasound of the abdomen and soft tissues of the neck.

The availability of ophthalmologist consultation especially in patients with diabetes mellitus.

Continuing education of physicians, the art therapy

Review of the establishment of clinics for people with diabetes, as well as better cooperation with

Endocrinologists.

Teamwork and continuous operation will allow patients adequate treatment.

Keywords: Endocrine, prevention, the importance

#### P05.037

### Ethical attitudes of primary health care professionals - A descriptive study in Portuguese Health Centres

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Purpose: There are few studies about the determinants and basis that influence health professionals' ethical decisions. The objectives of this study were to identify and compare the set of professionals' ethical attitudes and the justifications for their decision making.

Methods: Cross-sectional study, quantitative and qualitative, involving doctors and nurses from health centres of the central region of Portugal (cluster sampling). A scale to assess the professionals' ethical attitudes was built, validated (with a pre-test, pilot study and the application of Cronbach's Alpha) and used through a self-administered questionnaire.

On a second moment, the participants were asked to list ethical problems of three hypothetical cases and consecutively recommend a solution for those situations, justifying their suggestion. Software: SPSS 15.0. Statistical tests: t-test and ANOVA.

Results and Discussion: The authors inquired 370 health professionals, 180 doctors and 190 nurses, 73.5% female, mean age 46.2 years. The professionals' ethical attitudes did not seem influenced by the career or gender. However, as age and number of years active increase, the ethical attitudes become more resolute and they seem more so in those working in Viseu and Aveiro. Ethical reflection in collective organisations implies the existence of certain conditions, the main one being the organisation's own "moral community", i.e. the set of moral norms shared by its members, as organisations articulate the individual interests of its members seeking common goals. Yet they should do so while respecting the dignity of citizens and their fundamental

#### P05.038

#### Do we take on consideration chronic patients' sexuality?

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Background: We observed that sexuality is not a frequent question as diets or exercise can be in a Primary Care consultation. That is why we thought about carrying on this study.

Aims: To know how important is sexuality for patients and if they have noticed any change since their chronic illness was detected or they had started with their treatment.

Methods: A descriptive observational study has been carried out in different Primary Care Health Centers of the Public Health System of Spain during two months of 2011. Data were collected from anonymous interview to chronic patients between 50 and 80 years old. Sample: 93 people: 57 men, 36 women. Mean age 64,5 years old.

Results: 23% of men think sexuality is very important but only 3% of women give that importance. 43% of men and women think is quite important. 35% of men think is little important against 53% of women. 60% of men have realized some changes due: 40% to chronic illness, 33% to treatment and 18 % to age. While 40% of women that have realised some changes think it is due: 33% to age and 17% to treatment. 37% of men have consulted to the urologist and GP. 11% of women have consulted gynaecologist and GP. 48% of men have treatment for erectile dysfunction. Conclusions: Cardiovascular factors have to be taken on consideration in men since they affect the sexuality physiology. Erectile dysfunction is a sentinel symptom of endothelial dysfunction. Women give another magnitude to their sexuality and age is important due to hormonal changes. Sexuality is a part of the holistic view of patients' life and Heath Professionals in Primary Care should try to give a chance to talk about sexuality with our patients in order to help them to recover their wellbeing.

#### P05.039

The representation of the number and types of antihypertensive drugs in the regulation of arterial hypertension in the outpatient family doctor

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According to estimates by the World Health Organization because of high blood pressure in the world is dying around seven million people, accounting for 13% of total deaths due to premature death and disability.

One of the major risk factor for stroke, coronary heart disease, chronic heart failure, chronic renal failure, sudden death. It is important to properly treat hypertension and to achieve the target of therapeutic value in order to avoid these complications.

The aim of this study was to determine the prevalence and types of antihypertensive drugs in the treatment of hypertension.

Material and methods: Inevestigation was performed prospectively, based on data obtained from three family medicine team, two from the Health Center in Banja Luka and one from the Health Center Prijedor .Inevestigation was conducted in the period from 14.11.2011-18.11.2011.Covered patients with a diagnosis of hypertension, and have come for any reason.

Results: The study population consisted of 191 patients diagnosed with hypertension, of whom 78 men and 113 women. 12.5% of patients did not use pharmacological therapy, received advice, 23.5% received one drug, a combination of two drugs and 45.02% for three or more drugs 18.98%.

Of the total number of medications prescribed ACE inhibitors were the most represented 51.8% and 16.9% beta blockers, calcium channel blockers and diuretics 21.6% 9.4%. The majority of patients belong to the age group 50-69 years. 80.6% of respondents had regulate blood pressure, and 12.5% are not regularly used prescribed medication.

Conclusion: The achievement of stable blood pressure values of the majority of patients received a combination therapy of two antihypertensive drugs. Drug most frequently from a group of ACE inhibitors.

#### P05.040

Association of blood lead levels with demographic, reproductive and employment related factors in Turkish women

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Objective: The aim of this study is to compare the blood lead levels in women who are unemployed and employed, and to associate the difference with demographic, work, and reproductive factors. Participants: A total of 63 post-menopausal women attending the routine check-up unit of Family Medicine Department for detection of osteoporosis were included in the study. There were 36 unemployed and 27 employed women.

Methods: Patients filled up a questionnaire regarding their sociodemographics. Their blood chemistry and blood lead levels were determined and bone mineral densities were measured by Dual Energy X-Ray Absorptiometry. In the statistical analysis, Mann-Whitney U test was used to compare means and  $\chi^2$  was used to compare ratios. Backward logistic regression was used for multivariate analysis.

Results: There was no significant difference between their age (57.17 $\pm$  7.46; unemployed, 54.19 $\pm$ 5.36; employed). The mean blood lead levels were 25.92 $\pm$ 9.31 µg/dl in the unemployed group and 33.98 $\pm$ 13.50 µg/dl in the employed group (p=0.011). Smoking rate was significantly higher in employed women (p=0.033). There were also significant differences between the number of births (p=0.032) and duration of breastfeeding (p=0.008). These were lower in the employed group. There was no association between osteoporosis and employment.

Conclusions: Lead levels are significantly higher in employed women compared with unemployed, hence the measures to improve working conditions should be adopted.

Table 1: The demographic and reproductive factors and lead levels of the employed and unemployed wom

of the employed and unemployed worn						
		Unemployed		Employed		
	n	Mean ± SD	n	Mean ± SD	p*	
Age	36	57,27±7,45	27	54,19±5,36	0,223	
Lead	36	25,92±9,31	27	33,98±13,48	0,011	
Pregnancy	36	2,53±1,56	27	1,74±0,98	0,032	
Breast-feeding	36	24,31±18,38	27	13,52±12,6	0,008	
Menopause	36	10,88± 9,8	27	5,44±4,41	0,037	

Table 2: Presence of some factors in employed and unemployed women							
		Unemployed	Employed				
	n	%	n	%	p*		
Osteoporosis(-)	17	47,2	15	55,6	0,513		
Osteoporosis(+)	19	52,8	12	44,4			
Air pollution(+)	20	55,6	17	63	0,555		
Air pollution (-)	16	44,4	10	37			
Smoking(-)	31	86	17	63	0,033		
Smoking(+)	5	14	10	37			

#### P05.041

## Whiplash Associated Disorders (WAD) in Health Center of Castilla y León (Spain)

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AIMS: Assess the care of patients with Whiplash Associated Disorders (WAD) in our Basic Health Zone, to promote an Improvement Plan in the care of these patients in daily clinical practice.

DESIGN: The authors conducted a descriptive cross-sectional study of patients with WAD after traffic accident recorded in the computerized medical records of the PILARICA Health Center. METHOD:

Of the total of 16,294 patients (8634 women and 7660 men) of our Basic Health Zone, with a Clinical History with computerized records, we reviewed 99 cases (43 men and 56 women) had a diagnosis of WAD after traffic accident. Variables were studied: sex, age, average time of healing / stabilization, days of disability, consequences and treatment.

RESULTS: 1-PREVALENCE: Total 0.6%, men 0.56%, 0.64% in women. 2-AGE: 60-70: men 2.3%, 3.6% women, 50-60: 6.9% men, 17.8% women, 40-50: 44,3% male, 33.9% women, 30-40: 4.7% men, 10.7% women, 20-30: 37,2% male, 30.4% women, men 15-20:4,6%, 1.8% women.

3-TIME HEALING / STABILIZATION: 59.3 days

4-WORK DISABILITY THROUGH TIME: 45 days.

5-AFTERMATH: 65% sequelae, the most frequent post-traumatic cervical syndrome (35.1%) and non-binding algias traumatic cervical root (16.4%).

7-TREATMENT: 62.1% of the injured are being treated with collar, 55.7%, rehabilitation, 36% received combination therapy and 17.2%, other treatment modalities or none.

CONCLUSIONS: Between 20 and 50 years is 86% of men and 75% of women, with average daily time of work incapacity of 45 days and 65% of cases sequelae, all this implies a significant health spending begs our Basic Health Zone Improvement Plan Assistance to include Primary Care Physicians, Specialists in Orthopedic Surgery and Traumatology and Rehabilitation.

### P05.042

#### Influence of blood pressure valvular aortic stenosis

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Objective: To evaluate the influence of blood pressure and sex in assessing the severity of valvular aortic stenosis.

Materials and Methods: Design: Restrospective study Location: cardiology department

Subjects: patients with severe aortic stenosis were admitted to our cardiology department between the years 2003-2006.

Methods: We measured gender, age, blood pressure, were valued by cardiac catheterization, left ventriculography and Doppler echocardiography.

Findings: The sample comprised 60 patients, 31 men (51.7%) and 29 women (48.3%). 32 patients (53.3%) had a blood pressure >130/85 mmHg. The maximum and mean gradient by echocardiography was 71.35 and 43.80 mmHg in men and 80.54 and 46.56 mmHg in women. The Mean peak Gradient evaluated by cardiac catheterization was 66.39 in men and 75.68. The mean ejection fraction by echocardiography was 56.55% in men and 66.23% in women. The average mean arterial pressure in males was 86.71 and 87.57 mmHg in women

Conclusions: . In our sample we found no influence of HBP and sex in echocardiographic and hemodynamic assessment of severe aortic stenosis. It is possible that increased afterload that hypertension is to offset the effect on the transvalvular gradient increased burden posed by the intrinsic valve lesion.

#### P05.043

## Prognosis to 1 year of elderly patients with myocardial infarction: quality of life

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Objective: To analyze the survival and quality of life at 6 and 12 months after discharge of patients

Materials and Methods:

Design: restrospective study

Location: All patients were referred for consultation at 6 and 12 months after hospital discharge.

Subjects: Patients >75 years old with myocardial infarction in 2009. Methods: We measured gender, age, if our patients have experienced a cardiac event in the first 6 and 12 months.

Findings: The sample consisted of 94 patients (p), 46 men. Average age 79.8a children (men) and 80.06 years (women). At 6 months they had re-entered 14 p, 8 coronary event, 2 for stroke, 1 for lower limb ischemia, 1 due to heart failure, 1 for bradyarrhythmia that required permanent pacemaker and 1 non-cardiac cause. In the first 6 months died 12 p, cardiogenic shock (6 p), multiorgan failure (2p), arrhythmia (2p), sepsis (1p) and cancer (1p). Half Karnofky Index: 87.2. Between 6 and 12 months were readmitted 8 p, 2 and 6 heart failure by coronary events. 10 patients died, 5 of cardiogenic shock, 2 for neoplasia, 1 stroke, 1 and 1 multiorgan failure due to arrhythmia. GEL Karnofky index average was 76.6. Found as predictors of mortality at 6 months, female gender (p = 0.38, OR 6.44 (1.11-37.42) and left ventricular dysfunction (p = 0.039, OR 6.45 (1.1-37.7) and 12 months: females with OR 3.67 (1.01-13.46, p = 0.049).

Conclusions: The survival of elderly patients with myocardial infarction in the short term is high, with an acceptable performance status and a light unit for the development of activities of daily living

#### P05.044

## Patients > 75 years old with myocardial infarction: Survival and quality of life

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Objective: To analyze the survival and quality of life at 6 months after discharge of patients.

Design: Retrospective study. Location: third level hospital.

Subjects: Patients >75 years old with the diagnosis of myocardial

infarction without ST-segment elevation(NSTE ACS).

Methods:We studied 52 consecutive patients admitted with NSTE-ACS and Tn positive in 2005.We analyzed gender,TIMI score,origin,destination at discharge,survival after discharge and quality of life(Karnofsky scale telephone survey).

Findings:We analyzed 52 patients (p),including 29 men (55.8%). TIMI:in 40 p(76.9%) of 3-4 points and 12 p(23.1%) of 5-7. Killip clinical grade: 5 p(67.3%) in grade I, 8 p(15.4%) in grade II, 6 p(11.5%) in grade III and 3(5.8%) in grade IV. Source: 38 p(73.1%) were admitted from the emergency room, 12 p(23.1%) from the ICU and 2 pts(3.8%) from another center. Coronary angiography was performed in 19 p(35.2%). In 5 p(9.3%) coronary angiography was performed within 48h of admission. ICP was performed at 16 p(29.6%), all grade I-II Killip. The culprit vessel was the DA in 14 p(73.8%), the CD 4-p(21.1%) and the CX in 1 p(5.3%). There was no need rescue angioplasty. 9 p is used in thrombolysis (16.9%). None underwent coronary bypass surgery. The discharge destination was as follows: 44 p(84.6%) at home, 2 p(3.8%) were referred to another center and 4(7.7%) died in Plant degree Killip III and IV, 2 with TIMI 3-4 and the other 2 with TIMI 5-7, coronary angiography is not carried out any of them. Survival:Of the 38 patients interviewed by telephone, 36 p(94.7%) survived at 3 months and 2 p die within the first 2 months. At 6 months, 35 survived(92.1%) of these 38 patients surveyed. All PCI patients surviving at 6 months follow up after discharge. Quality of life: 18(50%) with[70 points, 10 p(27.7%) with 60 points, 7 patients(19.4%) with 50 points and 1 patient(2.9%) with 40 points. Conclusions: Survival of elderly patients with myocardial infarction in the short term is high, particularly those undergoing PCI. The quality of life for most of these patients is good, incapable of normal activity, but may make an independent life.

#### P05.045

## Management plan and predictors of mortality in elderly myocardial infarction

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Objective: Meet management plan and predictors of mortality in elderly patients with myocardial infarction.

Materials and Methods: Design: Restrospective study Location: Third level hospital.

Subjects: Patients >75 years old with myocardial infarction

Methods: We reviewed all patients >75 years with myocardial infarction in 2009, on admission, 6 and 12 months after discharge. We analyzed gender, age, initial diagnosis, if we had performed echocardiographt, coronary angiography, the culprit vessel and drugs.

Findings: 103 patients (p), 52 men. Mean age: 80.21 years (men) and 80.31 years (women). Initial diagnosis: STEMI (15.5%) and NSTE-ACS (84.5%), 62.1% had TIMI e5. Killip class: I-II 85.4% 14.6% III-IV. Echocardiography was performed in 68% of p. Coronary angiography was performed in 35 p, 3 p without significant coronary lesions, 17 p 3-vessel disease. The culprit vessel was: TCI (5 p), DA (15 p), CD (5p) and CX (7p). PCI was performed in 26 p. 8 p was used in thrombolysis. 1 p underwent coronary bypass surgery. Drugs at discharge: aspirin (96.8%), clopidogrel (76.9%), beta-blockers (62.7%), calcium antagonists (38.2%), nitrates (70.2%), statins (96.8%), ACEI/ARB (82.9%). 9 pts died in plant (6 cardiogenic shock, multiorgan failure 2 and 1 malignant arrhythmia). one of them, culprit vessel revascularization in income (DA) in the context of 3-vessel disease. The only predictor of hospital mortality with statistical significance were age (OR 1.32 (95% CI 1.11-1.58).

Conclusions: Our study shows the high complexity of managing these patients, because of their high comorbidity associated with diffuse coronary artery disease in most cases and with a high rate of resource consumption and hospital complications.

#### Octogenarians: myocardial infarction without ST elevation

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Objective: Know the survival and quality of life in our octogenarians with myocardial infarction.

Materials and Methods: Design: Restrospective study Location: Third level hospital.

Subjects: patients admitted consecutively octogenarians in the

cardiology, myocardial infarction, in 2005.

Methods: We analyzed gender, TIMI score, origin, destination at discharge, survival after discharge and quality of life (Karnofsky

Findings: We analyzed 27 patients (p), 15 patients were men (55.6%). TIMI: in 20 p (74%) of 3-4 points and 17 p (26%) of 5-7. Killip clinical grade: 15 p (55.6%) in grade I, 6 p (22.2%) in grade II, 4 p (14.8%) in grade III and 2p (7.4%) in grade IV. Source: 23 p (85.2%) were admitted from the emergency room, 3 p (11.1%) from the ICU and 1 p (3.7%) came from another Center. Coronary angiography was performed in 3 pts (11.1%). In 1 p (3.7%) coronary angiography was performed within 48 h of admission. ICP was performed at 3 p (11.1%), all grade I-II Killip. The culprit vessel was the DA in 2 p (66.6%), and the CX in 1 p (3.7%). There was no need rescue angioplasty in any patient. None underwent coronary bypass surgery. The discharge destination was as follows: 24 p (88.9%) at home, 3 p (11.1%) died on the ground in grade III and IV Killip, 2 with TIMI 4-5, no coronary angiography to any of them. Survival: Of the 24 patients interviewed by telephone, 18 p (75%) survived at 3 months and 6 p (25%) die within the first 2 months. At 6 months, surviving 9 p (50%). All PCI patients surviving at 6 months follow up after discharge. Quality of life at 6 months, 3 p (16.6%) with [70 points, 2 p (11.1%) with 60 points, 3 patients (16.6%) with 50 points and 1 patient (5.5%) with 40 points. Conclusions: Myocardial infarction in octogenarian patients is a major cause of loss of quantity and quality of life. Most of these patients are discharged to their own homes, albeit with a high degree of dependency for the development of activities of daily living.

#### P05.047

Management of patients with chronic low back pain in the general medical setting with the thermal rehabilitative

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Mud-balneotherapy allows to reduce the use of medicine and is also beneficial "for the spirit" due to the effects of the environment and of the recreational aspects of the thermal resorts.

The objective of this research is to evaluate the short-term changes brought about by the mud-balneotherapy thermal treatment on the psychophysical well-being of the patients with chronic lumbago.

The research, carried out in the thermal spa of Margherita Di Savoia (BT), is based on a protocol of 12 sessions, that include 25 minutes of treatment and 30 minutes of reaction to the treatment.

### **Patients and Methods**

100 patients were selected, 49 men and 51 women, aged between 34-82, diagnosed with chronic lumbago.

They were given: the trunk flexibility test (sit and reach test); the VAS scale (Visual Analogue Scale); the SF-36 health survey; a value scale for the patients' judgement on the therapy. At the end of the treatment the evaluation tests were carried out again, thus confronting the results obtained.

#### Results

Pain measurement: the average of the values before and after the treatment went from 4.42 to 3.45.

Trunk flexibility test (sit and reach test): the average of the values before and after the treatment went from 11.73 cm to 10.16 cm with a range gain of 1.57 cm.

SF-36 health survey on psychophysical well-being: the average of the values relative to the different dimensions was higher in the patients after the mud-balneotherapy treatment.

Judgment on the efficaciousness of the therapy:

Excellent: 27 patients; Good: 57 patients; Fairly good: 14 patients; Poor: 2 patients.

No patient said the cure was unsatisfactory.

#### Conclusions

The improvement in the well-being of the patient with chronic lower back pain is obtained through the optimization of the physical condition but also of the psychological, social and relational one.

The research reveals a good short-term effect of the mudbalneotherapy treatment on the psychophysical state of the patient. Moreover, the patients have expressed a positive judgment on the treatment suggested by their GP for the psychophysical well-being perceived.

Risk factors and risk level for falling ill with Diabetes mellitus among citizens of Novi Sad

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Introduction: Diabetes is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. Number of diabetic patients is constantly increasing, as in Republic of Serbia, so all over the world.

Aim: This work's aim is to ascertain presence of risk factors and risk level for the emergence of diabetes among citizens of Novi Sad, and to ascertain whether there are gender differences considering this subject.

Method: Filling out the questionnaire and analysis of risk assessment for the development of type 2 diabetes mellitus, recommended in the National Guidelines for the prevention of type 2 diabetes mellitus. The questionnaires were completed randomly, based on voluntary patient. Patients suffering from diabetes mellitus were excluded from the study.

Results and discussion: The research was participated 448 females and 224 males citizens of Novi Sad. More than 70% of men and 58% of women were overweight or obesity. Waist size larger than 80 cm for women and larger than 94 cm for men was present among 64,88% of respondents. More than 2/3 of respondents of both sexes said that they are physically active. Fruits and vegetables are consumed on a daily basis by 74,78% of women and 66,52% of men. Half of the 672 respondents use medication for blood pressure regulation. More than 70% of people who have completed the questionnaire was measured earlier in life elevated blood sugar. About a third of respondents have positive family anamnesis of diabetes mellitus. Easily elevated to very high risk of diabetes has more than 70% of respondents.

Conclusion: Analysis of the results confirmed high frequency of risk factors for the emergence of diabetes, for both genders. It was also observed that, for more than two-thirds of respondents, level of risk for the emergence of this disease is from slightly enhanced to a very high one. This points out the need to start with beforehand and adequate prevention as soon as possible, aiming this way to directly influence raising citizens' consciousness in order for them to embrace healthy lifestyles as the only way to preserve health and prevent illness.

## Quality of life, metabolic syndrome and depression in stroke patients

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The aim of this article is to determine differences of Quality of Life (QoL) in patients after stroke depending on the level of depression and appearance of metabolic syndrome (MS), also including some individual components of metabolic syndrome. HADS questionnaire, for depression and anxiety assessment, and WHOQOL questionnaire, for quality of life assessment, was used for questioning 202 stroke patients. Younger responders and those with higher level of education have better quality of life. Depression strongly influences quality of life. Metabolic syndrome does not disturbe QoL, as well as observed individual parameters of MS. Although there is a strong connection between QoL and MS, we found that only depression significantly affects all aspects of quality of life by corrupting them.

#### P05 050

## The incidence of urinary tract infections in patients with diabetes mellitus

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The aim: To determine how often patients with diabetes mellitus (DM) suffer from urinary tract infections (UTI).

Inroduction:UTI's are more common in diabetic patients and 6-24 times more frequently in women with diabetes and 3.4 to 17 times more common in men with diabetes than in people without diabetes

Mterials and methods: The audit covered all medical health records of patients with diabetes mellitus who in 2010. had a diagnosis of urinary tract infections. The parameters used in the audit were: age, sex, duration of diabetes mellitus, type of diabetes, urine analysis, renal ultrasound, average value of blood sugar (BS)

All data were entered into a pre-made form and processed in Excel.

Results: Of the 1832 patients in a family medicine team,120 of them has diabetes mellitus, 57 (54.3%) of these patients had one or more times a urinary infection during the year, 19 men (33.3%) and 38 women (66 , 4%). Patients older than 65 years had statistically significant (P<0.0001) urinary infection as compared to younger patients. Uncomplicated urinary tract infections were statistically significant occurred in relation to complicated urinary tract infection (P <0.001) and lower urinary tract infection compared to infection of the upper urinary tract. The duration of diabetes in 19 patients (33.3%) was less than 5 years, in 24 patients (42.1%) between 5 and 10 years and in 14 patients (24.6%) for more than 10 years. Average values of BS are less than 7 mmol / I was in only 10 patients (17.5%), and greater than 10 mmol / I in 26 patients (45, 6%). The subjects with DM and urinary tract infections have a statistically significant higher average value of BS (P = 0.0013).

Conclusion: Among patients with diabetes tend to have urinary tract infections: the elderly, women, those who have long treated diabetes, those with elevated levels of a BS. Neither the patient is hospitalized due to infection. In patients with diabetes each urinary infection should be considered as complicated because of the diabetes, which further complicates treatment and increases the risk of urinary tract infections.

#### P05.051

Ankle-brachial index in health primary assistance - In relation with erectil dysfunction

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PURPOSE: A sample of 7.394 inhabitants was enclosed in this study. The erectil dysfunction(E. D.) is a sign of vascular disease on patient with Diabetes Mellitus type 2 (D. M. 2), as well as those patient with high risk of cardiovascular disease.

DESIGN & METHODS: A transversal descriptive study was made during 12 months. Population sample of 445 patients all of them diabetics type 2, a total of 109 A. B. I was done to this patients. The A. B. I was determinate, considering pathological those values ≤ 0.9, through the Watch BP Office ABI, with the Hadeco Smartop bi-doppler ultrasound scan, using Hadeco Smart-V- Link Doppler as a software.

RESULTS: A 32% of the patients show ischemic heart disease; a 12% have cerebral vascular disease and a 13% show peripheral artheriopathy.

CONSCLUSIONS: A 40 % of the diabetics males have E. D. The results of this study shows that the E. D. should be considered an arteriosclerosis marker and could be included on the stratification algorithms of the cardiovascular risk and detection of the asymptomatic vasculopathies, being a simple method for the detection of A. B. I. in Health Primary Assistance.

#### P05.052

Potential contributing factors to disability, survival and life lost years following ischemic stroke - Challenges and opportunities: results of the Ebrictus Study

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**Background and Purpose.** To value the mortality, degree of dependence, survival, and years of life lost (YLL) after first episode of stroke.

**Methods:** cohort study with community based register. There were 553 people between 15-90 years with the first episode of ictus definitive or transitory were recruited between 01/04/2006 and 31/03/2008. The analyses were performed with the use of time-to-event methods, according to the intention-to-treat principle. Dependence deficits was scored according scale of Barthel (IB) one year after stroke; YLL (1-70 years) from the averages of the life expectancies on having been born; survival analysis for Kaplan-Meier's curves, bivariate analysis comparing the variables between patients who had dead and those hadn't, and Cox's multivariate.

**Results**: averaged 73,3 SD:11,6 years. The average time of follow-up was 29,7±13,4 months, in that 26,6 % of the patients died. The average value EB fell down >20%, especially among women. The 41,5% (IC95 30,6-52,8%) had a moderate dependence or more. The probability of global accumulated survival was 0,96 (IC95 0,94-0,97) the first month and 0,69 (IC95 0,65-0,72) fourth year. The thrombolysis showed a protective effect on mortality especially among the women. The main predictors variables were history of recurrent cardiovascular event (RR 6,7 IC95 2,2-21,7) and the aging (RR 1,08 IC95 1,01-1,2). The average of YLL was 11,5/10000/year SD7,2, higher among

**Conclusion.** There are differences on functional evolution, mortality, and potential years of life lost by genre. A new cardiovascular event is an independent predictor for a long survival.

Primary and secondary cardiovascular prevention results in patients with stroke. Relapse risk and associated survival - Ebrictus study

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Introduction. The prevalence and cardiovascular factors control (CVRF) are determining to suffer a stroke and its relapse which arise the mortality and disability. Aim: To estimate the incidence of the first episode of ictus and describe the results in primary and secondary cardiovascular prevention. Patients and Methods: Observational and prospective study of a fix cohort of 130.649 people, 15-90-year-old assigned to participants centers between 01/04/2006 and 31/03/2008. Community based register. Analyses were performed with the use of time-to-event methods, included Cox's multivariate on survival, risk of it's relapse; the cardiovascular risk factors diagnosed (FRCV) and it's relative risk (RR); cardiovascular risk (RCV). Results: 553 patients were enrolled (48,8% female), average age 73± DE11,6 years with the first episode of stroke. After the episode, the hypertension (74,9 % vs 88,7 %), atrial fibrillation (9,9 % vs 16 %) and dislipemia (37,8 % vs 49,8 %) increased significantly as well its control. The 47% (IC95% 42,8-51,2) of the cases had high risk of relapsing. In the 15,7 % of the patients happened relapse of cardiovascular event, 48,3 % of which were ictus. The main predictors variables were history of recurrent cardiovascular event (RR 6,7 IC95 2,2-21,7) and the aging (RR 1,08 IC95 1,01-1,2) with a significative survival difference between them. Conclusions: The cardiovascular secondary prevention seems to be more effective both in CVRF's detection and its control and is extremely important to get better results of survival.

#### P05 054

#### Frequency of urinary tract infections with old people

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**Introduction.** Numerous functional disorders that occur in older patients as well as other diseases and urological abnormalities contribute to the increase of urinary infections in this population.

**Goal.** The aim of the paper is to define the frequency of urinary infections in patients older than 65 years and predisposed factors for their appearance and duration.

**Method.** The study was done at Health Care Center Vracar, Belgrade, Serbia, during 2011. Study was based on systematic inspections and insights in general practice medical records in 400 patients older than 65 years.

Results. The sample of 400 questioned persons from this population showed that the frequency of urinary infection was 26%. The frequency increases with the age and it is bigger with women. About 6% of questioned persons (classification according to Starney) had first urinary infection, 44% had relapse of infection and 49% had re-infection, which is of importance from therapeutic aspect. Chronic infections of lower parts of urinary tract have been the most frequent (86%), with dominant cistitis infections (74%), more common in female patients. Chronic prostatitis infections are present in 33% of male patients. The most predisposed factors of urine infections are obstructive urino ducts (benign prostatic hyperplasia with 68%, calculosis with 18% and permanent catheter with 16% in male patients and calculosis with 23%, kidney's cysts with 12% and insufficiency of small pelvis bottom with 9% in female patients). From chronic diseases the most frequent are hypertension (44%), diabetes (24%) and anemia (7%).

**Conclusion.** Urinary infections in patients older than 65 years are wery frequent. Having in mind all said above, the most of urinary infections with older people are treated as complicated infections and preventive effects are achieved by continual observation of these patients.

#### P05.055

## Approach To Attitudes Regarding Parenthood In Relation To Occupation Groups

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**Introduction:** Biopsychosocial approach is important in family medicine practice. The aim of this study is to observe the attitudes of parents in relation to different occupation groups.

Materials and methods: In this research, prospective, observational and analytic methods were used. These groups were defined as: medical personel, technical personnel, members of the security services, educators, housewives and private sector workers. In this survey, people of child-bearing age were used. A "Survey of Attitudes to Parenthood" was completed the people selected in these groups. The survey consists of 48 sentences grouped under 8 factors and is a measure which has been tested for validity and reliability. The evaluation of the sentences in the survey was made on a 5-Point Likert-type scale. The factors measured were Family Environment (FE), Aims and Ideals (AI), Attitudes to Children (AC), Physical Competency (PC), Attitudes to Marriage (AM), Economic Condition (EC), Social Condition (SC) and Personal Skills (PS). In addition, the general average score has calculated using the total scores of the survey. The factor scores of the groups were compered using the SPSS statistics program.

**Results:** 53 men and 95 women took part in our study. In the general comparison of the 6 groups, the FE scores were found to be significant at the (p < 0.001) level, and the EC scores were significant at the (p = 0.001) level. In the bilateral comparisons: The following statistical differences in scores were calculated: between Medical personel and Members of the Security services FE ( $4.3 \pm 0.5$ ;  $3.8 \pm 0.6$ ; p = 0.006), AM ( $3.9 \pm 0.9$ ;  $33.3 \pm 0.9$ , p = 0.0199 and EC ( $3.7 \pm 0.6$ ;  $3.3 \pm 0.6$ , p = 0.028), between Medical personel and Educators FE ( $4.3 \pm 0.5$ ;  $4 \pm 0.5$ , p = 0.044), between private sector workers and housewives PC ( $4 \pm 0.8$ ;  $3.6 \pm 0.6$ , p = 0.049).

**Conclusion**: It is observed that attitudes to parenthood are affected by occupation factors. The Survey "Attitudes To Parenthood"will be useful in determining these attitudes and differences in future.

#### P05.056

Do we register adequately the precise information in a possible contact with a patient of tuberculosis?

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Aims: To know if it is made a correct data collection in primary health care , when we have a possible contact with a patient with tuberculosis

Material and methods: Multicentral descriptive retrospective study of patients attending at three centers of primary care in the period between 2000-2010 , and that came for a possible contact with tuberculosis. 558 patients were included. We value the quality of the record of the information in the clinical history. SPSS statistical analysis

Results: We included 558 patients, 108 of them in pediatric age (19.4%). Questioned the existence of contact in 90.7%, but did not register the domain in which this contact occurs in 40.3% We do not ask the duration of the contact in 49,8 % of cases. It was interrogated on the existence of clinic of tuberculosis in all the patients. Of the tuberculin test that were realized was not recorded the exact size in 189 cases (34.1%). No records if asked by the BCG vaccination in 51.1% of cases, especially in adults (> 20 years) in which the percentage was 67.3% (p <0.01). In subjects who had a positive tuberculin test, lack the vaccination record in 66.7% versus 42.8% of negative tuberculin test (p <0.01).

Conclusion: We must strive to better record the data related to tuberculosis contacts, especially contact time and the existence of

prior vaccination, especially in adults and for his transcendency, in those with positive tuberculin test. We should always check the exact size of tuberculin skin test and not just to record positive or negative. It would be advisable to establish a protocol in our health system to assist in recording data.

#### P05.057

## Description of patients who come to our health centers for tuberculosis contact

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Aims: To describe the characteristics of patients saw on primary care with questions about a possible tuberculosis contact Material and methods: Descriptive retrospective study of the patients attended in three centers of primary care in the period between 2000-2010, and that came for a possible contact with tuberculosis. 558 patients were included. The analyzed variables

include age, sex, type of contact, duration, accomplishment of tuberculin test and attitude of primary care physician. Statistical analysis programmes SPSS.

Results: We obtained a sample of 558 subjects, 57.7% women, 108 of them in pediatric age and 450 over 14 years (mean 37  $\pm$  14.78 years) without risk factors 532 (95.3%). Related contact with a tuberculosis patient with 392 patients (70.3%), almost all come with no indication of other physicians (91.8%). In most cases the contact was a relative (31.5%) followed by work or school. There are only a contact over 6 hours in 20.5%. Tuberculin test was realized in 518 cases (although there were only 392 contacts), resulting in 207 patients positive (37.1%). 93.4% were asymptomatic. There were 114 patients (20.4%) who wanted tuberculin test without having had direct contact with tuberculosis patients. Chest radiography request 269 (48.8% of those attending). Specialist is derived 23 patients and 28 patients had BCG vaccine

Conclusion: Most patients come to our health centers, of a spontaneous way after a possible tuberculosis contact, though in a great percentage of cases the above mentioned contact does not exist or this is not intimate enough (> 6 hours), and a fifth part of the patients, comes because they want to make the test, even in the absence contact. The physician we realize too many "tests" (tuberculin test and chest radiograph) for patients not indicated (no intimate contact and / or asymptomatic).

#### P05.058

#### Characteristics of smokers, patients in family medicine

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Goal: To investigate smoking habit and some characteristics of family medicine patients who smoke. Subjects and method: 135 patients aged 24-79 (73F, 62M). Research was conducted in two family medicine clinics in Sarajevo city, B&H. Fagerstrom test of nicotine dependence was used as well as purposely-created questionnaire containing following variables: age, sex, educational level, length of smoking experience, daily cigarette consumption, time to first cigarette after waking, type of cigarettes depending on nicotine level, earlier smoking cessations, desire to quit smoking and opinion on health improvement if they quit smoking. Results: Subjects' average age is 53,3y (SD14,35y). Most of them, 83(61,4%) have a High School Diploma. Average smoking experience is 28,7y, average daily cigarette consumption is 21,4. Time to first cigarette after waking: <5min in 27 subjects (20%), 5-30min in 79(58,5%), 31-60min in 26(19,2%) and >60 min in only 3 subjects (2,2%). Nicotine level: full flavor cigarettes are smoked by 82 subjects (60,7%), lights by 43(31,8%) and ultra lights by 10 subjects (7,4%). According to Fagerstrom test 42 subjects (31,1%)

have low nicotine dependence, 67(49,6%) moderate and 26 subjects (19,2%) have high nicotine dependence. As much as 81 subjects (60%) had previously quit smoking. 89 subjects (65,9%) want to quit, 43(31,8%) don't want to and 3 subjects (2,2%) don't know if they want to quit smoking. 98 subjects (72,5%) think that their health would improve if they quit smoking, 25 (18,5%) don't think it would, 4(2,9%) think it might, while 9(6,6) don't know if it would. Conclusion: Our subjects' average consumption is more than one package of cigarettes a day (21,4) and most of them, 58,5% take their first cigarette 5-30 min after waking. Nevertheless, indications that most of the subjects, 60,7% smoke full flavor cigarettes, that 49,6% have moderate nicotine dependence, that 65,9% want to quit smoking and that 72,5% of subjects think their health would improve if they quit smoking, are used in our work on smoking cessation with patients and have already given initial results.

#### P05 059

## The frequency and quality of management of patients with COPD in family medicine team

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The aim: To investigate the frequency and quality of management of patients with COPD in the practice of family medicine physicians.

Introduction: It is estimated that until 2020th, COPD will be the third leading cause of mortality. The family medicine teams should be evaluates regularly and continuously the patient's status, including spirometry, other tests, as well as ongoing monitoring of associated diseases.

Materials and methods: The study was conducted in the family medicine team in the period from January to December 2010. Of the total 1684 users of health services, 40 of them have a diagnosis of COPD. The data used from medical- health records were: age, sex, duration of COPD, BMI, occupation, smoking status, influenza vaccination, functional assessment of lung function parameters (FEV1), COPD therapy treatment of disease and associated diseases. Based on data collected, we made the assessment of the quality management of patients with COPD according to the standards, criteria and indicators for improving the quality of FMT (standard 5.6-COPD). All data were entered into a pre-made form and processed in Excel.

Results: In the study participated 36 subjects with COPD, mean age 67.7 years (youngest 19 and oldest 81 years), 21 man and 15 women. The disease duration longer than 10 years were in 24 subjects (67%). Smokers (42%) dominated in the examined group. The largest number of subjects suffering from moderate form of COPD. All subjects are advised to get flu vaccine. With regard to comorbidity, testing has shown that COPD is closely associated with many chronic diseases (ischemic heart disease, hypertension, Dislipoproteinemia, osteoporosis and depression).

Most the subjects have a BMI greater than 21kg/m2 which proved to be a useful parameter of significant prognostic factor in the evaluation of patients with COPD.

Conclusion: The results of this study, compared with other studies could be characterized as satisfactory, but given that our survey dominated subjects with moderate COPD (88%) we can not be satisfied, and we seek the causes of this situation and work on their elimination.

Keywords: COPD, quality management, the family medicine.

## Risk assessment of micro-macroalbuminuria measuring levels of glycolysated hemoglobin in blood samples

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BACKGROUND: The goal is to determine the value of glycolysated hemoglobin that leads to formation of micro-macroalbuminuria in patients with diabetes mellitus type 2. Microalbuminuria is an early sign of diabetic nephropathy and premature cardiovascular events. The risk of microalbuminuria in patients with type 2 diabetes mellitus is thought to depend on the degree of hyperglycemia, and the relationship between the level of hyperglycemia and urinary albumin excretion is not defined.

METHODS: We have measured the urine albumin excretion in three random urine samples, at least once a month, in 182 patients with diabetes mellitus type 2, in period from 1-Feb-2009 to 1-Feb-2011.

Microalbuminuria was detected using albumin / creatinine ratio in early morning urine.

Microalbuminuria was diagnosed if the albumin / creatinine ratio was 2.5-30mg / mmol in men and 3.5-30mg / mmol in women in the two occurrences in the last three months. Macro-albuminuria is considered if the albumin / creatinine ratio 30-300 mg / mmol for men and for women. Glycolysated hemoglobin was measured three years ago as an index of hyperglycemia.

RESULTS: The average age of patients was  $66 \pm 10$  years with a minimum of 44 and maximum of 86 years, 33% men, 67% women. Macro-albuminuria prevailed in 27.4 % (n=50) in patients with type 2 diabetes. 78% of patients indicate increased value of HbA1c (> 6.5%). The average value of HbA1c in subjects that developed micro-makroalbuminuria was (n = 50) 8.94  $\pm$  2.51%, and in the group (n=132) without micro-macroalbuminuria was 7.97  $\pm$  2.02% which is statistically significant (p = 0.037).

CONCLUSIONS: Two key parameters for late diabetic complications were glycolysated hemoglobin and micro-albuminuria. The risk for micro-macroalbuminuria is increased with values of glycolysated hemoglobin more than 9.84%. Incidence and severity of diabetic complications dramatically decreases if diabetic control is improved.

Keywords: Glycosylated hemoglobin, micro-macroalbuminuria, type 2 diabetes mellitus

## P05.061

### Cardiovascular risk at the prediabetic patients

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Introduction: Prediabetes is defined as the "grey area" between normal blood sugar and his diabetis level. Impaired fasting glycemia (IFG) refers to a condition in which the fasting blood glucose is elevated above what is considered normal levels but not high enough to be classified as diabetes. It's associated with insulin resistence and increase risk of cardiovascular pathology. So, the risk for the great cardiovascular event(myocardial infarction, stroke,TIA)has been increased above 50% for the period of 7 years from the moment of detection prediabetic patient. WHO criteria for prediabetes: fasting plasma glucose level from 6.1 to 6.9 mmol/l.

Method: We have done a retrospectiv analysis of 153 charts of prediabetic patients to see how many of them have developed some of the great cardiovascular event (myicardial infarction, stroke, TIA)for a period of 7 years from the moment of detection prediabetes.

Results: Analysis of our 153 charts of prediabetic patients have shwed us that 87 patients have diveloped MI, stroke or TIA during of 7 years from the begining of the diesase (56.8%),and 16 of them were lettal (18.4%). Primary, 36 of them had myocardial infarcion, and 51 had stoke or TIA.

Conclusion: The number of great cardiovascular comlications in this patients has showen as extemly high, so the main goal in family practice is early detection of glucose intolerance and prediabetes, and early prevention. The most effective tool should be a life style intervention (low fat, low sugar and low-salt diet),

physical exercise (45 min. per day) and reducing body weight (minnimum 5-10%).

#### P05.062

Usefulness of the Alcohol Use Disorders Identification Test Alcohol Consumption Questions(AUDIT-C) in Screening for At-risk drinking and Alcohol Use Disorders among College Students

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Back ground: This study shows the usefulness of at-risk drinking and alcohol use disorders identification of AUDIT-C (Alcohol Use Disorders Identification Test Alcohol Consumption Questions) among Korean university students visiting the outpatient clinic for primary care.

Methods: This study was based on 378 university students (198 male, 189 female) visiting Chungnam National University health clinic from March to May, 2011.

At-risk drinking and alcohol use disorders identification were evaluated by diagnostic interview, and we followed the standards of National Institute Alcohol Abuse and Alcoholism about definition of at-risk drinking, and used diagnostic criteria of DSM-IV about alcohol use disorders.

We carried out three surveys such as AUDIT, AUDIT-C and CAGE except for diagnostic interview and then compared sensitivity, specificity, and AUROC (Area Under Receiver Operating Characteristic curve) of questionnaires about the interview results. Results: AUROC (95% CI) about at-risk drinking identification of AUDIT-C is 0.927 in the male students and 0.921 in the female students, and AUROC of AUDIT is 0.906 in the males and 0.898 in the females. AUROC of CAGE is 0.643 in the males and 0.657 in the females. The good score for at-risk drinking identification of AUDIT-C is more than 6 points in the males and more than 4 points in the females.

AUROC (95% CI) about alcohol use disorders identification of AUDIT-C is 0.902 in the male students and 0.939 in the female students. AUDIT is 0.936 in the males and 0.960 in the females. CAGE is 0.712 in the males and 0.844 in the females. The good score for alcohol use disorders identification of AUDIT-C is more than 7 points in the males and more than 6 points in the females. *Discussion*: AUDIT-C is considered to be a useful identification tool for at-risk drinking as well as alcohol use disorders identification.

#### P05.063

Epidemiology and screening for abdominal aortic aneurysm in a municipality family health care system

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Aims and background: Incidence of abdominal aortic aneurysm (AAA) in major population has been increased in the last two decades. Due to aging, incidence and prevalence of AAA increasing constantly, primary healthcare system should recognize the patients with increased risk for AAA development, and should provide optimal screening and initial diagnosis. Doppler-sonographic (DS) examination is a useful non-invasive diagnostic tool for AAA in daily practice in major vascular centers. However, in family medical practice, the guidelines for DS screening for AAA remain unclear. The aim of our study was to analyze the results of DS screening for AAA in a daily practice of a family medicine physician.

Material and methods: The study was performed in a municipality primary health care system from January 1, 2010, through November 30, 2011. 118 patients (aged 50+ years) underwent DS examination of abdominal aorta. The DS examination followed abdominal palpation and groin, popliteal and pedal pulsations verification, and aortic and groin auscultation. Risk factors for atherosclerosis were recorded. DS examination was performed

after all the patients were classified as being 50-60 years old (group A), 60-70 years old (Group B), and  $\geq$  70 years old (Group C). The patients with AAA of 5 cm in diameter were immediately referred to a vascular surgeon.

Results: 76 male and  $4\bar{2}$  female pts (average age 68.5 years) underwent DS aortic measurement. There were 11 pts/2 AAA in Group A , 44/6 AAA in group B and 63/18 AAA in group C. There were 18 men with AAA, and 8 women.

Conclusion: In a country like Serbia, with high incidence of atherosclerosis, DS screening for AAA is justified, for it might assist a family practitioner to diagnose AAA in time, and to make high quality decision about medical treatment and/or referral of such patients to a vascular surgeon.

## Flushing response in the relationship between alcohol consumption and cardiovascular disease risk

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Background: This study examines the relationship between cardiovascular disease risk and facial flushing of South Korean men after they drink. Methods: The sample of this is 1817 South Korean men, who are older than 30 years and have taken regular checkup at the health promotion center of Chungnam National University Hospital from 2007 to 2009. 283 are non-drinkers, 662 are flushing group, and 872 are non-flushing group among the sample group. The pattern of alcohol consumption on a weekly base and facial flushing are asked by a questionnaire. The quantity of drink is measured according to the guideline of National Institute on Alcohol Abuse and Alcoholisms, which determines 14g as a standard unit. Cardiovascular disease risk is assessed based on the research result of the Framingham heart study in 2008. Based on the data of the non-drinkers' group, confounding factors-BMI, diastolic blood pressure, LDL-cholesterol, triglycerides, the pattern of exercise are adjusted; and after that, this study uses logistic regression to analyze cardiovascular disease risk of a flushing and a non-flushing group in ten years, related to the pattern of alcohol consumption on a weekly basis. Results: The average degree of cardiovascular disease risk is significantly low(10.1±4.4) in nonflushing group compared to nondrinkers. The frequency of cardiovascular disease risk is higher in the flushing group compared to the non-flushing group regardless of the quantity of alcohol consumption. This study also finds that cardiovascular disease risk is significantly decreased with a medium degree, only when a person is in non-flushing group and also in a group who drink less than 4 standard units per a week. Conclusion: This research finds out that cardiovascular disease risk is low in ten years when a sample person is in non-flushing group and drinks less than 4 standard units per a week. Thus, facial-flushing factor should be considered importantly as well as the volume of alcohol consumption to preserve good health.

### P05.065

## Risk of Hepatitis B in High School Students in Eastern region of Turkey

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#### Aim

The hepatitis B is considered a very dangerous disease and can be converted into cancer. Therefore it is necessary to understand how it spread and try to prevent the risky behavior especially in young population. We aimed in this study to assess risky behavior among young high school pupils for developing hepatitis B infection.

Material and method:

A cross sectional survey has been done during February and March 2007 at the 29 high schools in Erzurum city center, Turkey.

At the time of the study, 17598 pupils were contacted and data was collected with a 10-item questionnaire that developed based on literature and by the researchers. The sample was selected randomly, and weighting was according to the total number of students in each school. Participation was on a voluntary basis, and data collection was conducted on an anonymous manner. Out of total 3055 students, 2976 (97.41%) accepted to participate, however 2930 questionnaires were found valid and complete. Results:

Results depicted that there is a significant differences (p<0.001) among all questions related to their risky behavior and other means of transfer of Hepatitis B infection. When we compared the previous history of hepatitis B and risky behavior among pupils then we found that, 39.1% had surgery and 28.1% didn't have it, 33.8% uses utilized razor blades or nail clippers or toothbrush and 28.1% didn't utilize it, 50% had blood transfusion and 27.5% couldn't transfuse, 41.9% were using injections and 26.5% were not them, 33.9% had traffic accidents or other injuries and 26.4% didn't have any injury, 36.3% had family history and 24.2% didn't have, 41.1% had tattoo marks and 23.3% didn't have it, and 25.4% of females and 32.9% of males were reported about hepatitis B. Conclusion:

Erzurum has some high risk behavior in young population. Since surgery and blood transfusions found the main root of transfer of viral hepatitis B so it needs some urgent measures to find the reasons and make some solution for their prevention. Furthermore it is suggested that family physicians should act immediately and develop some plans for health education especially for young population.

#### P05.066

### Cultural competencies of primary healthcare professionals

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#### Introduction

The approach to health problems of immigrants implies a challenge for the health system of Catalonia (Spanish autonomous community of 7.5 million inhabitants) and for their professionals, who must develop their own competencies to offer an adequate care to those patients.

#### Objective

To outline a first approach to the competence level on transcultural care that primary healthcare professionals in Catalonia may possess.

## Methods

Observational, transversal and descriptive survey by means of an autoadministered questionnaire accessible online. The questionnaire has been adapted, from the *Clinical Cultural Competency Questionnaire*, *Like RC*, *2004*, to the environment where these professionals work. It explores: knowledge, skills, encounters/situations, attitudes and education/training.

The questionnaire was answered by 388 professionals with a mean age of 44.7 years, being the 75.3% women. The 71.9% are medical doctors and the 24.5% nurses. They have been exercising their profession during a mean of 18.3 years; the 60.3% have a stable labour contract. These professionals take care of some 20 immigrants coming from Africa, Asia or South America every week. For a 57.0% of professionals the number of immigrants they attend represents between the 5% and the 30% of attended patients, for the 18.1% of them represents more than a 30% and for the 24.9% less than a 5%.

The Knowledge they have on immigrants' characteristics and on health and social politics that affect immigrants obtain, in a 0 to 5 scale, a mean score between 2.5 and 3. Related to Skills they possess to manage social and cultural aspects, they also obtain mean rates between 2.5 and 3. When asked on the importance of social and cultural aspects of their professional activity, the mean scores are over 4. An 81.1% consider quite or very important to receive formal education on cultural diversity.

#### Conclusions

They show an intermediate level of knowledge and skills to take care of immigrant patients and express a high demand of formative needs, which are not fulfilled. For most explored circumstances, professionals don't display much discomfort on attending foreign patients, even if they recognise a great educational lack on the matter.

#### P05.067

#### Bacteria responsible and antibiotic sensitivities for infections in pediatric outpatient urine

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Objective: To determine the most frequent microorganisms in urine and its sensitivity in childhood, as a guide for recommend a priori empirical antibiotic for clinical suspected urinary infection.

#### Material and methods:

Design: Descriptive longitudinal. Location: Urban Health Center.

Subjects: Pediatric patients (under 14 years) with a positive in

urine culture

Methods: We evaluated the positive urine cultures in patients under 14 years, which requested by our health center from July 2009 to June 2011. We measured age, sex, isolated microorganism and sensitivity (≥ 90%) to commonly used antibiotics.

Results: There were 25 positive urine cultures in this period of time, of which 72% were isolated from females. The mean age was 5.40 years (standard deviation 4.34, median 3, mode 3). Escherichia coli was the most common organism in 44% (11 cases, 9 female, 2 male), followed by Enterococcus Faecalis with 20% (5 cases, 2 female, 3 male) and Proteus mirabilis with 16% (4 cases, 3 female, 1 male). Escherichia Coli has a sensitivity of 100% to Amoxicillin/Clavulanate, Fosfomycin, Cefuroxime, Ciprofloxacin, Cefoxitima, Gentamicin. The Enteroccocus Faecalis is sensitive to Amoxicillin/Clavulanate, Fosfomycin, Levofloxacin, and Penicillin. Proteus Mirabilis is sensitive to Amoxicillin/Clavulanate, Fosfomycin, Cefuroxime Ciprofloxacin.

Conclusions: E. coli is the most common organism with a wide possibility of antibiotic therapy. We recommend the use of Amoxicillin/Clavulanate, Cefuroxime and Fosfomycin as first choice. Amoxicillin/Clavulanate is the antibiotic most effective in our environment.

#### P05.068

### The prevalence of burnout syndrome in the family medicine physicians in the Republic of Srpska

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Introduction: The burnout syndrome is defined as chronic work stress that includes three dimensions: the sense of the emotional exhaustion, the negative approach to providing services (depersonalization) and the sense of reduced accomplishment. Medicine is one of the professions at the greatest risk of suffering from burnout syndrome.

Objective: To assess the presence of stress and burnout syndrome regarding all three components (the emotional exhaustion, the depersonalization and the personal accomplishment) in the family medicine physicians in the Republic

Methods: The study was carried out on the basis of a questionnaire survey among 239 family medicine physicians in seven Primary Health Care Centers in the Republic of Srpska (192 practicing physicians in family medicine and 47 family medicine

residents) from February 1th to April 30th 2010. In the institutions in which the study was conducted questionnaire was offered to all the employed physicians who fulfilled it: the questionnaire for selfassessment of the stress level (Girdin, Everly, Dusek, 1996) and MBI-HSS- Maslach Burnout Inventory Human Services Survey (Maslach et al., 1996) that are amended with data regarding age, sex, years of service, way of work and educational and vocational

Results: The prevalence of the physicians with high level of stress was 75.3% (79.2% of the practicing physicians in family medicine and 59.6% of the family medicine residents). The high level of the emotional exhaustion was present among 46.0% examinees (51.6% of the practicing physicians in family medicine and 25.6% of the family medicine residents); the high degree of depersonalization was present among 21.3% of the surveyed physicians (20.3% of practicing physicians in family medicine and 25.6% of family medicine residents); the low level of personal accomplishment was present among 43.1% of the surveyed physicians (43.7% of the practicing physicians in family medicine and 42.5% of the family medicine residents).

Conclusion/Discussion: Family medicine physicians in the Republic of Srpska demonstrate high level of stress and high burnout syndrome regarding all three subscales. Acquired results indicate a need to undertake corrective measures for prevention of stress and the burnout syndrome.

#### P05.069

#### Improvement of Primary Care Schedule Management Using Information and Communication Technologies (ICTs)

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#### Background

New information and communication technologies (ICTs) such as email and text messaging have been shown to be useful in some aspects of primary care service delivery. Improvement of outpatient schedule management is essential for reduction of waiting lists and ICTs have a crucial role in these matters. Our primary care center at the metropolitan area of Barcelona, has implemented these technologies during the last year. Several outcomes have been evaluated. For example, non-face-to-face consultation has reduced 17% conventional visits (from 300,443 to 247,444) and frequentation ratios from 6.9 to 1.3. Predictable consultations, related to getting health checking results, represent more than 21 % of consultations. Thus, we sought to reduce this kind of conventional and fruitless appointments by using ICTs.

The assessment of a non-face-to-face consultation program on schedule management using ICTs.

### Methods

The information was massively delivered by ICTs under acceptance and in a confidential way. A specific soft-ware made control of incidences and mistake correction on feed-back bases. In addition, a comprehensive training program addressed to health professionals was carried out in different ways (educational sessions, training workshops, etc.). The program was firstly evaluated on blood test results and then used to inform of gynecological cytology studies.

#### Results

Our center serves 74,783 women. During a one-year-period, 4,990 gynecological cytology studies were carried out. Through ICTs we sent 1,126 (23 %) normal result communications: 543 (48% emails) and 583 (52%) messages. Consequently, 1,126 appointments were saved, corresponding to 225 midwife work hours (45 midwife work days). The indirect profit of this saving was equivalent to 3,100 E. The direct and indirect cost of these actions was estimated in 110 E and 875 E for messaging and upkeep, respectively.

#### Conclusions

Information communication technologies are likely to play a central role within general practice. Our experience shows how the use of ICTs reduces predictable consultations, waiting lists and cost/profit ratios. We are currently applying ICTs to deliver a wider result assortment including blood tests, electrocardiogram, unmidriatic retinopathy screenings, spirometric studies, etc.

#### P05.070

Prevalence of the metabolic syndrome based in the new International Diabetes Federation definition among population of Lleida (Spain)

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#### Objective:

To compare the prevalence of the Metabolic Syndrome (MS) as defined by the International Diabetes Federation (MS-IDF), versus the revised criteria of the IDF (IDF-R), among population of Lleida (Spain).

Research design and methods:

We performed a cross-sectional study of census subjects aged ≥18 years randomly selected. MS-IDF criteria are (≥ 2 criteria and waist circumference [WC] being an obligatory component): WC ethnic specific, for Europids ≥94 cm in men and ≥80 cm in women, serum triglycerides ≥150 mg/dL or drug treatment, HDL-C <40 mg/dL in males and <50 mg/dL in females or drug treatment, blood pressure ≥130/85 mmHg or drug treatment and fasting glucose ≥100 mg/dL or diabetes mellitus. According to IDF-R, MS criteria include 3 of previous abnormal findings, but abdominal obesity is not a prerequisite. Moreover, there are 2 levels of abdominal obesity in Europids: an increased risk (cut point like IDF) and still higher risk (WC ≥102 cm in men and ≥88 cm in women). Results:

A total of 284 subjects were included, 58.36% were women and 41.64% were men, mean age range 51.1 years (95% Confidence Interval [CI] 47.5-54.7) for men and 50.6 years (95% CI 47.1-54.1) for women. There were 10.34% of immigrants, most of them from Central and South America. The prevalence of the MS-IDF was 34% (95% CI 28.6-39.5), for IDF-R increased risk was 36.27% (95% CI 30.68-41.86) and for IDF-R still higher risk was 31.34% (95% CI 25.94-36.73). No statistical differences were observed for gender-adjusted prevalence.

Conclusions:

No statistically significant differences in the prevalence of MS were observed between IDF and IDF-R.

These findings may have significant implications in the fact that abdominal obesity is highly correlated with the other four components of the syndrome, but is not the main.

#### P05.071

#### Assessment of cardiovascular risk in family practice

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Introduction: Cardiovascular diseases (CVD) are the main cause of disability and premature death all around the world. In the Federation of Bosnia and Herzegovina CVD consist 53,9% of a total mortality in the year 2008. The evaluation of a ten year absolute risk of a fatal CV event is made with the use of the table Systematic Coronary Risk Evaluation- SCORE, it's used for a determination of the CV risk in a primary prevention.

Aim: To evaluate the absolute cardiovascular risk (CVR)of the fatal cardiovascular event by the patients age 40 till 50 and also to evaluate the absolute cardiovascular risk that would be expected at their age of 60.

Method: The research is designed as a cross sectional study. The study included 51 patients,age 40 till 50, who haven't been

diagnosed with cardiovascular disease or who weren't suffering from diabetes. The method of random selection was used. The SCORE table for the high- risk countries was used for the evaluation.

Result: The average value of the evaluated absolute CV risk is 1,47% and the absolute CV risk  $\geq 5\%$  have 14% of the patients. The average value of the absolute CV risk by the patients, that was projected at the age of 60, is 5,86%, or the absolute CV risk has increased by 4,39%. Of that 26 (50,9%) of the patients had the CV risk <5%, 15 (29,4%) of the patients had the CV risk  $\geq 5\%$  while 10 (19,6%) had the CV risk  $\geq 10\%$ . Total 25 (49,0%) of the patients had the absolute CV risk almost  $\geq 5\%$ , which would be expected at their age of 60.

Conclusion: The result of the research indicates the importance of the early evaluation of the CV risk in a Family practice and also the necessity of timely and intensive preventive treatment

Keywords: cardiovascular diseases, cardiovascular risk, prevention

#### P05.072

What brings more the revised criteria of the International Diabetes Federation in our population?

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#### Objective:

To compare the prevalence of the Metabolic Syndrome (MS) as defined by the International Diabetes Federation (MS-IDF), versus the revised criteria of the IDF (IDF-R), among population of Lleida (Spain).

Research design and methods:

We performed a cross-sectional study of census subjects aged ≥18 years randomly selected. MS-IDF criteria are (≥ 2 criteria and waist circumference [WC] being an obligatory component): WC ethnic specific, for Europids ≥94 cm in men and ≥80 cm in women, serum triglycerides ≥150 mg/dL or drug treatment, HDL-C <40 mg/dL in males and <50 mg/dL in females or drug treatment, blood pressure ≥130/85 mmHg or drug treatment and fasting glucose ≥100 mg/dL or diabetes mellitus. According to IDF-R, MS criteria include 3 of previous abnormal findings, but abdominal obesity is not a prerequisite. Moreover, there are 2 levels of abdominal obesity in Europids: an increased risk (cut point like IDF) and still higher risk (WC ≥102 cm in men and ≥88 cm in women).

A total of 284 subjects were included, 58.36% were women and 41.64% were men, mean age range 51.1 years (95% Confidence Interval [CI] 47.5-54.7) for men and 50.6 years (95% CI 47.1-54.1) for women. There were 10.34% of immigrants, most of them from Central and South America. The prevalence of the MS-IDF was 34% (95% CI 28.6-39.5), for IDF-R increased risk was 36.27% (95% CI 30.68-41.86) and for IDF-R still higher risk was 31.34% (95% CI 25.94-36.73). No statistical differences were observed for gender-adjusted prevalence.

Conclusions:

No statistically significant differences in the prevalence of MS were observed between IDF and IDF-R.

These findings may have significant implications in the fact that abdominal obesity is highly correlated with the other four components of the syndrome, but it is not the main.

#### P05.073

### Prevalence of glaucoma in family medicine practice

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Introduction: Glaucoma is an eye disease characterized by elevated intraocular pressure, optic nerve papilla excavation and

appearance of paracentral scotoma in the visual field. Glaucoma causes blindness and is the second leading cause of blindness.

Objectve: was to determine prevalence of specific forms of glaucoma among patients in family medicine practice.

Methods: The study included 2036 medical records from which data were collected: age, sex, duration of illness, presence of glaucoma in one or both eyes, treatment, comorbidities, use of contraindicated medication and family history. The obtained data were statistically analyzed.

Results: From 2036 medical records 45 patients had glaucoma. 24 patients had primary glaucoma, 21 patients with simplex form, 3 patients with angular glaucoma and 6 patients had secondary glaucoma. 11 patients had ocular hypertension and 2 patients with glaucoma sine tensio. There was not evidence about form of glaucoma for 2 patients. The prevalence of glaucoma in family medicine team was 2.2% what corresponds to the prevalence of glaucoma in other studies (1-5%). The most common form was primary glaucoma simplex and prevalence was higher in women. The average age of patients was 65.7 years and average age at diagnosis of glaucoma was 60.2 years. The average duration of illness was 6.3 years. For 11 patients with glaucoma, contraindicated drugs were prescribed during chronic therapy: in 3 cases the nitrates and in 8 cases the benzodiazepines. 2 patients reported positive family history of glaucoma.

Conclusion: Glaucoma is a disease that can be diagnosed in time by successful screening. Family doctors need education about identifying high-risk groups and risk-factors, symptoms, proper use of medication and regular ophthalmological consultations.

## P05.074 Breastfeeding, prevalence and determinants

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Context: Breastfeeding is a millenary practice with nutritional, immunologic, cognitive, economic and social benefits. World Health Organization recommends exclusive breastfeeding during the first semester of life. After that, it should be given complementary food, maintaining breastfeeding, at least, until the baby completes two years of life.

Objective: Access the prevalence of breastfeeding in a sample of mothers from a General Practitioner Centre. Alert for the benefits of discussing breastfeeding issues in maternal health appointments.

Methods: Descriptive, retrospective and transversal study, including a population of 125 mothers who delivered from the first of October of 2008 till the first of October of 2009,under medical supervision on a general practitioner unit. Studied variables as age, parity, maternal education, delivery related factors, level of information and counseling related to breastfeeding, health professionals practices, breastfeeding prevalence and duration and causes of abandon, based on the use of questionnaires. Statistic analysis made in PASW Statistics 18.

Results: The study included a sample of 60 mothers, presenting an average age of 32,97 years. In 48,33% delivery occurred by caesarian. 43% of the newborns were breastfed for the first time at the first hour of life. 63,33% of the mothers considered themselves "very well informed" about the benefits of breastfeeding. The medium of exclusive breastfeeding was 4,18 months. The prevalence of breastfeeding on discharge data was 96,67%, reducing to 85% at the end of the first month, 61,66% after six months and 38,33% after the first year of life. The most frequent reasons pointed for breastfeeding ending were subjective reasons, based on maternal perception.

Conclusions: The sample presented a high prevalence of breastfeeding at discharge data, a higher prevalence of breastfeeding after 6 months compared to the values presented in previous studies and a percentage of mothers breastfeeding for a period equal or higher than 3 months superior to the 50%, achieving the National Health Plan's goals. However, the medium duration of breastfeeding was inferior to the 6 months recommended by the World Health Organization.

#### P05.076

#### **Diabetes and Depression in Family Medicine**

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Introduction: Depression is often co-morbid for other somatic diseases, including diabetes, complicating their advance and results.

Aim: Demonstrating validity of depression screening in DM patients.

Participants and methods: Research was conducted from April until September 2011 at one family medicine clinic in Sarajevo city. Participants were diabetics from the four FM teams that were not diagnosed with depression - 521 of them .There were 325 women, 246 (75.65%) of them in peroral therapy and 79 (24.34%) in insulin therapy. There were 196 men, 93 (47.44%) of them in peroral therapy and 103 (52.55%) in insulin therapy. All participants took the Beck Depression Test (BDT) - the standard test for identifying depression symptoms

Results: 92 participants (17.6%) obtained test scores within the scope of BDT first degree scale - minimal depression symptoms. 65(12.47%) patients (M 2.11% W 10.36%) in oral therapy and 27(5.18%) patients (M 38.38% W 1.34%) in insulin therapy belong to the first degree group. 429 participants (82.4%) had scores stretching between degree two - mild depression - and degree five - severe depression. Degree two - 139 participants (26%) -M12,28% W14,39%; degree three - 173 participants (33%) - M 10.17% W 23.03%; degree four - 96 participants (18.5%) - M 8.63% W 9.78%; degree five - 18 participants (3.5%) - M0% % W3,45%. According to therapy type, participants in peroral therapy demonstrate symptoms ranging from mild depression (degree two) - M48% W28% - to mild and moderate depression (degree three) -M25% W37%. In insulin therapy participants, depression symptoms ranges are as follows: mild to moderate depression (degree three) - M 30% W35%; moderate to severe depression (degree four) - M31% W37%; severe depression (degree five) M0% W22%.

Conclusion: Depression and diabetes mellitus co-morbidity is present in 82.4% of our diabetes patients. However, depression was not recognized before researching. Depression symptoms are most severe in female patients and insulin therapy patients. These facts testify the validity of depression screening in all diabetes mellitus patients.

#### P05.077

## Various forms of treatment of type 2 diabetes mellitus and their impact on glycoregulation

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Background and aim: The good glycoregulation of patients with diabetes type 2, prevents or stops the progression of chronic complications and allows the quality of life. The aim of this study was to compare the degree of glycemic control, keep an eye on glycated hemoglobin HbA1c on patients on a different regimen of tretmant.

Methods: The study included 86 patients, average age 58.4 + - 4.5 years, average BMI 31.1 + -2.8 kg/m2. Following up on patients who are treated for diabetes mellitus type 2, an average of 5 + -1.3 years, and that the previous 6 months had a different therapeutic approach, and were divided into 3 groups. The first group of 30 patients, 16 women and 14 men, beside diet and physical activity also received oral therapy (metformin maximum dose and preparations of sulfonylurea maximum dose). The second group of 29 patients, 15 women and 14 men, beside diet, physical activity, oral therapy (metformin maximum dose and maximum dose of sulfonylurea) received an evening dose of basal insulin. The third group of 27 patients, 14 women and 13 men, beside diet, physical activity, oral therapy (metformin maximum dose) is treated with regime of biphasic mixtures insulin divided into two daily doses.

Results: The first group of patients had an average HbA1c 7.92%, for women 8.02% and men 7.82%. The second group had an average HbA1c 7.18%, that women 7.23% and men 7.13%. The third group had an average HbA1c 7.19%, women 7.12% and men

7.26%. No significant difference is found in the degree of glycemic control between genders in the same mode of therapy. There was a significant difference between the degree of glycemic control apropos the values of HbA1c in first group compared to the second and third group, but not between the second and third group. Conclusion: Better glycoregulation and much better value HbA1c achieved in the group of patients who had previously been introduced in the treatment of insulin.

#### P05.078

### Fear of Women as early detection of gender violence

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#### **OBJECTIVES:**

Assess whether the questions (5.7) of the Women Abuse Screening Test Toll (WAST) to study the fear of women to their partner and a history of emotional abuse are more valid indicators than the WAST reduced by any of its options .

#### METHODOLOGY:

Cross-sectional observational study conducted in the first fortnight in February 2011 by 11 physicians and 13 nurse practitioners. Population:

Women of 15 - 64 years who attended for any reason to query. Sample size = 254 population of 8395 women (ages of range), alpha = 0.05, accuracy + / - 0.05 units with a bilateral contrast to an estimated ratio of 0.15, assuming restocking fee of 0.25. **Exclusions:** 

Be accompanied, not having a current partner, not understanding the language, can not read / write, severe mental disabilities.

Self production survey was offered, anonymously, without witnesses, consisting of: demographic questionnaire and habits, followed by WAST for Spanish-speaking population. The surveys were collected in the consultations themselves.

We define Abuse if full WAST greater than 10.

We differentiate between full WAST, WAST reduced to questions 1 and, and its options 1,2 or 3.

#### **RESULTS:**

303 surveys collected valid 295. In 34 cases of psychological violence were observed; in 9 cases of psychological + physical violence; 1 case mental, physical and sexual.

Violence tests	WAST Full	WAST 1,2 opc1	WAST 5	WAST 7	WAST. 5.7. opc1	WAST 5.7.opc2	WAST. 5.7.opc3
Prevalence	14.91	24.74	4.06	15.25	6.44	2.03	13.56
Desviation over prevalence	0	+ 9,83	-10,85	+0,34	-8,47	-12,88	-1,35

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Reliability tests	Sensitivity	Specificity	VPP	NPV
WAST 1.2.opc1	93.18	87.25	56.16	98.64
WAST 1.2.opc2	25	99.6	91.66	88.34
WAST.5	43.18	99.6	95	90.9
WAST7	86.36	97.21	84.44	97.6
WAST.5.7.opc1	43.18	100	100	77.89
WAST.5.7.opc2	13.63	97.65	50	88.34
WAST.5.7.opc3	90.9	100	100	94.43
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### CONCLUSIONS

The WAST 5.7. is a tool much or more useful than the WAST 1.2. because it has better predictive values with prevalence close to reality.

#### P05.079

#### Factors related to gender violence

J. J. Bernad Suarez, L. Bernad Marin, C. Santamaria Colomer, A. Vazquez Duran, C. Viñas Silva, S. Criville, P. Claver, J. Gerhard Perez, J. Cortes Martinez, S. Granell; ICS, Vilassar De Mar, Spain.

OBJECTIVES: To assess the possible relationship between demographic, socioeconomic and lifestyle, the fact of suffering gender violence.

METHODOLOGY: Cross-sectional observational study conducted in the first fortnight in February 2011 by 11 physicians and 13 nurse practitioners.

Population: Women 15 - 64 years who attended for any reason to query. Sample size = 254 population of 8395 women (ages of range), alpha = 0.05, accuracy + / - 0.05 units with a bilateral contrast to an estimated ratio of 0.15, assuming restocking fee of 0.25

Exclusions: Be accompanied, not having a current partner, not understanding the language, can not read / write, severe mental disabilities. Self production survey was offered, anonymously, without witnesses, consisting of: demographic questionnaire and habits, followed by WAST (Women Abuse Screening Tool) for Spanish-speaking population. The surveys were collected in the consultations themselves.

We define abuse if WAST greater than 10. The sample was distributed into three groups:

(1) general population , (2) women in abuse (3) women without abuse. We study relationships by age group, number of children, time of coexistence of the couple, origin of the woman and partner, occupation of the woman and her partner, educational level of women and couples, use of snuff for women and couples, alcohol consumption of women and couples.

Data processing for W-Excel, Numbers.

RESULTS: 303 surveys collected valid 295. In 34 cases of psychological violence were observed; in 9 cases of psychological + physical violence; 1 case mental, physical and sexual.

n = 295	General Population (GP)	Abuse (A)	Non abuse (NA)	Statistical Signific.
Origin women:South- America	14 (4,75%)	5 (11,36%)	9 (3,58%)	GP/A: z = 2;p<0,0<0,01
Non occupation women	46 (15,5%)	12 (27,27%)	34 (13,54%)	GP/A : z = 2;p<0,02
Non occupation couple	28 (9,49%)	8 (18,18%)	20 (7,9%)	GP/A: z = 1,84;p<0,03 A/NA :z = 2,4;p<0,01
Couple with only Primary education	69 (22,71%)	17 (38,63%)	52( 20,71%)	GP/A :z = 2,63;p<0,001
Prevalence alcohol-couple >28UEB	1,3	6,8	0,39	GP/A:z= 2,34;p<0,01 A/NA:z= 3,9;p<0,001

### CONCLUSIONS:

Statistical significance was confirmed in women from South America, unemployed women, unemployed couples, couples with only primary education, couples at risk of consumption alcohol

### Beliefs on mood state and health of immigrant people in primary healthcare

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Introduction: Recently, have arrived in Catalonia (Spain), many immigrants from many different countries and continents

(Martinez-Ramos, 2009). Immigrants come to the primary healthcare centers of the public health system. Some studies have shown, many of the problems are emotional and are related with the immigration process and with the adaptation to the new country (Achotegui, 2005). In order to assure good care to the immigrants, doctors need to know wich are their beliefs about illness and health depending from different backgrounds and cultures.

Objective: To determine the internal causes of disease risk perceived by immigrant patients.

Methods: We have interviewed 49 immigrants over 18 years, who have resided in Catalonia (Spain) between 6 months and 10 years, belonging to 5 groups: Andean (n = 10), North Africans (n = 10), sub- Sahara (n = 10), Hindustani (n = 9) and Chinese (n = 10). The interviews were done in the Maresme region, where these groups are abundant. A trained psychologist has made semi-structured individual interviews with the support of a cultural mediator. Content analysis was done using qualitative methodology through technical Grounded Theory (Glaser & Strauss 1967, Masson 2002). There has been a first individual analysis, an analysis of a discussion group and intergroup comparison, by expert judges. Results: Two types of causes of internal attribution, beliefs about mood and cognitive status, are found. We present the beliefs of

#### P05.081

## Health beliefs of North African immigrants in primary healthcare

each group and differences between the five.

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Introduction: Recently, have arrived in Catalonia (Spain), many immigrants coming from North Africa (Morocco) (Martinez-Ramos, 2009). Immigrants come to the primary healthcare centers of the public health system. Some studies have shown that health problems are related to their beliefs about health and disease. These beliefs are influenced by social and cultural factors (Macipe-Costa y Gimeno-Feliu, 2011).

Objective: To evaluate the beliefs of North African immigrants about health and disease.

Methods: We have interviewed 10 North African immigrants over 18 years, who have resided in Catalonia (Spain) between 6 months and 10 years. The interviews were done in the Maresme region, where this group is abundant. A trained psychologist has made semi-structured individual interviews with the support of a cultural mediator. Content analysis was done using qualitative methodology through technical Grounded Theory (Glaser & Strauss 1967, Masson 2002). There has been a first individual analysis, an analysis of a discussion group and intergroup comparison, by expert judges.

Results: We present a categorical map of the immigrant beliefs, which are of two types: beliefs about risk and prevention health. We discuss some of the meanings of individual and group beliefs.

#### P05 082

#### Health beliefs of Andean immigrants in primary healthcare

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Introduction: Recently, have arrived in Catalonia (Spain), many immigrants coming from Andean Region (IDESCAT 2008).

Immigrants come to the primary healthcare centers of the public health system. Some studies have shown that health problems are related to their beliefs about health and disease. These beliefs are influenced by social and cultural factors (Macipe-Costa y Gimeno-Feliu, 2011).

Objective: To evaluate the beliefs of andean immigrants about health and disease.

Methods: We have interviewed 10 andean immigrants (Bolivia, Perú, Colombia y Ecuador) over 18 years, who have resided in Catalonia (Spain) between 6 months and 10 years. The interviews were done in the Maresme region, where this group is abundant. A trained psychologist has made semi-structured individual interviews. Content analysis was done using qualitative methodology through technical Grounded Theory (Glaser & Strauss 1967, Masson 2002). There has been a first individual analysis, an analysis of a discussion group and intergroup comparison, by expert judges.

Results: We present a categorical map of the immigrant beliefs, which are of two types: beliefs about risk and prevention health. We discuss some of the meanings of individual and group beliefs.

#### P05 083

## An Audit of Vitamin B12 prescription in an urban General Practice

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Farnham Medical Centre, Cavan, Ireland.

#### Aims.

To assess the number of patients currently receiving intramuscular Vitamin B12 treatment.

To assess the indication for testing, initial diagnosis, Vitamin level on initial testing and compare these to recognised standards.

To assess the level of compliance in our practice with these standards

#### Methods;

A retrospective audit using Socrates was performed over an eleven month period from 1<sup>st</sup> January to 31<sup>st</sup> of November 2011. All patients who had received IntraMuscular Vitamin B12 treatment were included in our audit.

We sought to determine the indication for Vitamin B12 testing, the indication for commencing therapy, the date of last B12 level and the laboratory value at time of commencement of therapy.

We compared this with recognised best practice.

Data was collected from Socrates and paper files for those on long term treatment.

#### Results:

Fifty Eight (58) patients were prescribed IM Vitamin B12 therapy over the timeframe of audit. Thirty five (35) or sixty(60)% were aged over sixty five(65) years of age, thirty four (34) or fifty eight(58)% were female. Twenty four (24) or forty one (41)% of patients had values at initial testing of <150pmol/l or a moderate probability of symptomatic deficiency. Fourteen (14) or twenty four (24)% of patients had no level documented, the remainder were commenced on treatment in tertiary care. Thirty (30) patients or fifty one (51) % had an acceptable indication for testing.

All had a Vitamin B12 level carried out within the last 6-8 months. A firm diagnosis was only made in nineteen or thirty two (32) % of patients.

## Discussion;

We carried out this audit as the first step in assessing our use of both treatment and testing of Vitamin B12 in our practice. We feel that tighter adherence to guidelines is needed, as such a copy of the guidelines has been placed on all members of the practice's desks. We are undertaking to audit all Vitamin B12 testing in the practice as the next step of our assessment.

#### Prediabetes and metabolic syndrome

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Early glycoregulation disorder (prediabetes) is manifested as impaired fasting glucose /IFG/ or impaired glucose tolerance /IGT/. Patients with prediabetes have a high risk for development of Diabetes Mellitus type 2 /T2DM/ and cardio-vascular diseases.

AIM: was to determine frequency of metabolic syndrome /MeSy/ in patients with prediabetes /IFG and IGT/ and in patients with newly diagnosed T2DM.

DESIGN&METHODS: The study was epidemiological and it had lasted for six months. Study included 250 patients of both sexes, aged from 18 to 70 years /85 men/, who were obese, but with no earlier diagnose of T2DM. All patients were received an invitation from their general practice doctor (one time monthly) to measure their own waist size, blood pressure, lipid status and plasma glucose. Oral glucose tolerance test /OGTT/ was performed if the glucose was ≥ 5.6mmol/l. Patients were sorted in four groups, by glycoregulation disorder. In each group, it was determined the number of patients with MeSy by the International Diabetes Federation /IDF/ criteria.

RESULTS: From 250 patients who were obese, there was 50 of them /20%/ in the group with normal glycoregulation (first group); in second group, with impaired fasting glucose /IFG/, there were 96 patients /38.4%/; 64 of them /25.6%/ were in third group, with impaired glucose tolerance /IGT/; in fourth group, with newly diagnosed diabetes, there were 40 of them /16%/. All of the patients from the group with new diagnosed diabetes /40/ and as well from the group with IGT /64/ had MeSy. The same thing happened with 56 patients /58%/ from the group with IFG and 26 patients /65.5%/ from the group with normal glycoregulation (they had MeSy).

CONCLUSION: This research shows that use of OGTT in obese patients is justified to detect early disturbances of glycoregulation, as well as primary prevention of MeSy, therefore T2DM.

#### P05.085

The role of primary care physician in early prostate cancer detection- availabilities and limits

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Prostate cancer is the third most common malignant disease in men. As there are no possibilities for the health care system to organize screening, early detection of the disease is of great significance.Our objectives were examining the role of primary care physicians in early prostate cancer detection; which diagnostic procedure were most commonly used; is there a need for guidelines and would closer cooperation with urologist help earlier detection and more successful treatment.Methods:Questionnaires were delivered to 69 primary care physicians employed in two Health care centers.Statistic parameters used in data processing were:structure,interval ofstandard deviation,significance of differences( $\chi^2$  test).Results:83% of physicians think that the PSA is a necessary procedure in prostate cancer screening for all men over 50. These results are in correlation with the opinion that PSA should be done on primary care level(87 % physicians). In spite of that,91% of primary care physicians don't use digital rectal examination. The highest number of physicians (41,5%) consider that this examination should be done by urologists, while 40% of them are unsure of the result.In early prostate cancer detection,71% think that the best way to diagnose prostate cancer is to do an ultrasound, PSA test and digital rectal examination, but only 7% think that it is enough to use only PSA test and digital rectal examination.89% of physicians reckon that guidelines would be very useful. Doctors who were younger than 45 have shown more interest in using guidelines. This difference was significant, but not highly statistically significant(p=5.08).83% of physicians agree that the better cooperation with urologists and practical education would lead to more successful treatment. It might help having organized training sessions to ensure that newly trained physicians have the technical skills to do these examinations

effectively. Conclusion: The role of primary care physicians in early prostate cancer screening detection in this moment is very insufficient.It is necessary to create guidelines which would be helpful to define the content and range of services which would be given by primary care physicians. It is very important to create a connection between primary care physicians and urologists, which would help solving diagnostic and therapeutic dilemmas. In theory that should lead to the avoidance of repeating diagnostic procedures, reduction of discomfort to patients and cut back on costs

#### P05.086

#### Summary of annual activities in a health primary center

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<sup>1</sup>Medical Director. Health Center. Banyeres de Mariola., Banyeres de Mariola, Spain, <sup>2</sup>General Hospital Universitary Albacete, Albacete, Spain, <sup>3</sup>Catholic University "SAN VICENTE MÁRTIR", Valencia, Spain, <sup>4</sup>Medical Director. E. V. I., Albacete, Spain, <sup>5</sup>Medical Director of Head of the Memory Clinic. General Universitary Hospital, Castellón, Spain, <sup>6</sup>University "CARDENAL HERRERA" C. E. U., Valencia, Spain.

Aim: To study the performance and activity of a Health Primary Center, located in a semi-urban habitat during 1 year.

Materials and Methods: We analyse the contacts with the sanitary system in a population of 7.329 inhabitants, with an age ranging between 0 to 102 years. The activity record and the indicators provided by the informatics system Abucasis-2 were studied.

Results: The following information was obtained:

- SOCIAL WORKER: 1.870.
- ADMINISTRATIVE ACTIVITIES: 1.626.
- MATRON: 1.937.
- CONTINUOUS ATTENTION (GUARD) NURSING (7 nurses): 3.683.
- NURSING (5 nurses): 24.804.
- NURSING ON SATURDAY( 5 nurses): 913.
- FLU VACCINATION CAMPAIGN: 1.308 doses administrated.
- DENTISTRY AND ORAL HYGIENIST (2 persons): 883.
- PEDIATRICS (1 pediatrician): 5.382.
- FAMILY MEDICINE (4 General Practitioner's): 42.763. FAMILY MEDICINE ON SATURDAY (4 General Practitioner's): 1.394.
- CONTINUOUS ATTENTION (GUARD) FAMILY MEDICINE (7 General Practitioner's): 7.073.
- ACTIVITIES ON DOMICILE: 395.
- INTERCONSULT REQUEST: 2.143.
- REFERRALS TO HOSPITAL EMERGENCY: 346.
- REQUEST OF IMAGE TESTS: 666.
- TOTAL OF CONTACTS: 91.445; FROM THEM, 14.788 WITHOUT PREVIOUS APPOINTMENT REQUEST FOR NONE OF THE REQUIRED ATTENTION.

Conclusions: In general's rules, we observe a high rate of consumption of sanitary services. Draw attention that professionals such as Social Worker and the Matron have significantly less number of contacts than other professionals. Finally, is clear that the weight of the care work falls upon Family Physicians.

#### P05.087 **Breast cancer**

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#### INTRODUCTION:

Breast cancer is the leading cancer which affects the female population. As a difficult and unpredictable disease it undermines all life aspects of the sick person and their functioning in the family, social environment and at their workplace.

#### GOAL:

To elaborate components which affect the formation of psychological profile of people suffering from the disease. Importance of psychological status and the result of the treatment/acceptance and submission of therapy.

#### METHOD:

Retrospective - analytical study of data obtained in ambulatory work. The study includes the cases of six patients who have visited my office with the first symptoms. They were diagnosed and submitted to all stages of diagnosis and treatment.

RESULTS:

Breast cancer causes major problems not only in the life of the sick person but also in the family. Problems arise in all adreas: emotional, material, social.

On the other hand, the family helps the process of healing with its compact size, maturity, stability and emotional connection.

On the example of these six patiens, five women and one man, I have shown how family and social environment affect the creating of the psychological status of the patient and their attitude towards illness and treatment.

Three women in this group whom I have observed are highly educated and come from stable families who are in touch with their emotions and with a good financial situation. They have had a good course of treatment and are cured to date.

Because of her unstable psychological profile, only one of them endured the treatment hard and had late consequences: seroma at the surgial place, micosis, radiation dermatitis, anemia, etc.

The rest of the patiens, two women and one man are not highly educated and come from less stable families with financial and other problems. They experienced more problems during all stages of disease and treatment and had many complications. CONCLUSION:

People who come from emotionally stable families with good financial situation and who are satisfied with their job and business environment endure the problems caused by the disease much better. All of these improves the possibility of successful treatment and healing.

#### P05.089

Non-High-Density Lipoprotein cholesterol goal attainment according to the cardiovascular risk among population of Lleida, Spain

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Objective:To assess the proportion of patients of our population achieving guideline-recommended non-High-Density Lipoprotein Cholesterol (non-HDL-c) goal according to the cardiovascular risk and to evaluate the association with gender, hypertension, type 2 diabetes mellitus (DM), abdominal obesity and metabolic syndrome (MS).

Methods:Cross-sectional study of census subjects aged ≥18 years randomly selected. Variables recorded were gender, age, hypertension, DM, current treatment with lipid-lowering drugs, antidiabetic oral agents and/or insulin, three no consecutive arterial tension determinations, waist circumference, fasting glucosa and serum total cholesterol, HDL-c and triglycerides. Hypertension was defined by the Joint National Commite on Detection, Evaluation and Treatment of High Blood Presure-Seventh Report and 2003 European Society of Hypertension Guidelines for the management of Arterial Hypertension, DM by the American Diabetes Association 2003 and abdominal obesity and MS according to the National Cholesterol Education Program Adult Treatment Panel III 2001 (MS-NCEP-ATPIII) and the International Diabetes Federation 2005 (MS-IDF). Baseline cardiovascular risk was determined by the Framingham risk score. Non-HDL-c was calculated with the formula: total cholesterol - non-HDL-c, and its terapeutic goal was based in NCEP-ATPIII recommendations.

Results:A total of 283 participants were included, 118 men (41.7%) and 165 women (58.3%), mean age range 51.1 years (95%Confidence Interval[CI] 47.5-54.7) for men and 50.6 years (95%CI 47.1-54.1) for women. 105(37.10%) subjects had hypertension, 32(11.31%) DM, 124(43.82%) abdominal obesity, 64(22.61%) MS-NCEP-ATPIII and 98(34.63%) MS-IDF. A total of 181 subjects (63.96%) achieved the non-HDL-c therapeutic target.

Non-HDL-c goal attainment was significantly lower in men (46.6%; 95%CI 37.6-55.6) than in women (76.4%; 95%CI 69.9-82.8), in hypertensive subjects (50.5%, 95%CI 40.9-60) than in no hypertensive (71.9%; 95%CI 65.3-78.5) and in patients with MS than in those without, either as defined by NCEP-ATPIII (39.1%; 95%CI 27.1-51 and 71.2%; 95%CI 65.2-77.2, respectively) or IDF (42.9%; 95%CI 33.1-52.7 and 75.1%; 95%CI 68.9-81.4, respectively). No statistical relation was found between non-HDL-c goal and DM (50% vs 65.7%,p=0.116) and abdominal obesity (58.9% vs 67.9%,p=0.134).

Conclusion:According to our results, non-HDL-c goal achievement is lower among our population, as it is in patients with DM or abdominal obesity. Patients suffering of hypetension or MS have significantly worse attainment of non-HDL-c target.

#### P05.090

Non-High-Density Lipoprotein Cholesterol distribution by gender, hypertension and type 2 diabetes mellitus among population of Lleida (Spain)

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Objectives: To determine the prevalence of Non-High-Density Lipoprotein Cholesterol (non-HDL-c) and its relation to gender, hypertension and type 2 diabetes mellitus (DM) among our population.

Methods: We performed a cross-sectional study of census subjects aged ≥ 18 years randomly selected. Variables recorded were gender, age, hypertension, DM, three no consecutive arterial tension determinations, fasting glucose, total cholesterol and HDL-c. Hypertension was defined by the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure-Seventh Report and 2003 European Society of Hypertension Guidelines for the management of Arterial Hypertension and DM according to the American Diabetes Association 2003. Non-HDL-c was calculated with the formula: total cholesterol - non-HDL-c.

Results: A total of 283 subjects were included, 118 men (41.7%) and 165 women (58.3%), mean age range 51.1 years (95% Confidence Interval [CI] 47.5-54.7) for men and 50.6 years (95% CI 47.1-54.1) for women. 105 (37.10%) subjects had hypertension and 32 (11.31%) had DM. Mean non-HDL-c levels were significantly lower in women 134.42 mg/dl (95% CI 128.61-140.23) than in men, 144.81 mg/dl (95% CI 138.07-151.54) (p=0.032). Hipertensive women had significantly higher mean non-HDL-c levels, 148.07 mg/dl (95% CI 136.2-159.9) than no hypertensive women, 129.14 mg/dl (95% CI 122.7-135.6). Differences in males were not observed. No statistical relation was found between non-HDL-c and DM.

Conclusion: Women had non-HDL-c levels significantly lower than men. High non-HDL-c levels could be related with hypertension in females. However, no relation was found between non-HDL-c and DM. Further work is required to support these findings.

#### P05.091

Functional ability and neglect of care for the elderly persons

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INTRODUCTION: With the general rise in living standards and improving health care in developed countries, the lifespan got extended, and thus the increased proportion of elderly in the general population. Number of people aged over 65 years continuously and rapidly grows, especially in economically developed countries, but also in developing countries. Our environment is faced with the challenge of an aging population. OBJECTIVE: To assess the ability for daily activities and lack of care for the elderly persons

PATIENTS AND METHODS: 200 subjects older than 65. Assesed group was formed by people living alone, and control group comprised the elderly, who traditionally live in a family environment. General geriatric questionnaire was created for this study, and a questionnaire which we used to assess the ability of the daily activities of the subjects was the Instrumental Activities of Daily Living Scale.

The questionnaire contains questions related to use of the phone, shopping, preparing meals, doing housework, physical activities, use of drugs, money management.

RESULTS: 200 elderly subjects were included in our study, 45% of those who live alone and 55% of subjects who live in family or social environment. Age of subjects ranged from 65-94 years. There were 57.5% female and 42.5% of male subjects.

For the assessment of daily activities on a scale of 11-28, the average value was 19, higher values indicated better functional activity. Percentage of neglected participants in assessed group was 24.4% and 7.3% in the control group (p = 0.001).

CONCLUSION: Application of preventive health measures for older people makes it possible to prevent the occurrence of risk factors that lead to unhealthy aging, and thus to preserve the functional capacity and improvement of health in older age.

Keywords: older people, ability, neglect

#### P05.092

#### Use of statins in patients with type 2 diabetes

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Background: Patients with diabetes mellitus type 2, because of atherogenic dyslipidemia, are at increased risk of cardiovascular diseases (CVD). Statins have been available to most patients in Bosnia and Herzegovina, and people with diabetes can get them on prescription.

Aims: To analyze the share and role of statins in preventing CVD in patients with type 2 diabetes.

Material and methods: Retroactively were analyzed 123 medical records of patients with type 2 diabetes, registered in a Family Medicine Health Center Kalesija. The analysis included patients of both genders, older than 40, which had a proven type 2 diabetes, and at the time of diagnosis of diabetes did not have proven CVD. Patients were divided into two groups: One group of 32 patients with type 2 diabetes which, in the period from 2003-2011. in addition to standard treatment, the therapy included statins, at any dose, at least for 6 months in one calendar year. The second group consisted of 91 patients with type 2 diabetes, who were on standard diabetes treatment in the same period, and therapy for some reason did not include statins. As the parameters for a proven CVD during this period, the 6 adverse cardiovascular / cerebrovascular (CV) events were observed, events that have led or contributed to the development of: cerebrovascular stroke, myocardial infarction, heart failure, renal failure, blindness, nontraumatic limb amoutations.

Results: During the monitoring period 2003-2011., 3 (10%) patients who used statins in the treatment were proved at least 1 out of 6 monitored unfavorable CV event. Also, in the same monitoring period, 24 (26%) patients who are not used in the treatment of statins, demonstrated at least 1 of 6 monitored adverse CV event. 91 (74%) patients with type 2 diabetes did not use, and 32 (26%) patients used statins in the preventive treatment of CVD.

Conclusions: There is not sufficient abundance of statins in preventing CVD in patients with type 2 diabetes. With the current standard treatment, further introduction of statins in all patients with type 2 diabetes, would be of essential importance for the prevention and reduction of cardiovascular disease and mortality rate.

#### P05.093

#### **Disease Prevalence of Female Students**

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#### Aim:

People pass through a period of change both physically and spiritually in the period of youth. If disorders appearing in this period aren't treated, can cause serious chronic illnesses at forward stages of development.

In our study, we investigated common disease prevalence of female students come from different parts of the country.

Materials and Methods:

334 female students were enrolled in the study. After receiving approval of the participants, we recorded their known diseases and medications. Laboratory parameters, related to the suspected disease by physical examination, was requested. Pelvic ultrasonography was performed in patients who are considered as polycystic ovary syndrome. The results were recorded to the database SPSS-15 and statistical analysis was made. Results:

The average age of the patients was 19,98  $\pm$  1,00. Participants present 4.8% (n=17) drug allergy, 2.3% (n=8) food allergy, 14.4% (n=51) the other allergies such as mite, dust, pollen. 11.7 percent of participants (n=41) has been stated with iron deficiency anemia. Vitamin B 12 deficiency 1.2% (n=4), gastritis 2.1% (n=7), hypothyroidism 0.9% (n=3), migraine 0.6% (n=2), thalassemia minor 1.5% (n=5), eczema 0.3% (n=1), polycystic ovary syndrome 6.9% (n=23) were found. 7.9 percent of participants (n=28) was smoking cigarettes. Alcohol use cases were detected 1.4% (n=5). Discussion:

The basis of the family medicine mainly consist of curative and preventive care. Therefore, complications that may occur in the future can be minimized with early diagnosis and treatment of existing diseases. As a result, routine checks of registered individuals should be made and identified problems should be treated by family physicians.

#### P05.094

#### **Communicate COPD**

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Communication in general practice has always played a central role; social changes have resulted from the new approaches in patient demand for health interventions, and linked to new laws to encourage more and more marked by a full awareness of their disease status and therapeutic possibilities by the patient. Aims of the work

Aim of our work was to try to measure the effectiveness in communication of a general practitioners (GPs) group, dealing with a great social impact disease, the chronic obstructive pulmonary disease - COPD. The specific aim was to check the communicative validity of GP in the patient with COPD and the illness knowledge that he has, in particular about two major therapeutic approaches such as: compliance and lifestyle. Method

Refer to COPD patients, recruited randomly from 10 GPs, a structured questionnaire: the Communicate-COPD.

Each general practitioner provides a questionnaire to all COPD patients who visit in his practice for 3 months for any reason. Results

At the end of three months of observation were collected on 600 patients' data. Analysis of the data has been found that:

- The 10 GPs attending a population of about 13,000 patients, the diagnosis of COPD has a prevalence of 5.5% and the diagnoses are accompanied by spirometry in 55% of cases.
- The family doctor is the main reference for 62% of patients, for whom 55% are aware of the symptoms of the disease and 48% are aware that caring properly can slow chronic degenerative

- 68% of patients shows that it was their family doctor explained to him the manner of taking the drugs, but only 48% manage to follow the directions properly.
- Despite the admission for 92% of patients have had the smoking ban only 64% able to observe it. Over 80% are aware of how air pollution affects the disease and 43% are aware of what the previous work with exposure to dust and / or gas could adversely affect progression of the disease
- 90% of respondents asked to want to know more.

## Waist Circumference and Blood Pressure values to role out the Metabolic Syndrome

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Objectives: To determine the usefulness of both Waist Circumference (WC) and Blood Pressure (BP) to role out the Metabolic Syndrome (MS).

Methods: Cross-sectional study of 292 census subjects randomized from Lleida (Spain). There were 41.64% men (age average 51.1) and 58.36% women (age 50.6). According to National Cholesterol Education Program Adult Treatment Panel III (ATP III), the MS include ≥3 criteria out of five: triglycerides ≥150 mg/dL, HDL-C <40 mg/dL in males and <50 mg/dL in females, BP ≥130/85 mmHg, fasting glucose ≥100 mg/dL or diabetes mellitus and WC ≥102 cm in males and ≥ 88 cm in females. We have chosen both BP and WC because there are the most prevalent criteria in our population: 44.6% (95% CI =38.6-50.7) and 44.7% (95% CI =39-50.4), respectively.

Results: The Negative Predictive Value (NPV) was >89% or even 100% (between 30 and 40 years old). However, the Positive Predictive Value (PPV) is around 50%.

Conclusions: Considering both BP and WC criteria as diagnostic of the MS, we could say the patient does not have MS, wrong only 6 of 100 times (NPV = 93.60%).

We may use it as a way to role out the MS, being not necessary to perform a blood test and preventing economic costs.

#### P05.096

## Relationship of Hemoglobin A1C with the presence and severity of Diabetic Ketoacidosis

**D. Melentijevic**<sup>1</sup>, S. Conic<sup>1</sup>, M. Stankovic<sup>1</sup>, M. Brkic<sup>1</sup>, S. Melentijevic<sup>2</sup>:

<sup>1</sup>Health Center "Dr Simo Milosevic" Cukarica, Belgrade, Serbia, <sup>2</sup>KBC Zvezdara, Belgrade, Serbia.

- Diabetic ketoacidosis (DKA) is acute complication of diabetes.
- The diagnosis is confirmed by the blood glucose>15mmol/I,pH< 7,3,serum bicarbonate</li>
   <15mmol/I,serum osmolality >330 mosm/I and ketonaemia.
- Tight glucose control prevents complications.
   Hemoglobin A1C (HgbA1C) is parameter of good glucose control.
- OBJECTIVES: To determine correlation between HgbA1C levels and the presence and severity of diabetic ketoacidosis.
- METHODS:We studied patients with DKA, who are hospitalized in period 2007-2010.in Klinical department of endocrinology of KBC Zvezdara.Data were obtained from medical documents.We investigated glycemia,HgbA1C,blood pH and level of bicarbonates.
- Data were processed using the methods of descriptive and analytical statistics, linear correlation and to assess

the significance of the difference Single Factor parametric analysis of variance (ANOVA).

Diabetic ketoacidosis (DKA) is acute complication of diabetes. The diagnosis is confirmed by the blood glucose>15mmol/l,pH< 7,3,serum bicarbonate <15mmol/l,serum osmolality >330 mosm/l and ketonaemia.

Tight glucose control prevents complications. Hemoglobin A1C (HgbA1C) is parameter of good glucose control.

OBJECTIVES: To determine correlation between HgbA1C levels and the presence and severity of diabetic ketoacidosis.

METHODS:We studied patients with DKA, who are hospitalized in period 2007-2010.in Klinical department of endocrinology of KBC Zvezdara.Data were obtained from medical documents.We investigated glycemia,HgbA1C,blood pH and level of bicarbonates. Data were processed using the methods of descriptive and analytical statistics, linear correlation and to assess the significance of the difference Single Factor parametric analysis of variance (ANOVA).

RESULTS: We studied 48 individuals with diagnosed DKA,25 women,23 men average age 50,3±16,6. In time of admission to hospital average blood glucose was 31mmol/l,HgbA1C 11,8%,pH 6.89,HCO3-7,3. Compared to the level of bicarbonates patients were divided into three group,15-18mEq/l n1=10, 10-15mEq/l n2=11,<10mEq/l n3=27patients.We examined whether there is a difference in HgA1c among patients in relation to the level bicarbonates using ANOVA. Obtained empirical value of the Fisher ratio is F=6,18, p <0,01 (F2;45;0,05=3,23 and F2;45;0,01=5,18). Examining the correlation between HgbA1C and glycemia we found, remp=0,08, p>0,05(r 0.05=0,285, r 0.01=0,368,DF=46), correlation between HgbA1C and pH remp=0,99,p<0,01(r 0.05=0,285, r 0.01=0,368,DF=46). CONCLUSION: We found there is statistically proven correlation between HgbA1C and levels of bicarbonates, pH, but no statistically proven correlation of HgA1C and blood glucose level.

#### P05.097

## Hypoglycemic treatment and Chronic renal disease in diabetic patients

A. Pedro Pijoan, V. Grahit Vidosa, S. Pérez Zamora, F. Flor, A. Vericat Roure, C. Ramírez Sanchez; Consorci Sanitari Integral- Gaudí Salut, Barcelona, Spain.

#### AIM

There are different recommendations known with hypoglycaemic treatment in diabetic patients with chronic kidney disease (CKD). It is known that sulfonylurea glipizide is recommended in patients with chronic kidney disease (CKD). Hypoglycaemia remains a risk with glipizide.

This study is aimed to determine the prevalence of diabetes type 2 patients treated with sulfonylurea and CKD registered. Secondary objective is to describe hypoglycaemic treatments in diabetics patients with CKD.

DESIGN & METHODS

Cross-sectional study of a random sample of diabetic patients with filled renal stage by blood test assigned and visited in our Primary Care Centre during 2010.

Inclusion criteria: Subjects >over 15 years with diabetes and CKD (glomerular filtration rate (GFR) < 60ml/min).

Exclusion criteria: terminal diseases, pregnancy, not having results of analytics and exitus.

Following variables are considered: age, sex, body mass index (BMI), CKD diagnosis, diabetes diagnosis, hypoglycaemic treatments, diagnosis of HTA and dyslipidemia. Evaluation indicators were calculated following International Guidelines. RESULTS

16770 visited patients, where 1396 have diabetes, and 189 with CKD diagnosis. 50% were women and mean age was 79,5 (8,7). Mean BMI≥30=32,2%, 90,3% had been diagnosed of hypertension and 53,5% of dyslipidemia. Only 144 patients were studied with GFR between 30-60= 83,3%; between 15-29=16%; <15=0,7%. From 144 patients, 110 (76,4%) have hypoglycaemic treatment and 34 (23,6%) without.

Results pending.

#### CONCLUSIONS

In this study we attempted to identify those diabetic patients treated with sulfonylurea that perhaps could benefit from alternative therapies with the aim to preserve renal function. We have observed a low prevalence of CKD.

We expect that our diabetic patients should have to be more controlled as they have a high risk in diabetic complications. But we should be aware about our prescriptions for the security of our patients.

#### P05.098

## Evaluation of urinary tract infections with positive urine cultures in women of childbearing age

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**Purpose**: To evaluate the characteristics of positive urine cultures in the subgroup of women between 14 and 45 years of age and recommend an appropriate antibiotic.

#### Material and methods:

Design: Descriptive longitudinal.

Location: Urban health center with two rural clinics.

Subjects: Women aged between 14 and 45 years with positive

urine culture requested by family doctor.

**Methods**: We evaluated the positive urine cultures in female patients between 14 and 45 years of age requested by our health center from July 2009 to June 2011, excluding those patients with 3 or more positive urine cultures in the same year. We measured age, the organism that is isolated and sensitivity equal to or greater than 90% to the most commonly used antibiotics.

Results: We analyzed 218 positive urine cultures in this group of women. The average age of 31.32 years (standard deviation The most frequently isolated microorganism was Escherichia coli in 53.2% of cases followed by Enterococcus faecalis with 14.7% Klepbsiella pneumoniae 9.2% and 6.9% Streptococco agalactiae. Escherichia coli has a sensitivity greater than or equal to 90% to cefoxitin, gentamicin, clarithromycin, cefuroxime acetyl and fosfomycin. Enterococcus faecalis has a sensitivity greater than or equal to 90% to penicillin, ampicillin, amoxicillin/clavulanic acid, fosfomycin vancomvcin. levofloxacin. Klebsiella pneumoniae has a sensitivity greater than or equal to 90% to cefoxitin, gentamicin, clarithromycin, cefuroxime acetyl, amoxicillin/clavulanate and ciprofloxacin. Streptococco agalactiae has a sensitivity equal to or greater than 90% to penicillin, ampicillin, vancomycin and levofloxacin.

Conclusions: Escherichia coli is the most common organism in this patient group. First choice of empirical antibiotic therapy can begin with Fosfomycin, also having as good alternatives in this group of patients, cefuroxime and amoxicillin/clavulanate. Knowing the bacteriological map of the area is essential for a correct empirical antibiotic therapy.

#### P05.099

The influence of environment on the incidence of Bronchial Asthma attacks followed in the General Practice ambulance in Belgrade

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Bronchial asthma represents health problem in the world, but also in Serbia. Clean air is foundation of health and life of people and ecosystem. Increased levels of air pollution is a significant risk to human health. Air Plutiotion Regulation in Serbia is based on Directive 96/62/EC of European-Commission and Air quality guidelines (AQGs) by WHO.

Aims: Study has the aim to investigate relationship between air quality and frequency of bronchial asthma attacks. Belgrade has

eleven urban-forest areas and environment is high evaluated with continual air monitoring. Mining and Smelting Complex in town Bor has significant contribution to bad ecological and health situation. Due to obsolete technology of refinement and poor system maintenance, dangerous materials easily find way to environment. Eg-Tailings are a source of dust, the concentrations of sulfur dioxide are at least 100-days per year above the allowable WHO limit and other air quality guidelines (AQGs) by WHO are not good. Methods: Tracking patients with medical records that show they are suffering from asthma with often attacks five years ago. We studied 181(100%) patients aged 30-49, 102(56.35%)men and 79(43.65%)women during 8-months from March2011 October2011; they changed of residence, from Bor to Belgrade. Results: At first-medical-examination in Belgrade in March for 102(56.35%)men and 79(43.65%)women, we confirm diagnosis bronchial asthma with attacks 6-8-times per month during 5-years beforehand, living in Bor. Belgrade's results are: April 2011: 7men-4attacks, 68men-6attacks, 27men-7attacks per month. 9women-5attacks, 70women-6attacks per month. For all, same therapy is extended, as before. June 2011:11men-1attacks, 29men-2attacks, 62men-3attacks.7women-1attacks, 24women-3attacks, 48women-4attacks per month. October 2011:19men-0attacks, 57men-1attacks, 26men-2attacks. 28women-0attacks, 19women-1attacks, 32women-2attacks per month.

Conclusions: Control and monitoring of air pollution in Belgrade are rigorous. The last two years in Belgrade there are declining trend of pollution in urban areas due to drastic decline in industrial production and the existence of eleven forest areas. Mean annual values do not exceed allowable for PM10, O3, NO2, SO2 by WHO. Study shows efficiency of air quality in moderation of asthma. Attacks to asthma patients have been reduced or completely vanished in Belgrade with using regular therapy.

#### P05.100 Headache in Primary Care

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Headache presents one of the most frequent reasons on primary health care medical consults. In most situations where the symptoms of headache are predominant is also usual to find functional inability of variable duration, which shows the impact that it has in the daily relational, social and productive activities. However, most clinical situations where the headache symptom dominates are undiagnosed and untreated, all over the world.

The clinical approach, anamnesis and physical exam, are sufficient to get the diagnosis, in most cases, reserving the use of diagnostic tests to a small number of clinical situations. Primary headaches account for 90% of headache with greater prevalence for migraine and tension-type headache. The general practitioner has an important role in the diagnosis and management of those headaches, providing the adequate treatment in the acute phase, and having the knowledge to indicate and choose the adequate prophylactic therapy. The cluster headaches and trigeminal neuralgias are less frequent, however they also need a correct diagnosis for symptom relief and guidance in the crisis to the exclusion of secondary causes. The general practitioner has also a privileged position for the diagnosis of secondary headaches that, if early diagnosed, can be a significant impact on prognosis.

#### P05.101

Telecommunication technology based system in General Practice for female population in Serbia

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Breast cancer is growing problem in family doctors practice nowdays. In Serbia each year 4000 new breast cancer cases are diagnosed. The fight against breast cancer used systematic medical records for whole female population. Knowing the patient

is part of the art of family medicine. Sympathy, tact, gentleness and permanent communication with patient are important in family doctor practice.

Aims: The aim of our study is the implementation of modern common use technology-telecommunication services for information and education female population in General Practice in the fight against breast cancer.

Methods: The use of modern technology-telecommunication services: SMS, MMS, e-mail in the period of 12 months for information and education women-aged 25-45, about the life discipline and to encourage them for medical records. In our Department of Primary care there are 465 (100%) women aged 25-45 and they are familiar with modern communication technologies, that means communication services are understandabe and acceptable to this target group.

Results: We sent 3 SMS, or 3 MMS or 3 e-mail monthly to 465 (100%) women aged 25-45 in period of one year continuouslly. Those age believe in the medical recommendations obtained by telecommunication-services. Thanks to information and warnings by SMS, MMS or e-mail they had been encouraged for medical records. The results are 388 (83,44%) of 465 (100%) women had come to medical records and 61 (13,12%) had been diagnosed breast cancer. 77(16,56%) were not come for medical recording Conclusions:Our results indicate that women healthcare family system in Serbia identify potential patient much better by telecommunication-services, urge women to protect themselves by medical records. In our case the women group was 465 (100%) and 388 (83,44%) women were medical recorded and 61 (13,12%) were successfully treated.

#### P05.102

Correlation between Lipoprotein Lp(a) levels and significance ischemic stroke episode in patients who were treated in Internal Medicine Department

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Introduction: Arterial hypertension, diabetes mellitus, dyslipidaemia, atrial fibrillation (AF) are significant risk factors of the ischemic stroke. High levels of Lp(a) is an aggravating factor for atherothrombotic and vascular events.

Purpose: The purpose of this study was to evaluate the lipoprotein Lp(a) levels in patients who were treated due to ischemic stroke in the internal medicine department of Tzaneio General Hospital of Piraeus.

Material and methods: In our study were participated 87 patients (52 men / 35 women, mean age79±9 years). The diagnosis in admission for all patients was ischemic stroke and was confirmed by brain CT scan. The seriousness of ischemic stroke was estimated using the National Institutes of Health Stroke Scale (NIHSS). The patients were evaluated based on the NIHSS according to the seriousness into high risk (>10) and low risk (<10). Laboratory parameters were evaluated for the levels of cholesterol (Tchol), triglycerides (Tg), lipoproteins [LDL, HDL and Lp(a)].

Results: Our patients had a mean Tchol. 195,5±40,5 mg/dl, LDL 133,3±30,3 mg/dl, HDL 44±11,1 mg/dl, Tg 135,9±40,5 mg/dl and mean Lp(a) 32±29,5 mg/dl. The percentage of patients who had Lp(a)<40 mg/dl was 82,7% (72/87). Only 15 (17,3%) of patients were found with Lp(a)>40mg/dl, NIHSS>10 and more serious clinical status.

Conclusion: These results suggest that ischemic stroke and high levels of Lp(a) are strongly associated with serious symptoms and signs and a worsen prognosis. However, the ischemic stroke remain a great problem for all patients and these observations may help to render plausible a strategy for a better control of high Lp(a) levels.

#### P05.103

Where are we going to? The evolution of the mental disorders prevalence registered in the electronic medical records of the practices from an urban health care centre

**D. F. Pruteanu**, F. Antón García, F. Rivera Casares; CS Fuensanta, Valencia, Spain.

**Objectives**: To assess the evolution of the prevalence of anxiety, depression and their association registered in the medical records of the adult population (14 years and older) of an urban health care centre (HCC).

**Methodology**: Our HCC is an urban surgery and it is composed by a Main Centre (MC) with seven general practitioners (GP) and an Auxiliary Centre (AC) with four GPs. The Electronic Medical Records (EMR) have been available in our HCC since 2005. The attended adult population oscillated between 15,548 patients in 2005 and 19,312 in 2011. We determined the registered biannually prevalence (from 2005 to 2011) of anxiety, depression and their association globally, by each centre and by each practice. The data were extracted from the EMR.

Results: Prevalence (%) (2005/2007/2009/2011) Anxiety: globally 7.2/13.51/17.53/20.8. By centre: MC 8/14.7/18.8/21.74. AC 6/11.6/15.4/19.12. Depression: globally 4.03/6.17/7.73/8.62. By centre: MC 3.9/6.5/8.5/9.51. AC 4.3/5.6/6.5/7.13. Double association: globally 0.62/1.87/2.84/3.67. By centre: MC 0.8/2.2/3.4/4.32. AC 0.4/1.3/1.9/2.58. Prevalence (%) (ranging from the smaller to the highest) by practice from both centres for the same period: anxiety: 5.1-12.1/10.9-18.9/14.7-26.4/18.09-31.19. Depression: 0.8-10.8/1.6-13.3/1.7-16.7/2.03-19.03.

**Conclusions**: In the evaluated period the registered prevalence of anxiety tripled so that one out of five patients has this diagnosis in their EMR in 2011. The prevalence of depression increased to more than double. In the MC the tenth part of the patients has the diagnosis of depression and in the AC one out of 14 patients. We can observe big differences of the prevalence of both disorders between our practices, especially regarding the depression.

#### P05.104

Where are the public health care managers looking to?

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**Objectives:** To assess the spending made by the general practitioners of a health care centre (HCC) in function of their results.

**Methodology**: There are seven GPs working at our HC. We previously standardized their practices. The evaluated period: 2009 - 2010. The variables assessed for each practice: standardised expenditure per patient (Euro) (SEP), attendance rate (AR): number of visits/patient/year; percentages: specialist referrals (SR): number of referrals/patient/year; HBP screening (HBPScr) and HBP control (<140/90mmHg) (HBPCon); DM screening (DMScr) and DM control (HbA1c<=7%) (DMCon); use of evidence C medicines (ECM). The data were extracted from the electronic medical records and from the GAIA programme (pharmacology information system of the local health department). We assigned a score to each indicator depending on its importance (total score: 70 points). After the initial assessment of the year 2009, the data were presented within the HCC at the beginning of 2010 aiming at taking measures for an improvement in 2010.

**Results**: Data 2009-2010 by each practice regarding total score and SEP/point: P1: (65.41-64.26 points); (3.66-3.44 euros). P2: (49.86-51.74); (6.59-6.21). P3: (50.56-50.03); (8.41-7.85). P4: (64.51-68.45); (4.85-3.72). P5: (42.95-42.6); (9.88-9.76). P6: (56.11-56.72); (7.09-5.98). P7: (53-51.66); (8.24-8.05). Mean SEP / point of the HCC: 2009: 6.96 euros (maximum 9.88; minimum 3.66). 2010: 6.43 euros (maximum 9.76; minimum 3.44).

**Conclusions**: We can observe an improvement of the efficiency in 2010. There are big differences of the expenditure generated by the practices of our HCC. The two practices with the best score are also the ones to have the littlest SEP. These differences depend on the health care professional responsible of each practice. The public health care managers don't assume the control of these differences.

### "I'm hypertensive"

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Objectives: Determine how the hypertensive men are controlled under 55 years in our health area.

Materials and methods: Research descriptive, transversal and observational. We selected from among 10.234 male of our health center, those under 55 years with a diagnosis of arterial hypertension(AHT) from the database of medical records. We exclued those pacients didnt go to the consultation from the last 5 years. We used the following variables: age, cardiovascular risk factors (diabetes, dyslipemia, tobacco, over 30 body mass index (BMI) and previous cardiovascular events), analytical and blood pressure control in the last year, if they took the treatment and periodic blood pressure control in our health center.

Results: We found 155 males under 55 years old diagnose of AHT. Of them, had diabetes 12.9%, dyslipemia 29.7% cardiovascular risk factor 7.7%, BMI over30 30.9% and smokers 23.9%. Note that in over half of the patients was not registered their BMI or smoking habits. In the last year the 52.9% of them had analytical control and blood pressure control 60%. Of this 60%, the 3% had borderline blood pressure and the 45.16% had values over 140/90. Only the 9% of hypertensive men less than 55 years old didn't have anti-hypertensive treatment. The 19.4% of pacients had a pressure-control every two months at the health center.

Conclusions: Arterial hypertension is one of the modifiable cardiovascular risk factors more prevalent in the population. It's associated to high morbidity and mortality especially in developed countries. Although it is an asymptomatic disease and easy to detect, presents serious and deadly complications if not treated properly.

Despite the risk associated with an elevated blood pressure, only the 60% of the pacients had blood pressure control in the last year and, of these, the 45.16% had over 140/90 blood pressure. A 9% did't have treatment despite having been diagnosed with arterial hypertension. We try to achieve a better control of these patients because we have the means to improve the quality of life and survival of them.

### P05.106

Perception of urgency of emergency service physicians about patients who applied to emergency department

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**Introduction:** In the literature, emergency department applications with non-urgent complaints distributed a wide range (% 7-94). This is because there is no standart in terms of perception of urgency and adequate coordination between primary care physicians and patients. In our study, we researched perception of urgency of physicians in charge of pediatric emergency ward about the patients who applied to emergency service.

Material and Methods: The study was performed on physicians whom are in charge of GMMF Pediatric Emergency Service. Physicians were asked to filled out a questionnaire, regarding perception of urgency, about parents who applied to emergency service for their children. Questionnaire included how much time passed from the beginning of complaints, waiting time of patient in the emergency room, decision after examination and cause of the patient to come to the emergency room.

Results: 45.5% of parents who applied to emergency service for their children (n=341) expressed that complaint of their children

continued for 12-24 hours. Patients mentioned crowded out-patient clinics as the most common cause of application to emergency service. Physicians reported that 67.3% of patients (n=505) could be waited for examination safely untill the next day. They sent 34.4% of them (n=258) home with proposals, administered symptomatic treatment to 27.7% of them. Only 12 patients (1.6%) were hospitalized.

**Conclusion:** In a study, the inappropriate application rate, in terms of urgency, was found 32.2%. This rate was higher in our study. We evaluate that this rate will decrease if primary care services are made more effective.

#### P05.107

"Incidence of hypothyroidism in our health area"

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Objectives:Research the incidence os hypothyroidism in our healt area.

Materials and method:Research descriptive, longitudinal, observational and retrospective. We used the database of our hospital medical records (19.260 pacients) to study the new episodes detected between 01/01/11 and 01/09/11. We discovered 126 new cases. We used the following variables: sex, age, functional patology (disease of Hashimoto, subclinical Hypothyroidism, clinical hypothyroidism and normal), reason of te consultation (by casual or analitical signs and symptons or by previous diagnosis of other service), analytical to the diagnosis, THS and T4 free values at diagnosis; and antithyroid antibodies.

Results:We found 126 new pacients diagnoses of hypothyroidism with and incidence of 0.007%. With a mean age of 48 years, 57.1% women of the total. The diagnosis was at 72.2% casual or by an analytical requested for another reason, in 15.9% per clinic, in 8.7% per hospital diagnosis and in 3.2% no record. 69% was classified as subclinical hypothyroidism, 19.8% as clinical hypothyroidism. 6.3% as autoinmune and 4.8% was not yet confirmed. The antithyroid antibodies was positive at 11.1% and the antimicrosomal at 13.5%.

Conclusion: Highlights the importance incidence of this pathology in our area (0.007%), being more frequent in females. We have seen a decline in age at diagnosis due to an increase in the practice of preventive medicine.

#### P05.108

Correlation between glycemic categories and long term CVoutcomes in diabetic patients after ischemic stroke

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#### Aims

Diabetes is well recognized as a major risk factor for the development of stroke. Hyperglycemia is prevalent in the early phase of acute ischemic stroke and is associated with worse neurological outcome and increased stroke mortality. The aim of the present study is to assess the significance of a selection of admission and during hospitalization glycemic indices in the prediction of neurological outcome among diabetic patients that suffered ischemic stroke (IS).

### Methods

The study population consisted of 212 consecutive, patients with type 1 or 2 diabetes admitted between January 2008 and August

2009. Neurological examination was developed according to NIHSS. Improvement of neurological outcome was considered a modification of equal or less than 4 points in NIHSS. Logistic regression analysis was conducted in order to investigate how accurate improvement in neurological outcome can be predicted by admission plasma glucose concentration (APG), fasting plasma glucose concentration (FPG), postprandial plasma glucose concentration (PPG), glucose spikes (GS), glycosylated hemoglobin (HbA1c) and diabetes duration in years, for discharge, in a 3 month, 6 month and 12 month period of time accordingly. Results

For discharge diabetes duration (OR=0.93 95% CI: 0.89-0.98, p=0.005) was the only significant predictor of outcome.In 3 months significant predictors of outcome were diabetes duration (OR=0.91 95% CI: 0.86-0.96, p=0.001) and HbA1c (OR=2.72, 95% CI: 1.27-5.83, p=0.01). In 6 months significant predictors of aggravation were diabetes duration (OR=1.08 95% CI: 1.01-1.15, p=0.012) and APG (OR=1.01 95%CI: 1.00-1.03, p=0.039).In 12 months APG (OR=1.01 95% CI: 1.00-1.03, p=0.018) and HbA1c (OR=1.76 95% CI: 1.06-2.91, p=0.027) predicted significantly the outcome. Conclusion

Hyperglycemia worsens the neurological outcome of IS diabetic patients. Each glycemic index corresponds to a significant predicting factor in a different time period. Diabetes duration in addition to its recent prior regulation as expressed by HbA1c contribute critically to the prognosis of IS in diabetic patients. Long diabetes duration predicts negative outcome of IS at discharge, in the3rd and 6th month. HbA1c is a significant predictor of neurological outcome in 3 and 12 months. APG appears to have an important effect on the prognosis of IS in the 6th and 12th month.

#### P05.109

Characteristics of bone mineral density of lumbar spine and femur in healthy men at one hospital in Korea

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**Background**: As the prevalence of osteoporosis in men are increasing, the mortality and morbidity of fracture is higher than in women nowadays. But there are few studies about BMD in Korean men. So we measured BMD at lumbar spine and femur to find the difference and discordance rate between lumber spine and femur with age.

**Method**: From January 2002 to May 2010, we measured height, weight and BMD of different skeletal sites by DEXA in 314 subject at one hospital. The subjects had no history of diseases and fracture. Factors affecting BMD was analyzed via ANOVA, Chi square test and Pearson Correlation.

**Result**: The BMD of L1, L2, L3, L4, Femur neck, Ward triangle, and Trochanter was 1.003±0.160, 1.086±0.175, 1.137±0.182, 1.180±0.193, 0.935±0.133, 0.740±0.163, and 0.819±0.113, respectively. The prevalence of osteopenia and osteoporosis increased with age. L2 spine and any site of femur showed negative correlations with age. The discordance rate between lumbar spine and femur was 43.9%. The BMD of L3, L4 spine was low in smoking men.

**Conclusion:** The BMD of L2 spine and all sites of femur decreased with age, but other lumbar spine showed no correlations because of higher osteophytes in men. The prevalence of osteoporosis was highest in their 70's. Diagnostic rate by femur increased with age. So it might be useful to check BMD over 70, and to monitor BMD of femur with increasing age. The BMD of lumbar spine was low in smoking men.

Key word: Bone mineral density, Osteoporosis, Lumbar, Femur.

#### P05.110

A retrospective research about child abuse and neglect on 18-24 years old university students in Ankara

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World Health Organisation (WHO) defines "child abuse" as conscious or unconscious behaviours made by an adult, society or country and negatively affects a child's health, physical and psychosocial development; and defines "child neglect" as unfilled needs of a child for health, physical or psychosocial development. In United States, 3 million reports of child abuse are made in a year. Approximately 3,3 million child abuse reports and allegations concerning 6 million children were made during 2009. Every day, more than five children die because of child abuse. There may also be delayed effects of childhood abuse. Up to 30% of parents who who were abused and neglected in their own childhood, will later abuse their children. Childhood abuse and neglect becomes one of the important causes of psychological disorders. About 80% of 21 year olds that were abused as children met criteria for at least one psychological disorder. Also there are many financial issues concerning treatment, rehabilitation and follow up studies. Child abuse and neglect is a very important issue in Turkey because of the diagnosing difficulties, the lack of statistical data and epidemiologic factors. Prevention from abuse needs the organization of the efforts of health workers, especially the doctors and also many people from different occupations. It is an important point to improve the knowledge and skills of the primary health care personnel about the diagnosis, treatment and prevention of child abuse.

In this study we used the ICAST-R ("retrospective") instrument that is spesifically designed for young people aged 18-24 years and a The International Society for Prevention of Child Abuse and Neglect (ISPCAN) has created this research instrument with the help of UNICEF and the Oak Foundation for collecting data about all forms of violence against children. We translated the questionnare into Turkish and tested reliability and validity of the instrument. In the study we apply this instrument to university students in Ankara aged between 18 and 24 along with a questionnarie about socio-demographic factors. Results will be announced at WONCA Europe Conference 2012.

### P05.111 Home care in disabled patients

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### OBJECTIVE

To describe the management of disabled patients at home, made in primary care, assessing care and procedures applied and determining clinical situation of patients.

# MATERIAL AND METHODS

We obtained the list of patients and reviewed electronical clinical records, during three years, to characterize patients and study the professionals involved and the procedures applied. We also obtain gender and relationship of main caregiver. As outcome variables, we studied functional scales applied to patients, hospital admissions and emergency department attendance, as well as deaths.

# RESULTS

We included 155 patients, 76.1% women. Their average age was 83.2 years (standard deviation SD = 10.5). The diagnosis most frequently associated with disability was arthritis (58.7% of diagnoses), followed by dementia and other neurological disorders.

The average home medical consultations rose from 1.27/patient (SD 1.77) the first year, to 1.82 (SD = 2.21) the latter. Nursing visits went from 9.06 (SD = 19.64) to 10.40 (SD = 14.59) and the social worker made between 0.10 and 0.18 visits / year. The most frequent nursing activities were cures, the monitoring of hypertension or diabetes, and administration of injectables and vaccines.

The 85.4% of caregivers were women. 38.2% of caregivers were daughters/sons, 26.0% were paided external caregivers, and only 13% were couples.

The average number of Barthel test made was 0.79 tests / patient (SD = 0.55), with an average score of 38.95 (SD = 27.99), a severe level of dependence. The average number of Pfeiffer test was 0.63 / patient (SD = 0.54), with a mean of 3.99 errors (SD = 2.99), 34.6% of patients had a deficient intellectual functioning.

The annual rate of hospital admissions was 0.47 / patient. The emergency department attendance rate was 1.39 / patient, and the annual rate of deaths was 0.13. There were no differences among the three years studied.

### CONCLUSIONS

We've got an increase in consultations and activities of medical and nursing staff year by year, but this fact didn't mean a minor rate of hospital admissions, emergency

department attendance or deaths. The patients show cognitive deficits, and a severe level of dependence.

#### P05.112

# Prevalence of non-urgent consultations at Accident and emergency (A&E) department of a tertiary Hospital

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**Background**: Inappropriate use of public emergency services is inefficient, costly, and wasteful for the patients, the payers, and the delivery system. Nevertheless, it is well documented that emergency rooms are over-used for non-urgent health needs that could be more appropriately addressed in a primary care setting.

Aims and objectives: To determine the extent of non-urgent visits and consultation activities at the Accident and emergency (A&E) department assessed by nurse triage using the Manchester triage system (MTS).

Methods: This is a retrospective descriptive study uundertaken over 12 months between January 1, 2010 and December 31, 2010 on patients (adults and children) that presented the busy inner city A&E department of Ramon y Cajal University Teaching Hospital, Madrid Spain. Patients characteristics, selected flowcharts, discriminators, and urgency category were recorded in the MTS. Selection of a discriminator indicates one of the five urgency categories, with a maximum waiting time ("immediate" 0 minutes, "very urgent" 10 minutes, "urgent" 60 minutes, "standard" 120 minutes, and "non-urgent" 240 minutes).

Results: Nurses triaged 133,310 patients using the MTS, where 57% of patient were given triage category standard, followed by 32% as urgent, very urgent 9 %, non-urgent 1% and immediate 0, 8%. The most frequent presenting complaints were: worried patient (14%), leg swelling (13%) and abdominal pain (8%). Commonly used general discriminators were pain discriminators (33%), recent problems (17%), recent injury (6, 3%) and fever discriminators (1%); commonly used specific discriminators were increased work of breathing (3%), history of red eye (3%) and persisting vomiting

(1%). High ER visits were considered in the month of May 9% (n= 12038) and March

8, 8% (n= 11,739), whereas the least visited month is august with 7, 3% (n= 9799).

**Conclusions**: Most of the patients triaged as standard and nonurgent level that attended A&E department could have been treated in a general practice setting, considering them less likely to receive an investigation, minor surgical procedure, or referral. The A&E department is not an ideal place for practicing primary care.

#### P05.113

# Medical staff satisfaction in primary health care services in

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Background: Staff satisfaction is a key prerequisite of quality of care. Different studies have evidenced the positive associations between staff satisfaction and patient satisfaction with the quality of medical care. Our aim was to evaluate the satisfaction of medical staff working in primary health care settings in Kosovo.

Methods: A survey was conducted in January 2011 in Gjilan Region, Kosovo, including all family doctors (n=35), general practitioners (n=41) and nurses (n=66) working in primary care services. All participants were face-to-face interviewed using a questionnaire containing 10 structured questions (each of them using a 5-item scale where 1 stands for "poor or totally disagree" and 5 for "excellent or totally agree") and four open questions, tapping different aspects of satisfaction at workplace.

Results: 48% of participants rated the respect shown toward them from their colleagues as "excellent", whereas only 16% were very satisfied with the equipment available to them. Furthermore, 40% of participants reported that the moral of the medical staff is excellent and 30% think that working conditions have improved compared to one year ago. One in five participants were extremely stressed during working time and only 2% of participants totally agreed with their current salary.

Conclusions: Medical staff in Gjilan Region in Kosovo needs motivation and financial incentives in order to improve the quality of care and to cope more effectively with stress. These findings should be carefully addressed by policymakers in transitional Kosovo.

#### P05.114

# Intervention in the community to increase use of the correct technique for hand washing

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- 1. INTRODUCTION: Modern medicine is very technical and oriented to the diagnosis and treatment of diseases. Nevertheless given that lifestyles are the most important health determinants it seems sensible to invest more effort in promoting health and the prevention of disease through health education. When targeted at groups this is a low cost, high impact activity. We have worked on Hand Hygiene to avoid the transmission of infectious diseases.
- OBJÉCTIVES: Educate the community about the importance of Hand Hygiene by working with children and adults. • Extend the use of the correct Hand Hygiene technique supported by the WHO.
- 3. METHODOLOGY: We designed three types of intervention: Workshops in ten schools involving 304 children and 46 teachers. A workshop for female caregivers (24 participants). An information point in a rural health centre (57 participants). The importance of Hand Hygiene was explained them with an age relevant Power Point presentation, then with the help of a fluoroscope and demonstration gel we showed how usual handwashing was deficient on some parts of the hands. Then we showed them the correct technique and practiced it with them. The parents of the children and adult participants answered a preintervention survey on what they knew and the parents subsequently assessed the impact of the activity on the children.
- 4. RESULTS: Before the educational intervention, half of all respondents said they were aware of the existence of this technique but over 90% did not know how it should be done. They were unable to correctly identify the moments of everyday life in which there is risk of transmission of infectious diseases. The event had great impact on the children who began to change their habits with regard to Hand Hygiene.
- 5. CONCLUSIONS: It is a cheap and simple technique that avoids up to 80% of the transmission of infectious diseases and brings major benefits to society as a whole. Physicians and other primary health care workers have a wide range of tasks in Health Promotion.

#### Ischemic heart disease and metabolic syndrome

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Ischemic heart disease (IHD) includes a few entities, which are manifested as coronary syndrome, caused by different levels of myocardial suffering. IHD is often related to metabolic syndrome (MS), which is defined as cardiometabolic syndrome. The aim of the study was to investigate the frequency of IHD among the subjects with MS, to determine the correlation between waist girth (WG) in people with MS and body mass index (BMI). Material and methods: Anthropometric measurements and biochemical analyses were done during the examination. The group was formed, based on the criteria for MS, from which the sample of subjects with MS and IHD was selected. The study excluding criterion was verified diabetes. Results and discussion: The investigation included 42 subjects with MS: 24(5,14%) females and 18(42,86%) males, average age 57,88±12,79. The incidence of IHD was 16(38,1%). Subjects with IHD and MS were divided into groups, based on BMI: n1=3, n2=3, n3=8, n4=2. There were no subjects with the extreme obesity (n5=0). Parametric ANOVA was used for statistical analysis; Femp=3,8; F3,12(0,05;0,01) =3,49;5,95; p 0,05, which resulted in significant statistical difference in WG values related to BMI in people with IHD and MS.

Conclusion: There is a significant frequency of IHD among people with MS. The incidence of IHD is dependent on WG. WG and obesity are statistically significantly related within people with IHD. Key words: coronary syndrome, metabolic syndrome

# P05.116

# Ambulatory monitorization of blood pressure in a health primary center

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Aim: Validation of utility of M. A. P. A. as a tool for detection of white coat hypertension, evaluation of treatment refractary hypertension and knowledge of circadian rhytms.

Materials and Methods: We have a population sample of 7.359 patients with hypertension prevalence of 18% (1.322). We conducted a descriptive study by use of Holter Cardioline Walk 200b, and treating data obtained with the ABPM Cube Cardioline Software, following the recommendations of the E. S. H. 2.007. We studied a total of 37 hypetensive within a period of 8 months, making measurements during 24 hours, every 15 minutes during the day and at 30 at night, adapting to the labor rotation of the workforce.

Results: The age of the studied population is 23-64 years. With respect to sex, 63% men and 37% female. The circadian pattern obtained was 34% dipper, 47% non dipper and 19% riser.

Conclusions: The predominant pattern is not dipper. We detect 4 cases of white coat hypertension, 21 of the patients were being treated with triple therapy, and 16 present injury in target organ. So, the determination noninvasive monitor convenience and choice treatment facility of computer data, we think the M. A. P. A. a technique that should be available to all Family Doctors.

#### P05.117

# The effects of smoking on RDW levels and metabolic syndrome parameters in healthy young males

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**Background:** Smoking is a well recognized risk factor of cardiovascular diseases which is associated with increased cardiovascular mortalite. RDW is a parameter of complete blood count that has been reported to be associated with cardiovascular events indepented anemia in patients. The aim of this study is analysis the effect of smoking on RDW levels in healthy young adults.

**Methods:** A total of 105 (smokers (n=69) and non-smokers (n=36)) healthy young male participants were included into this cross-sectional study. Complete blood count, total cholesterol, LDL, HDL, triglyceride, fasting blood glucose, serum creatinine, uric acid, ALT, AST levels were determined using a multichannel analyzer. Systolic and diastolic blood pressures were measured manually. All parameters were compared in smoker and nonsmoker groups.

**Results:** Demographic features (age, sex, BMI) and anemia parameters (hemoglobin, serum iron, vitamin B12, folic acid) was similar in each group. Metabolic syndrome parameters; fasting glucose, trigliserid, HDL, waist circumference, systolic and diastolic blood pressure levels, were similar and there were not significantly difference among the groups (p>0.05). Total cholesterol and LDL were significantly high in non-smokers but these were statistical difference, not clinical. RDW levels were significantly high in smokers (58,25 $\pm$  4,12 in smokers, 55,41 $\pm$  6,04 non-smokers, p < 0,05). Percent of RDW was high in smokers group but there was not a significant difference between groups (%15,04 $\pm$  1,14 in smokers and %14,67 $\pm$  0,85 in non-smokers, p: 0,09). In pearson corelation test, high percent of RDW (>15) is associated with smoking (%72,2 smokers, %27,8 non-smokers, p < 0,05).

**Conclusions:** Cigarette smoking may affect RDW levels in healthy young subjects so that this early effect may associated with cardiovascular events in future.

Table 1: Baseline characteristics of each groups.

	Smokers	Non-smokers (	Р
	(n=69)	n=36)	value
Age , years	23,68± 3,69	24,16± 4,26	NS
Body mass index, kg/m2	23,05± 3,26	23,62± 2,61	NS
Waist circumference, cm	83,50± 8,54	85,75± 9,16	NS
Systolic pressure, mmHg	115,43± 11,36	114,16± 10,58	NS
Diastolic pressure, mmHg	75,79± 10,02	72,50± 8,40	NS
Fasting Glucose, mg/dl	85,66± 10,68	88,97± 9,03	NS
Serum Creatinine, mg/dl	0,85± 0,12	0,86± 0,13	NS
Uric acid, mg/dl	5,23± 1,05	5,16± 1,11	NS
AST, U/L	24,47± 11,31	23,52± 5,59	NS
ALT, U/L	24,44± 12,81	24,38± 10,66	NS
Total cholestrol, mg/dl	148,52± 32,24	166,22± 36,80	0,012
Triglycerides, mg/dl	118,17± 94,11	102,72± 46,55	<0,001
HDL cholesterol, mg/dl	38,91± 7,09	39,36± 6,49	NS
LDL cholesterol, mg/dl	92,65± 29,99	123,06± 37,91	NS
Serum iron, g/dl	93,10± 36,69	92,11± 38,99	NS
Serum folic acid, ng/ml	6,82± 2,15	7,09± 2,20	NS
Serum vitamin B12, pg/ml	282,11± 74,01	283,59± 96,57	NS
Hemoglobin, g/L	15,51± 1,18	15,05± 1,12	NS
Red cell distribution width (%)	15,04± 1,14	14,67± 0,85	0,09
RDW, fl	58,25± 4,12	55,41± 6,04	0,005

Table 2: Comparison of RDW in smoker and nonsmoker groups.

	RDW <%15	RDW >%15	P value
Smokers	36 (%52,2)	33 (%47,8)	NS
Non-smokers	26 (%72,2)	10 (%27,8)	0,047

#### Monitoring of thyroid dysfunction in primary care for 5 years

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Aim: To determine the prevalence of thyroid dysfunction in the population assigned to a Family Doctor, in semi-urban habitat and mountainous area.

Materials and Methods: We studied a population sample of 1.674 people enrolled in the quota of that G. P. A timely determination praticed between individuals who come to see for any reason, determining TSH; in case of resulting altered, the reference laboratory measures levels of T3, T4 and anti-thyroglobulin and anti-peroxidase. In case of alteration of TSH measurements were performed every six months during the years 2.005-2.010.

Results: Of the 347 tests performed subclinical hypothyroidism was detected in 42 patients. Hyperthyroidism in 5 patients. Goitre is palpable in three patients. Ultrasound studies and P. A. A. F., we obtain the following results: a) A case of follicular thyroid carcinoma in female patient, 39 years old. b) A case of medullary carcinoma in female patient, 62 years old. c) A simple case of colloid cyst in female patient 32 years old.

Of the 42 patients with subclinical hypothyroidism, have evolved lowing frank hypothyroidism, 13 patients, which figures have been normalized TSH at doses of L-tiroxine from 50 to 200 mcg/ day. Conclusions: Thyroid dysfunction, mainly hypothyroidism subclinic are common in our environment. We follow the recommendations of the request of TSH marked by the Clinical Guidelines, request access to ultrasound and P. A. A. F. (in case of being specified) is optimal in our referral hospital report of outcomes in terms not exceeding 10 days.

#### P05.119

Infections of urogenital system - an important factor of male infertility - detection of responsible pathogenic microorganisms (polycentric study)

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Purpose: To investigate the genitourinary tract infections as factors of male infertility, and isolate - identify the responsible microorganisms.

Methods: Our study was based on semen culture results of 128 men aged 27 to 48 years who were examined at hospitals of Kastoria and Katerini, whose semen analysis demonstrated infertile sperm. All of our samples were cultured the usual culture media, while for the identification and susceptibility testing in routine antibiotics we used the method of Kirby-Bauer, and checking for the presence of Ureoplasma Urealyticum (Uu) and Mycoplasma hominis (Mh), we used the Mycoview Test .

Results: Of the total of 128 cultures, 102 (79.7%) were positive, while 26 (20.3%) were negative or sterile. In order of frequency and development in the relevant cultures, the following microorganisms: In 36 (35,3%) Uu, at 24 (rate 23,5%) Gram (-) bacteria, 22 ( 21,6%) enterococcus faecalis , and 10 ( 9,8%) staphylococcus spp, while only 2 cultures (about 2%) revealed fungi, streptococcus spp, anaerobic, gardnerella vaginalis and Mh. Conclusions: Therefore, infections of the urogenital system is for men a very common and important infertility factor, which certainly should not skip our attention. It is apparent from the above that the relative microbiological control is required in all such cases. As

shown by the results of our study, the Ureoplasma Urealyticum, is the most common pathogen microbe among infertile men.

#### P05.120

Effects of I-carnitin administration in the values of cholesterol, triglycerides and lipoproteins of patients with dyslipidemia

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Dimitrios" of Thessaloniki, Thessaloniki, Greece.

Purpose: To investigate a possible reduction in serum values cholesterol, triglycerides and lipoprotein A in patients diagnosed with dyslipidemia, after chronic administration of L-carnitine.

Methods: 76 patients, (32 men and 44 women, mostly obese) suffering from dyslipidemia, were selected in this study, because of the presented increased levels of lipoprotein A [Lp (a)] since it is known, that it is an independent cardiovascular risk factor, and according to several randomized trials it is an important predictor of atherosclerosis. In all patients, L-carnitine was administered at a daily dose of 2 gr, for four months without any other modification of existing treatment, while both at baseline and after a period of 4 months period of the L-carnitine administration, the patients lipidemic profile was checked. There followed a statistical study of results, based on the use of the statistical package SPSS.

Results: Regarding the values of total cholesterol, HDL, LDL-cholesterol and triglycerides even though individual improvement of values were observed (the most important concerning the levels of HDL-cholesterol) none of these improvements were statistically significant. However, concerning the levels of Lp (a) the improvement of the value was statistically significant (p <0,005) in the majority of patients treated with L-Carnitine (67 from a total of 76 individuals in our study). Reduction, which on average was measured at 10.7% of their original value.

Conclusions: Therefore the administration of L-carnitine is useful for the prevention of atherosclerosis (cardiovascular disease), particularly in patients with elevated levels of Lp (a), as often occurs in obese individuals.

# P05.121

Characterization of patients who did not resort to primary health care in 2009

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Introduction: Patients who do not use health care are a challenge in clinical practice. This work aims to characterize the patients who did not attend to health care in our Family Health Unity in 2009 and identify possible causal factors of non-use, in order to promote reformulation of the clinical practice and increase the satisfaction. Methods: This was an observational, descriptive and cross-sectional sample of non-users of our primary health care unit in 2009. Data were obtained, consulting SAM's medical files and analyzed with SPSS ®.

Results: Sample of 259 patients, 60.2% male, mean age 33.9 years and 60.2% (n = 156) belonging to households of 3 - 4 elements. With regard to marital status only 7.7% of users had this information, 75% (n = 15) of witch married; 15.4% had educational level information, 27.1% with four or less years of schooling. Before 2009 they had an average of 8.6 visits, and 46.7% (n = 12) of this patients never had missed any appointments and 27.4% (n = 71) only missed one. The vaccination was actualized at 73.7% of patients (n = 191), 37.8% (n = 98) had diseases registered: tobacco abuse [35.7% (n = 35)], changes in lipid metabolism [13.3% (n = 13)] and obesity / overweight [19.3% (n = 11 / 8)]. About 40.5% (n = 105) had already consulted in 2010 and 10% (n = 26) had scheduled another appointment in 2010/11.

Discussion: The non-users of primary health care of our Family Health Unity in 2009 were mostly male, mean age of 33 years, married, from households of 3 to 4 elements, with four or fewer years of schooling, which had consultations prior to 2009. The vast

majority had national vaccination plane updated. Almost 40% had pathologies registered, most related to tobacco abuse, altered lipid metabolism, obesity or overweight. The use was not very different for the different doctors. This allows us to determine the profile of the non-user and if it's related to absenteeism and thus improve accessibility and care, especially among risk groups.

#### P05 122

# Therapeutic inertia in arterial hypertension

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Objetive: Study the therapeutic inertia in hypertension based on the results of 24-hour ambulatory blood pressure monitoring test. Material and methods:

Design: Descriptive study.

Setting: Primary care health center.

Participants: All patients who were tested with a 24 hour ABPM test during a period of 18 months, requested by general practitioners.

Measures: purpose of request, results, therapeutic attitude, therapeutic inertia.

Taking into account the recommendations of the hypertension guidelines of the ESH/ESC based on the severity and the presence of other cardiovascular risk factors (CVRF) and target organ disease.

Results: A total of 281 24 hour ABPM tests were analized, average age 63 years old, 13,5% with 2 or more CVRF, 23 % with target organ disease. 29,5% of the tests were requested for diagnosis, being 66% positive in hypertension, not starting any treatment in 49% of the patients. 69,5% of the tests were requested for treatment control , with patologic results in 71% of the patients, not making any changes in the treatment in 33% of the cases. Taking into account the recommendations of the ESH/ESC, having no therapeutic change on the 53% of grade I hypertension and in 8% of grade II hypertensions. Pointing out the therapeutic inertia on patients with more risks, 53% of grade I hypertension with 3 CVRF or target organ damage.

Conclusions: A significant therapeutic inertia in the treatment of hypertension. 50% of the patients who were diagnosed on hypertension did not receive any pharmacologic treatment. In 1 out of 3 patients who had poor controlled hypertension ,treatment was not modified. Emphasizing therapeutic inertia on hypertension grade I-II with 3 CVRF or target organ disease.

### P05.123

Investigation of the prevalence of HIV in blood donors population of the prefecture of Kastoria the last 12 years

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**PURPOSE:** To record the prevalence of HIV in blood donors population of the prefecture of Kastoria the period from 1/1/2000 to date

**METHOD:** We studied the data file section of Blood Transfusion Kastoria, which related to review 34,340 donors. These were volunteer blood donors at the hospital to donate blood within the family or friends, and volunteer blood donors of different clubs in our county. The determination of antibody immunodeficiency virus type HIV-1, 2 was put by the micro particular immunosorbent method, with confirmation of positive samples was the National AIDS Reference Center of Northern Greece with the method Western Blot.

#### RESULTS:

YEAR	NUMBER donation	POSITIVE SAMPLES (ELISA)	CONFIRMATION OF WESTERN BLOT
2000	2977	0	0
2001	3289	1	0
2002	2914	6	0
2003	3035	7	0
2004	3028	5	0
2005	2873	8	0
2006	2900	11	0
2007	2638	6	0
2008	3200	6	0
2009	2840	9	0
2010	2559	8	0
2011 (to 10 / 9)	2087	4	0

**CONCLUSIONS:** Although the period covered by our study was large enough, however, there was finally no positive sample, as all samples positive by ELISA in our hospital (total 71), proved that they were all negative by Western Blot in Reference Center for AIDS. Of course, the very positive fact that in no case justify our complacency. On the contrary, it is our duty to be vigilant, with both continuous public information and the correct history taking and exclusion from blood donation of persons belonging to risk groups in order to ensure a possible safer source of blood for transfusion.

### P05.124

Therapeutic attitude in hypertension based on the results of 24 hour ambulatory blood pressure monitoring test

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Objective: To know the therapeutic attitude in hypertension based on the results of 24 hour ambulatory blood pressure monitoring test (ABPM test).

Material and methods:

Design: Descriptive study.

Setting: Primary care health center.

Participants: All patients who were tested with a 24 hour ABPM test during a period of 18 months.

Measures: request of the test, results, therapeutic attitude: start treatment, change of dosis, associate other medicament, change of medicament; and the use of monotherapy or combinations.

Results: number of participants: 281 people. Average age 63. 53% women. 13,5% of the patients have 2 or more cardiovascular risk factors (CVRF), being the most frequent hypercholesterolaemia (36%) and diabetes (17,5%). 23% have hypertensive complications, being the most frequent isquemic cardiopathy (8%) and stroke (4%).

30% (84 patients) of the tests were requested for diagnosis and the other 70% (197 patients) for control. Hypertension was confirmated in 66% of the patients of the first group, pharmacologic treatment was provided to 51% of the patients, the most frequent treatments were: diuretics (37%), ACE inhibitors (33%) and Angiotensin II receptor blockers (10%).

Of the 197 24 hour-ABMP tests requested for control there were 71% patologic, modifying the treatment in 65%: a new drug was added in 34%, increasing dosis in 14% and modifying the drug in 4%.

Classifying hypertension in function of the severity and presence of CVRF or target organ disease there was not modification on the therapy in 53% of the hypertension grade I with 3 CVRF or target organ disease, and in 17% of the hypertension grade II with the same characteristics and poor control of hypertension.

Conclusions: Only 50% of the patients who were diagnosed on hypertension started pharmacologic treatment, monotherapy in

most of the cases. The most frequent therapeutic attitude in poorly controlled hypertension was to add another drug. High proportion of therapeutic inertia in poorly controlled hypertension.

#### P05.125

Investigation of the problem of aging population in donors responsibility of blood transfusion department of General Hospital Kastorias during the last decade

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**Objective:** To investigate and assess the extent, of the possible blood donors aging problem in Kastoria, through the data study from blood donation campaigns conducted by our hospitals Department of Blood Transfusion in Kastoria, during the last decade. This is one of the major problems for blood donation in our country, with significant impact on the adequacy of blood, the needs of which are increasing over time.

**Methods:** We investigated, 164 voluntary blood donation campaigns conducted by our Blood donation department, during 2001-2010, which involved the collection of 3821 units of blood.

**Results:** The response of our county residents in blood donation campaigns in the last decade, with emphasis on young blood donors, aged 18-35 years was as follows:

	2001	2002	200 3	2004	2005	2006	2007	2008	2009	201 0
Total trips	13	10	15	14	12	16	18	21	19	26
Total Units of Blood	373	227	309	333	331	446	355	386	506	555
Total Blood	198	176	187	182	194	285	274	287	365	318
New-age donors	23	19	16	25	26	36	39	41	63	54
Percentag e% of young donors	11.6 %	10.8 %	8.6 %	13.7 %	13.4 %	12.6 %	14.2 %	14.3 %	17.3 %	17 %

Involved, ie, a total of 2466 volunteer blood donors. while 342 of them were aged 35 years, so it is for young donors. Indeed, 125 of them (36.5%) was proved, by the forms they filled, that they donated blood for the first time to volunteer campaigns.

Conclusions: In contrast to the aging of the Blood donor population in our country,in our prefecture of Kastoria appears to be the opposite: we say a small but steady, and promising increase for the future of blood donation. The fact is attributed both to the good cooperation between the Board of donations and corporations or associations. The fact is that there a strong presence in the local community with many activities, for the general population, that increasingly raise the issue of blood donation, awareness and consistent responsible informing conserning matters of blood donation, and aiming to emphasize and encourage, especially young people, to volunteer more frequently.

#### P05.126

### Has been efficient our type 2 diabetics control?

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Introduction: Type 2 Diabetes (DM2) is a risk factor of cardiovascular disease, being the most common form of diabetes, accounting 90% of the cases. It is consensual that a better glycemic control, translated by a glycosylated haemoglobin

(HbA1c) level less than or equal to 6.5% is essential in the decrease of macrovascular and microvascular complications associated with diabetes.

Purpose: Evaluate the presence of macro and microvascular complications and other cardiovascular risk factors (hypertension, dyslipidemia, overweight or obesity and smoking) and treatment carried out in controlled patients with DM2.

Methodology: It was performed a cross-sectional and descriptive study about followed and controlled patients with DM2 registered in the health centre diabetic software in May 2011. For statistical analysis it was used SPSS ® version19.0.

Results: In the health center are followed 562 patients with type 2 diabetes, of whom 48% had a HbA1c value less than or equal to 6.5%. About 83% of the controled patients with DM2 had no macro-or microvascular complications. The most frequent complications were ischemic heart disease (11%) and peripheral vascular disease (5%). Regarding the presence of other cardiovascular risk factors, 73% were overweight or obese, 69% had hypertension and 49% dyslipidemia. About 84% of the patients were taking oral anti-diabetics agents (OAA) and 50% only received one OAA. Most patients were treated with biguanides (32%), followed by sulfonylureas (11%), only 3% of the controled type 2 diabetics take insulin and OAA.

Discussion: Results showed that although the control of patients with DM2, they still have a considerable prevalence of complications associated with diabetes. Besides that, biguanides are the most widely used group of OAA, as recommended in current standards and as verified in other studies.

Conclusion: This study shows the importance of early and ongoing work of the multidisciplinary team on the Primary Health Care in a constant struggle to control these patients and trying to prevent the onset of complications associated to DM2. It also allows a future improvement on the control of DM2 patients, through the implementation of new strategies.

#### P05.127

The prevalence of hyperglycemia and obesity in the study population in the city of Valjevo

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Background: Diabetes mellitus is one of the leading risk factors in cardiovascular diseases. Diabetics have twice the risk of premature death. Obesity is associated with hypertension, cerebro-vascular stroke and coronary heart disease.

AIM: examining the prevalence of hyperglycemia and obesity in the study population in the town of Valjevo in order to take measures to control and reduce these risk factors.

Method: The sample of 2000 inhabitants of Valjevo aged from 25 to 74 is doubly stratified by sex and place of residence (urban / rural) and evenly divided into five age groups.

Results: The prevalence of people whose blood glucose levels are 6.1 mmol / I and higher are 21.4%. The prevalence of people with blood glucose above 7 mmol / I(Diabetics) is 9, 9%. The difference in prevalence by sex is not statistically significant (p = 0.947). The difference in prevalence compared to age groups is statistically significant (p <0.001), increases with age. The prevalence of people with elevated blood glucose is significantly reduced by higher levels of education (p = 0.001). Prevalence of overweight people (people whose BMI is 30 kg/m² or more) is 20.1% (15.2% men and 24.7% women). The difference in obesity prevalence by gender was statistically significant (p <0.001). The prevalence of obesity significantly reduced by higher levels of education (p = 0.017). There is a high correlation (R2 = 0.7253) between the increase in prevalence of obesity and age.

Conclusion: The prevalence of people with elevated blood glucose and obesity increases with age, and decreases with the level of education. Elevated blood glucose and obesity are risk factors for the formation of chronic non-communicable diseases. Health activities should primarily focus on the elimination of risk factors. Achieving full health potential will be possible if the health resources rose and the health risks repressed simultaneously, and when the potentials overcome the risks.

# Control of diabetes in family medicine practice

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#### Aims

Epidemiological and pathological data documents that diabetes is an independent risk factor for cardiovascular disease. Identification of risk factors is a major first step for developing plan for risk reduction in diabetic patients in family practice.

Material & Method

This trial was conducted in Family Medicine Teaching Centre (FMTC) Tuzla and included all patients with diabetes mellitus treated by family medicine team at FMTC Tuzla (139/1919). We evaluated optimal components of diabetes control in 139 diabetic patients (49 men and 90 women).

Results

Prevalence of diabetes was 7,24%. Mean age of participants was  $65,24\pm11,65$  years. Mean duration of diabetes was  $7,51\pm6,86$  years. Significantly more women had diabetes than men (35,3%:64,7%; p<0,0001). Good glycemic control was present in only 33 (24,63%) diabetic patients and HbA1c level <7% had 58 (57,43%) patients. Mean level of fasting glucose was  $8,69\pm2,59$  mmol/l and mean value of HbA1C was  $7,04\pm1,13\%$ . Blood pressure <130/80 mmHg had 69 (52,27%) patients, total cholesterol level <4,5 mmol/l had only 25 (19,53%) patients, while 51 (40,8%) patients had triglyceride level <1,7 mmol/l. Body mass index <25 kg/m² had only 22 (15,83%) patients. Overall 99 (71,22%) diabetic patients had regular physical activity (mean was  $3,84\pm2,63$  hours per week). More than half of patients (71,95%) didn't smoke with 85 (61,16%) participants who had never smoked.

Conclusion

Results of this study showed that control of diabetes mellitus in family medicine practice was suboptimal. It indicates more effective strategies in primary health care in order to reduce cardiovascular morbidity and mortality in diabetic patients.

# P05.129 Peripheral arterial disease in diabetes

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Objective: Estimate the prevalence of peripheral arterial disease and asociated morbility in diabetic patients or smokers.

Material and methods:

Design: Descriptive study.

Setting: Primary care health center.

Participants: All patients with more than 55 years old diagnosed on diabetes or tabaquisme who were seeing in the primary care heath centre during a period of 3 months, were selected.

Measures: comorbility and cardiovascular risk factor. Calculating the coronary risk using the Framinghan score in the adaptation to the Spanish population, the REGICOR.

Degree of control of cardiovascular risk factors (CVRF). Measuring ankle/arm index using a manual doppler Multi Dopllex II with a 8Mhz sound.

Results: 162 patients, with an average age of 64 years old, being 68.5% men, 85% diabetic, 20% smokers, 54% hypertense and 51% hyperlipemic. 25% of the patients have a cardiovascular disease, specially ischemic heart disease (7%) and stroke (5%). Using the REGICOR score 66% of the patients have a light coronary risk, 30% moderate and 2% high risk. 43% of the patients have a good control of the blood pressure, 56% in the case of diabetes with HbA1c <7, and in the hyperlipemia 31,5% with cLDL <100.

The prevalence of peripheric arteriopathy with a patologic ankle/arm index was 27% (44 patients) including 6% whom cannot get satisfactory results and 2% with values of >1.4 with a

significance of not compressible arteries. 25% of the cases have intermitent claudication symptoms and the other patients silent peripheral arteriopathy. The group of patients with arteriopathy have a predominance of men (91,5%), being smokers 30% and ex-smokers 19%. The presence of cardiovascular diseases is of 43% in this group, having a moderate REGICOR score 40% and high score 4%, they have also worse blood pressure control, but better lipidic control and no differences in glycemic control.

Conclusions: The arteriopathy is a frecuent disease in diabetic patients, appearing in most of the patients in a silent form. The patients with arteriopathy have more vascular diseases and higher coronary risk. An active search is recommended by ankle/arm index especially in men, diabetic and smoker patients.

#### P05.130

# Prescription drugs in secondary prevention of ischemic heart disease in a healht center

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Objective: To compare the prescription of drugs recommended by clinical guidelines for patients with ischemic heart disease in the Health Center with the prescription in the national studies. Type of study: descriptive, observational and transversal. Scope: Primary Care.Population and sample: Health Center patients with ischemic heart disease found with the searcher ABUCASIS II program for the sections 410-414 of the ICD-9 (acute myocardial infarction and derivatives). They are located 521 stories. Measurements and interventions: the search was individualized by physician and evaluated differences in total national studies on the use of reference drugs in secondary prevention in patients with ischemic heart disease (antiplatelet agents or anticoagulants, beta blockers, statins and ACE inhibitors / ARA II). Ratios are obtained for the registration of drugs. We will use the EPI INFO and chi-square test for differences between proportions. We also evaluated the differences between professionals.Results: Mean age of the sample 73.22 years, 328 men and 193 women. The difference between the uses of drugs is favorable to the Health Center in the four drugs listed group, with significant differences. The differences between professionals also have significanceConclusions: The use of four recommended drugs for secondary prevention of ischemic heart disease is higher in the health center, but not optimal. It is important to support measures to improve the quality of prescribing and to facilitate individual information of the results.

### P05.131

### Profile of hypertensive treatment of a health center

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Objective: To evaluate the hypotensive our hypertensive therapy and the degree of control.

Type of study: descriptive, observational and transversal

Field of Study: Health Center

Population and sample: patients between 30-80 years with hypertension, selected by random number tables. 384 mined by the formula for proportions (p = 29.1%):

 $\ddot{N} = Z (p. 1-p) /. (Alpha of 5\%).$ 

Measurements and interventions: Treatment for hypertension, initial and current SBP, DBP, and initial and ongoing control of hypertension. Compared with national studies using chi-square test for proportions.

Results: Mean age of  $61.76 \pm 13.05$  years, with 191 men and 193 women. As hypertension is the average of  $8.12 \pm 5$  years and their current average TA (treated): SBP,  $135.62 \pm 15.17$  mm Hg and DBP:  $79.58 \pm 9.39$  mm Hg.

The consumption of drugs is greater in associations (especially of 2 drugs and ACE + diuretic) used the latter being significantly more about the study controlpress.

The most commonly used drugs are diuretics, ARBs and calcium antagonists. The initial mean SBP and DBP fall with treatment and 12.27 26.28 mm Hg, respectively. The degree of control (SBP <140/90 mm Hg) is higher than in the controlpress 2003 in total control and isolated systolic and diastolic BP significantly.

Conclusions: Although the degree of control is important, to improve, increase partnerships must have been a useful guide to achieve objectives in several clinical trials. We must adapt our way superior to prescription drug use increased following order of efficiency.

#### P05.132

### Hidden renal hypertensive patients of a health center

L. Rosell Panís, A. Lorenzo Piqueres, S. Martínez Parra, G. Badenes Marqués, V. Vázquez Martínez, I. Morales Pérez, M. Latorre Poveda, E. Serisa Blasco, L. Tarancon Gozalbo; Centro de salud Burriana, Burriana, Spain.

Objective: To evaluate the prevalence of renal failure (hidden and not hidden) in hypertensive patients.

Type of study: descriptive, observational and transversal.

Field of Study: Health Center

Population and sample: 384 patients with hypertension diagnosis, between 30-80 years selected by random number tables, quantified using the formula for proportions (p = prevalence of hypertension of 29.1%):

N = Z (p. 1-p) / (alpha 5%)

Measurements and interventions: Comparison variables: creatinine, creatinine clearance and glomerular seepage for the classification of the individual assessed as GFR. Find the difference between proportions by chi-square test using the EPI INFO.

Results: Mean age of  $61.76 \pm 13.05$  years with 191 men (49.7%) and 193 women (50.3%). The medium creatinine was  $0.95 \pm 0.29$  mg / dL (prevalence of 8% IR). In applying the MDRD study tables the medium glomerular filtration rate was 66.45 ml / min  $\pm$  13.63 with a prevalence of 21.35% total IR. The difference was significant at p <0.0000001, leaving the hidden IR with 82 patients (13.35%)

Discussion: The sample bias was that the population had their medical history previous, but its features are similar to those of other studies. In our setting, the diagnosis of IR creatinine review is inadequate and of low sensitivity. The MDRD study tables are effective to alleviate the problem.

Conclusions: The prevalence of kidney failure is higher using the MDRD formula, it is in the care of patients.

# P05.133

Effects of smoking on obesity in Korean men: Data analyses from the Korea National Health and Nutrition Examination Surveys (KNHANES)

#### C. Lee

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Background: To assess the cross-sectional associations between smoking and obesity in a national representative sample of Korean

Methods: We analyzed pooled data from the 3rd Korea National Health and Nutrition Examination Survey (KNHANES III) in 2005 and part of the fourth KNHANES in 2007. Height,body weight, and waist circumference (WC) were measured, and body mass index (BMI) was calculated. Age-adjusted means of BMI & WC were calculated using analysis of covariance. The associations of obesity and abdominal obesity with smoking status were examined using multiple logistic regression analysis.

Results: Age-adjusted means of BMI and WC were higher in exsmokers (N=1,206, BMI 24.4 kg/m2, WC 85.3 cm) than both in never smokers (N=725, BMI 24.0 kg/m2, WC 84.1 cm) and current smokers (N=1,570, BMI 23.7 kg/m2, WC 84.0 cm) (P<0.01, respectively). In the subjects aged 47 or older, the risk of obesity in current smokers was significantly lower than in never smokers regardless of smoking amount (P<0.01), while there were no differences in obesity risk between ex-smoker and never smoker. On the other hand, some ex-smokers who were less than 47 years old had a significantly higher risk of obesity (adjusted OR=1.56, 95% Confidence Interval [CI], 1.06-2.29 for 11-20 cigarettes per day [CPD]) and abdominal obesity (adjusted OR=2.26, 95% CI, 1.17-4.38; for ≥21 CPD) than never smokers. Current smokers aged less than 47 with ≥21 CPD had about a statistically nonsignificantly 40% higher risk of obesity and abdominal obesity. Conclusion: The current study found that male ex-smokers had a higher risk of obesity and abdominal obesity than never smokers and current smokers. However, age and smoking amount affected

#### P05.134

those associations.

Medical treatment of superficial thrombophlebitis of the lower limb: heparin or anti-inflammatory?

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### **Objectives**

The objective of this review is to clarify the best treatment for superficial thrombophlebitis (ST) of the lower limb (LL), regarding nonsteroidal anti-inflammatory drugs (NSAIDs) and low-molecular-weight heparin (LMWH).

#### **Data sources**

Pubmed database, evidence-based medicine websites, General Directorate of Health, Portuguese Association of General Practitioners, MGFamiliar.net, Index of Portuguese Medical Magazines.

# Review methods

Research of clinical guidelines (CG), Systematic reviews (SR) and original studies using the MeSH terms: venous thrombosis; heparin, low-molecular-weight; anti-inflammatory agents. The search was limited to articles published between 2008 and 2011. Exclusion criteria were: repeated articles; ST during hospital admittance; ST not in the LL; pediatric ST; ST prophylaxis; Complicated ST; Risk factor related ST. American Family Physician's Strength of Recommendation Taxonomy (SORT) was used to assess the level of evidence.

# Results

215 articles were obtained. We have selected one CG, two SR and one randomized clinical trial (RCT). Evidence supports that there is improvement in patients' symptoms with ST treated with LMWH or NSAIDs compared with placebo, reducing the incidence of recurrences and complications, without differences in safety profile in the short term. The evidence also highlights the anticoagulation as first-line therapy. The simultaneous use of NSAIDs and LMWH showed greater efficacy in symptomatic relief than LMWH alone in a RCT.

# Conclusions

LMWH and NSAIDs are the two options with evidence supporting its use as first-line treatment (SOR B). Anticoagulation for at least 4 weeks is indicated especially when severity criteria are identified (SOR B). More randomized clinical trials are needed, particularly regarding the choice between LMWH or NSAIDs or its' simultaneous use, doses and treatment's length.

# Representation of different types of malignant disease and the presence of certain risk factors in affected persons

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**Introduction:** Number of patients with malignant disease is increasing. In Serbia there are more then 30 000 people per year in whom malignant disease is diagnosed. After cardiovascular, malignant diseases are the leading cause of death.

**Objective:** The aim of this study was to determine the representation of different types of malignant disease and the presence of certain risk factors in affected person.

**Methods:** During the period from September to December 2011 a questionnaire about certain risk factors and type of malignant disease has been conducted among 37 patients of Primary Health Care Center "Dr Simo Milosevic". Anthropometric measurements were taken and the body mass index (BMI) was obtained.

Results: There was approximately equal distribution of malignant diseases by gender: 18 (48,65%) males and 19 (52.35%) females. The most frequently diagnosed was malignant disease of lungs (27% of all patients). Six (16.25%) persons had carcinoma of urinary tract, and there was equal presence of breast carcinoma, female genital tract carcinoma and digestive carcinoma (each had 13.5% of patients). Also, there were six (16,25%) patients who had malignant tumor of other localizations. Among affected people 20 (54,01%) of them were smokers and alcohol was consumed by 13,5% of patients. The number of obese patients with BMI >30kg/m2 was 12 (32,4%) and information about physical inactivity was given by 3 (8,1%) persons. Twenty four (64.9%) patients had a positive family history of malignant disease. The diagnosis was made due to examination of persons without symptoms in 11 (29,72%) cases, but 26 (70,28%) persons were investigated because they had certain symptoms and signs of disease.

**Conclusion:** Since the most common localization of malignant disease are lungs, and the most dominating risk factor is smoking, it is important to improve prevention of smoking and to insist on its eradication. As the majority of malignant tumors is revealed only after hearing from certain symptoms and signs, it is necessary to improve the quality of preventive examinations in patients without symptoms, with special reference to family history.

#### P05.136

#### Preconception care: observational and cross-sectional study

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Introduction: The preconception consultation is reflected in a continuous and integrated process of anticipatory care in reproductive health and aims to improve the quality of care provided to pregnant women and newborns, in order to reduce maternal and perinatal mortalities. In this consultation, in addition to being addressed psychological, familial, social and financial information relating to the preparation of pregnancy, should be performed appropriate analytical study, cervical cytology update and initiated supplementation with folic acid. Studies show that about 40-50% of pregnancies in developed countries were unplanned, leading to subsequent risks for pregnant and newborn. Goals: To determine the frequency of preconception consultation taken by pregnant women monitored at the Family Health Unit Egas Moniz (USF EM) in the period from 07.01.2010 to 31.07.2011, and evaluate the following parameters: updated cervical cytology, analytical preconception study and folic acid

supplementation.

Materials and Methods: An observational, descriptive and cross study, with the target population being all women with active Maternal Health Program in computer system SAM® (Medical Support System) in the period from 01/07/2010 to 07/31/2011. Data were obtained by consulting the computerized medical records and were processed with Microsoft Office Excel® 2007.

**Results:** Within a year there was register of 91 pregnant, 66 of which were monitored at USF EM. Only 24,2% of pregnant women monitored had preconception consultation, analytical study performed, folic acid supplementation and updated cervical

cytology. Of the 75,8% who didn't the consultation, 54% had updated cervical cytology at the time of pregnancy.

Conclusions: These results demonstrate the need for community sensitization in the areas of family planning, particularly in terms of preconception care in order to promote early and continuous prenatal surveillance. The Primary Health Care are in a unique position of awareness, so it is the responsibility of all professional teams at this level of care, to focus on continuous quality improvement in the area of Women's Health.

#### P05.137

Prevalence of renal failure among elderly population detected by equations of glomerular filtration

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### Background:

Chronic kidney diseases constitutes an important health problem especially among elderly population. Renal failure is considered an independent cardiovascular risk factor. The knowledge of prevalence of this syndrome using equations to estimate the glomerular filtration rate, may help to early detection of chronic kidney disease and prevent or delay its progression.

#### Objetives:

Primary objective: To know the prevalence of **Renal Failure (RF)** among elderly population detected with the **Glomerular Filtration Rate (GFR).** Secondary objective: To study the concordance degree of equations used to estimate GFR.

Methods: Desing: Descriptive cross-sectional study of individuals ≥ 65 years living in a Basic Health Zone of an urban Health Center. Sample was elaborated by random stratified sampling, weighted by age and sex. Participants were captured by means of postal mail, inviting them to take part in the study. Data about laboratory and anthropometric parameters were collected from computerized medical history. GFR was estimated using Cockcroft-Gault (C-G) and simplified MDRD equations. Renal failure was considered if GFR was <60 ml/min.

# Results:

Sample: 815 individuals. Prevalence of Failure Renal (FR) estimated with MDRD was =28,7% (CI95% of 25,57 to 31,91); and with C-G was=45,5% (CI95% of 36,74 to 43,60). Concordance between both equations was moderated (Kappa index =0,49). So prevalence calculated by C-G is higher than MDRD because C-G overestimates for weight. About sex: RF was higher in female (X² test): this was statistically significant with p<0,0001. About age: prevalence of RF increased with the age (t Student test) with p<0,0001.

### **Conclusions:**

- Prevalence of Renal Failure in elderly is elevated and it is increased with the age.
- Concordance between equations to calculate glomerular filtration rate is moderate, although both equations could detect RF with a. routine analysis.
- The systematic use of estimating equations in the electronic medical history using protocols could facilitate the detection of renal failure in Primary Care.

# P05.138

## Infectious agents and their implication in the cancer etiology

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The cancer is the second cause of morbidity and death in the world.

Among the carcinogenic factors involved in etiology together to the ionising radiations, the electromagnetic fields, chemical carcinogenic, there are also the infectious agents.

It is necessary the comprehension of the association of causality infectious agents-cancer

The infectious agents involved in the etiology of cancer: papillomavirus, the hepatitis virus B and C, Epstein Bar virus, immunodeficiency virus, HTLV1retrovirus, KSHV, Helicobacter Pylori, streptococus bovis.

The viral etiology cancer could be prevented with anti-viral vaccines.

Such a vaccine has been already successfully elaborated for the Hepatitis B virus.(VHB)

Recently, a vaccine against the two HPV types with high risk 16 and 18 has been developed.

So the long term objective is to develop vaccines or anti-viral medicines, which can target also other virus associated to the cancer, HTLV1, EBV, KSHV and VHC.

The increase of the survival rate has been demonstrated at the patients with hepatic cancer of viral etiology treated with multitargeted kinase inhibitors (Sorafenib).

The role of the family doctor in early detection of the infection with these pathogen agents in the etiology of the cancer, with screening methods.

#### P05.139

# Patient's rights, from General Practioner's and their own point of view

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Aims and background: Patient's rights are gathered in different regulations: Spanish Constitution (1978), Act on the General Health System (1986) and Law on the autonomy of patients and rights and obligations with regard to clinical information and documentation (Act 41/2002).

To know the importance that doctors as well as patients give to patients 'rights, and to compare between them.

**Material and method:** It is a descriptive, transversal and observational study. We evaluated, through the same questionnaire 149 patients and 227 General Practioners (GP) from the same Autonomous Region, randomized. We asked about level of importance of different patients rights (Likert scale).

**Results:** From patient, 50,34% were men. From GP, 35,7% were women. 99,6% of the GP give enough or much importance to an adequate assistance on the human side, and 98,2% give importance to the patient's right to be informed of the importance of the diagnosis. Between patient, just 55,7% give enough or much importance to free decide the acceptance of treatment, to free decide to choose doctor and to preserve privacy.

**Conclusions:** GP give more importance to patients right that patients themselves. We consider that information given to patient should improve.

#### P05.140

What about after? Does sexual functioning change after laparascopic adjustable gastric banding for obesity? Reflections for primary care

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Background: Obesity is one of the major causes of mortality and morbidity. Primary care physician needs to take appropriate action for prevention, follow-up and treatment of obesity. Related complaints in obese patients should also be a concern for family

physicians, one of which would be sexual dysfunction, a common complaint among obese.

Objective: This study aims to look for any change in sexual functioning of obese patients (with BMI>40kg/m²) after laparascopic adjustable gastric banding (LAGB).

Methods: The study included morbid obese patients who have gone under LAGB between 2008- 2010, in Ankara Numune Training and Research Hospital, Turkey. Among 84 patients meeting the inclusion criteria, 26 (30,9%) (10 males and 16 females) accepted to join the study. IFSO (The International Federation for The Surgery of Obesity) criteria were used for surgery decision. The female sexual function index (FSFI) and International Index of Erectile Function (IIEF-5) were used to evaluate sexual functioning in patients. The tests were run 6 months after the surgery. Nonparametric Kruskal-Wallis test was used to determine changes in the FSFI and IIEF-5.

Results: The mean patient age was 37,6 $\pm$ 7,6. Mean BMI was 40.4 $\pm$ 5.7. According to preoperative values, FSFI and IIEF-5 did not change significantly at the postoperative sixth months (p=0.061, p=0.092, respectively). There was no significant change in triglycerides, total cholesterol, VLDL and LDL levels after surgery, in 6 months, for both sexes. It was found that HDL and progesteron increases with a decreased BMI (correlation coefficient -0.715 and -0.571, respectively) in females. ALT levels are found to decrease significantly with a decrease in BMI in males (p<0,01).

Conclusion: Although LAGB might cause some positive changes in biochemical parameters, our study reveals no benefit in sexual functioning. This finding is important to discuss with patients. Primary care physicians need to understand the changes after interventions, such as LABG, so that they could guide and followup their patients after they are back to their own setting.

### P05.141 Climatic Effects on Hospital Admissions

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Many studies were conducted on the effects of climate change in diseases. In this study, we aimed to investigate the relationships between sex, age, climatic variables, and most common 20 reasons of hospital admissions.

The study was conducted in a tertiary care hospital in Erzurum, a city at 1900m's altitude. question was to compare mean temperature, humidity, and atmospheric pressure values for the most common 20 ICD10 diagnoses. Data for 148262 most common 20 reasons of application in the year 2009 was obtained from the main hospital registry and analyzed using the SPSS software. Climatic data for the same year was obtained from the Turkish State Meteorological Service.

Mean age ( $\pm$ SD) was 46.21 $\pm$ 17.6 years. The oldest person in the registry was 110 years old. Yearly averages ( $\pm$ SD) of temperature, dew point, humidity, atmospheric pressure, sunlight hours, and wind were 5.50 $\pm$ 9.56 (-28; 22) °C, -0.48 $\pm$ 7.30 (-31, 12) °C, 69.27 $\pm$ 15.0 (31, 98) %, 1017.28 $\pm$ 4.81 (1000, 1033) hPa, 9.07 $\pm$ 2.12 (0; 10) hours, and 9.71 $\pm$ 5.47 (2; 27) km/h respectively.

ICD10 codes such as L30 and M25.5 were given more during the warmer days whereas M51.0, M51.1, and D64 were seen during colder days (p<0.001). Diagnoses with lowest dew point were M51.0 and R07.3 whereas L30 and M25.5 were encountered during higher dew point days (p<0.001).

Erzurum shows some differences in the relationships of disease frequencies and climatic variables from the classical literature. Most strikingly, humidity and temperature may have inverse relationships in high altitudes with low water sources. Health professionals should take this into account when advising patients with diseases related with seasonal and climatic variations.

Distri	Distribution of most common 20 ICD-10 diagnoses according to seasons.									
	Winter		Spring		Summer		Autumn		Total	
	n	%	n	%	n	%	n	%	n	%
R07.3	5591	24.2	4774	20.6	6635	28.7	6122	26.5	23122	100.0
R51	3465	23.1	3263	21.8	4293	28.7	3956	26.4	14977	100.0
M25.5	1195	10.1	1919	16.2	4703	39.8	4012	33.9	11829	100.0
R10	1660	16.7	2610	26.3	3020	30.4	2633	26.5	9923	100.0
N39	1136	14.4	1107	14.0	2644	33.4	3025	38.2	7912	100.0
D50	1201	16.4	929	12.7	2604	35.6	2588	35.3	7322	100.0
R10.1	1231	17.9	1180	17.1	2426	35.2	2055	29.8	6892	100.0
E11	1112	16.2	1874	20.3	1986	29.0	1887	27.5	6859	100.0
M51.0	1680	25.9	989	15.2	2080	32.0	1747	26.9	6496	100.0
R06	1014	16.4	1463	23.7	1891	30.7	1797	29.1	6165	100.0
L30	550	9.2	626	10.1	2773	46.4	2030	34.0	5979	100.0
F41.1	878	15.3	1438	25.1	1807	31.5	1610	28.1	5733	100.0
I10	1158	21.2	1436	26.3	1551	28.4	1312	24.0	5457	100.0
M51.1	1532	29.2	1221	23.3	1678	32.0	808	15.4	5239	100.0
D64	493	9.7	941	18.4	825	16.2	2846	55.7	5105	100.0
Z34	918	20.8	912	20.6	1338	30.3	1250	28.3	4418	100.0
M06	777	20.0	963	24.7	1351	34.7	800	20.6	3891	100.0
N20.0	793	21.2	686	18.3	1233	33.0	1030	27.5	3742	100.0
E03	394	10.9	398	11.0	993	27.5	1828	50.6	3613	100.0
C50	700	19.5	741	20.7	1186	33.1	961	26.8	3588	100.0
Total	27478	18.5	29470	19.9	47017	31.7	44297	29.9	148262	100.0

# P05.142 Shared Decision-making regarding a critically ill child: A qualitative study in Turkey

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Background: There is a limited number of discussion around shared decision-making in Turkey. Decisions are traditionally made by physicians and the roles of other health care professionals and parents are not well-defined. This is not defined at all in case of critically ill children in intensive care units. Hospitalization in an intensive care unit causes different family responses which might include development of adverse psychological outcomes, such as anxiety, acute stress disorder, posttraumatic stress, depression, and complicated grief. Decision-making dynamics in such condition would be expected to differ from other settings.

Objective: The aim is to understand how decisions are made in ICU settings where critically-ill children require life-support decisions and what are the perceptions of health professionals and parents.

Method: We used grounded theory qualitative study methodology. We conducted in-depth, semi-structured, face to face interviews with 8 doctors, 9 nurses and 6 parents of critically-ill children. Interviews were digitally recorded and transcribed. The transcriptions were further analyzed following open coding and formation of themes.

Results: The themes were discussed in three major titles: perceived roles, emotions and challenges faced during the decision-making process. All nurses and patients agreed that the decision maker would be the physician. A few physicians were surprised to hear that their decisionmaking authority would be questioned. The patients clearly emphasized that they needed to be informed, but physicians- although they were aware that this was a need- thought that this was not possible because families would not understand the situation and there usually was no time for talking. Nurses understood patients' emotions better and had a closer relation with the parents. Both doctors and nurses thought that parents couldn't have all responsibilities about treatment choices, because they do not have the required knowledge.

Similarly parents were afraid to make a wrong decision so they wanted to leave this to doctors.

Conclusion: Our study reveals that shared-decision making is not well understood by health care professionals. Doctor is the major decision-making authority and this is also accepted and preferred by the patients and nurses. Patients have expectations and their wishes need to be heard.

#### P05.143

Relationship between the Charlson comorbidity index and levels of severity in the hospital emergency room. What is the role of primary care?

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Introduction: The greatest hope of life in our population and the increase in co-morbidity generate a hospital care overload. Charlson published in 1987 an index of comorbidity (ICC) whose objective was to predict mortality to one year. On the other hand, the patients who come to the emergency room (ER) from primary care are derived without taking into account the ICC. There is no literature studies that relate the ICC with levels of severity (LS) in emergencies in these patients.

Objectives: Associate the ICC with LS in patients > 64 aided in the ER of a second level hospital. Analyze their comorbidities, destination on discharge, according to LS and exitus proportion. Assess their usefulness from the primary attention.

Methods: Observational, retrospective, descriptive and relational study. Shows random in >64 aided served in the ER for 6 months. Variables: Age, sex, LS model Andorran triage, comorbidities, calculation of the ICC, destination discharge and exitus. The collection of data was made by computerized stories.

Results: 452 Included patients (>74 aided: 61%, women: 57%), of which 124 (27%) have a high co-morbidity (ICC≥3) and 273(60%) a LS moderate/high. The degree of association between ICC and LS was statistically significant. The destination at discharge to home was 321 (71%). Exitus 32(7%).

Conclusions: There is a directionally positive relationship between LS and the ICC. The >74 aided presented a higher ICC. The three more frequent disorders are Chronic Respiratory Disease, Diabetes Mellitus and Dementia. This Association indicates that the ICC is a useful tool to detect high-risk in elderly patients from primary care and give them attention more comprehensive and coordinated at all levels of care with the aim of reducing visits to emergencies and/or revenue.

#### P05.144

Survey of Incidence of Functional Thyroid Patology in a basic urban area of Primary Health

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Introduction: Thyroid dysfunction is very prevalent but there are few studies of its incidence. In the Wickham study, clinical hypothyroidism has an annual incidence of 3,5% in women and 0,6% in men, while in hyperthyroidism is 0,8% in women and negligible in men. A 5% of patients with positive antithyroid antibodies and elevated thyrotropin levels evolve to clinical hypothyroidism.

Objective: Learn about the incidence of thyroid functional pathology (TFP) for a period of two years in a basic area of health (BAH).

Methodology: Design: Descriptive, retrospective study. Area: Urban BAH. Population: people >14 aided who analyzed thyroid function (TF) during the years 2005-2006. Variables: sociodemographic and analytical (thyrotropin, thyroxine free, antithyroid antibodies).

Results: Population study: 7150 patients (3010 in 2005 and 4140 in 2006). New diagnoses of TFP: 526 patients (cumulative

incidence (CI) of 7.3%). The IC was 5% in 2005 (52±19 years; 84% women) and 8% in 2006 (50±17 years, 79.6 % women). Pathology more prevalent: subclinical hypothyroidism with 90 cases (IC: 2.9%), (52±20, 82% women) in the year 2005 and 187 cases (IC: 4.5%), (49±18, 78% female) in 2006. Rest of TFP in 2005: clinical hypothyroidism 16 (CI: 0.5%), 10 clinical hyperthyroidism (CI: 0.3%) and subclinical hyperthyroidism 10 (CI: 0.3%). TFP in 2006: 28 clinical hypothyroidism (CI: 0.6%), 5 clinical hyperthyroidism (CI: 0.1%) and subclinical hyperthyroidism 2 (IC: 0.04%). Determination of antithyroid antibodies in 2005: hyperthyroidism 71% (60% positive); Hypothyroidism 50% (43% positive). Determination of antithyroid antibodies in 2006: hyperthyroidism 77% (28% positive); Hypothyroidism 50% (40% positive). Registration of new cases in medical history: 72% in 2005 and 71% in 2006.

Conclusions: In general population, annual incidence of TFP in our study is 7,3%. Subclinical hypothyroidism is the more frequent disease. Determination of antithyroid antibodies is frequently done in hyperthyroidism. There is an infraregister of the diagnoses in the patient's medical history.

#### P05.145

#### Assessment of Daily Instrumental Activities of Elderly

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Objective: Functional restrictions are important in evaluating elderly patients. According to WHO, the best method for elderly approach is assessment of functional status. The evaluation of elderly functions is, on the otherhand, via questioning elderly patient's daily instrumental activities. While daily activities are necessary for survival, instrumental life activities cause (facilitate) a person's social cohesion. We aimed to evaluate daily instrumental activities of patients over the age of sixty and how to increase their adaptation to this special period.

Materials and Methods: Patients who applied to our Family Practice Unit of the University of Fatih in Pursaklar, Ankara have been invited for our study. 101 patients who accepted to join have been questioned according to their age, gender, education, household population, disability, vision impairment, hearing problems, chronic ilnesses, medicine they take and medical history. Patient's cognitive functions, Mini Mental Test Score, their emotional status, Geriatric Depression Scale, and their functional independence have been evaluated according to Lawton's Daily Instrumental Activity Scale. In this study, we demonstrated independent variants on each activity according to Lawton's Scale which measures elderly people daily instrumental activities. We have evaluated the relation between the independent variables and activities using Factorial ANOVA Analysis

Results: As a result of our research we have found that instrumental activities are affected with increased age, educational level, Mini Mental Test Score, chronic diseases such as hypertension, obstructive Lung Disease and Painful osteoarthritis. Activities are affected negatively with increased age, low Mini Mental Test Score, obstructive Lung Disease and Painful osteoarthritis. Whereas, scores are affected positively with educational level and hypertension.

Conclusion: Societies are getting older and thus findings are important in terms of making appropriate health policies and planning. With this regard, determination of the functional status of the elderly is recommended. For this reason, Lawton's Daily Instrumental Activity Scale might be used for assessment of functions especially in patients of high risk.

#### P05.146

# Healthcare Educational Work in Preventing Cholecystitis in The Obese

#### N. Protulipac:

Dom zdravlja Kragujevac, Kragujevac, Serbia.

Healthcare Educational Work in Preventing Cholecystitis in The Obese

Natasa Vukomirovic Protulipac, Ljiljana Mirkov, Tatjana Petrovic Medical Center Kragujevac

Nowdays, obesity is recognized as both social and health problem. There are many complications accompanying obesity and one of them is gallbladder disease with chronic inflammation and calculosis.

The aim of the research was to determine parameters within the obese in The Medical Center in Kragujevac:

- Number of those who suffer from cholecystitis
- Additional risk factors presence
- •Lowerings in body mass and lipid values in blood after applying both medical treatment and adequate diet
- •Evaluation of health intervention by both physicians and patients after six-month period

The research was done between 1<sup>st</sup> April and 1<sup>st</sup> November, 2011. The survey included 218 people among whom 28% were men and 72% were women. Characteristics of the surveyed:

They were chosen among those whose  $\dot{BMI}$  was higher than 25kg/m2.

18.8% of them were diagnosed with cholecystitis and acute pancreatitis (19.51% men and 80.49% women).

Most of them aged 50+ and 60+.

More than a half lived in the town.

Those who perform sedentary work were at higher risk.

Among long-lasting obesity patients, 16 were diagnosed with cholecystitis. During educational work with the obese, changes in lifestyle were suggested ie. nutrition changes and physical activity. Medicines and supplements were recommended as an additional kind of help. Physical activity was accepted by 40 people. Medicament therapy was taken by 15 woman and 5 men whereas 10 patients were taking some supplements.

Women were more disciplined and all of them (100%) accepted rational diet. At the end of the research both physicians and patients were given a questionnaire. The offered answers were:

Completely satisfied (6 physicians and 5 patients)

Partially satisfied

Indifferent

Partially unsatisfied (50% of both physicians and patients) Completely unsatisfied

Estimated results were almost the same within both groups.

Consequently, obesity (a high risk factor for a number of diseases) requires constant health educational work.

KEY WORDS: cholecystitis, obesity, health intervention

#### P05.147

Smoking and alcoholism incidance between patients whom appeling to family medicine department in Ankara

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Smoking is the most popular second cause of death in the world. The purpose of this study to investigate prevalance of nicotine dependency and alcohol dependency over a population reflect our society and also show importance of family physicians about conflicting with dependency.

We used sociodemographic data survey, Alcohol Users Definition and Identification Test (AUDIT), Fagerstrom Nicotin Tolerans Test (FNTT), Michigan Alcoholism Screening Test (MAST) to patients whom appealing to family medicine department, chosen with a random illustrating method, discussing public surveys face to face in this descriptive study.

Our study showed that smoking rate was 29% between general sample, 30,2% between up to 18 years old population. Smoking rate was more popular around men up to 18 years old (p<0.05), but smoking rate was similar between men and women down to 18 years old . Both our study and other studies showed that smoking rates raised between females and youths. This result showed that smoking will be increased among women in the future, also we

found that parents, siblings and second degree relatives like are effective developed smoking and alcohol drinking behaviours.

We point out smoking rate in doctors is meaningful higher than both society and other occupational groups. We need projects about stop smoking in doctors as a rol model, take duty active in all degrees of tobacco control programmes.

When a health service integrated to first step health centers, the probable of reaching success raise. The family physicians assimilated the biopsychosocial approach, who can reach all aged individuals from pediatrics to geriatrics have important responsibilities about preventing of dependency, early detection, interference, cure's following, and so doctors and other health care providers should be a rol model as a 'not smoking' image in society.

#### P05.148

Demographic characteristics of episodic and chronic migraine patients. Results in a series of 1113 patients

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INTRODUCTION: According to revised International Headache Society (IHS) criteria (2006) chronic migraine patients present at least 15 days of headache per month, 8 of them fulfilling pain characteristics and associated symptoms of migraine. Medication overuse (MO) is regular use during more than 3 months of symptomatic treatments on more than 10 or 15 days per month depending on type of drugs. We aim to characterize and compare demographic profiles for patients with chronic migraine, (CM) with or without MO, and episodic migraine in a large series of patients METHODS: We analyzed patients firstly attended in an outpatient headache clinic in a tertiary hospital during a four-year period (January 2008-December 2011), most of them referred by general practitioners. We gathered demographic and nosological characteristics of each patient. We considered time from migraine onset to referral. Episodic migraine (Group A) was diagnosed accordingly to International Classification of Headache Disorders II Edition (ICHD-II) criteria. For migraine with MO headache (MOH) (Group B) and CM (Group C) we considered revised IHS criteria. RESULTS: 1668 patients attended during inclusion period. 1113 (66.7%, 260 males, 853 females) diagnosed of migraine. Among them 727 (65.3%, 191 males, 536 females) were included in group A, 225 (20.2%, 39 males, 186 females) in group B, and 161 (14.5%, 30 males, 131 females) in group C. When comparing episodic migraine (Group A) with chronic migraine patients (Groups B and C) we found more female patients in Group A (82.1% vs 73.7, p: 0.002). Mean age at referral (44.7 ± 14.4 vs  $37.1 \pm 13.3$  years, p<0.001) and time from migraine onset (22.1  $\pm$ 14.8 vs 13.4 ± 12.8 years, p<0.001) were significantly increased in chronic migraine patients. When comparing characteristics of Groups B and C, age at referral  $(46.2 \pm 13.7 \text{ vs. } 42.6 \pm 15.1 \text{ years.})$ p: 0.014) and time from migraine onset (24.5  $\pm$  14.2 vs. 18.5  $\pm$  14.9 years, p<0.001) were increased in MO patients.

CONCLUSION: CM with or without MO represents a burdensome group of patients with different demographic characteristics than episodic migraine. Chronic migraine patients with MO are referred later to a headache office.

#### P05.149

Opioid prescription by General Practioners in moderate to severe chronic pain - does the training influence prescribing?

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#### Introduction

Chronic pain is one of the most frequent complaints in primary health care and the available data seems to indicate low opioid prescription at this level. Some studies reveal that physicians feel they don't possess adequate training in this area hence refraining the prescription.

### Objective

Evaluate the influence of specific training upon opioid prescription for the treatment of moderate to intense chronic pain.

#### Method

A questionnaire-based observational, descriptive, inferential study was performed on a sample universe of 68 General Practitioners (GPs) from 5 different Primary Care Health Centers. The internal validation was performed by an expert panel and the external by presenting the questionnaire to GPs outside the sampling universe. The descriptive and inferential statistical analysis was performed using SPSS 17.0.

#### Results

51.5% of the GPs in the sampling universe answered the questionnaire. The average age was 51.8 years old, 54.3% were female, 57.1% had some training in the area of pain, 35% of the latter attended 4-8 hour courses.

In cases of moderate chronic pain, 85% of Trained Practitioners (TPs) prescribe minor opioids in situations of Chronic Oncologic Pain (COP) and Chronic Non-Oncologic Pain (CNOP), 10% prescribe only in COP and 5% prescribe only in CNOP. 33.3% of Untrained Practitioners (UPs) don't prescribe minor opioids in any situation. For the treatment of intense chronic pain, 25% of the TPs don't prescribe major opioids in any situation versus 53.3% of the UPs

Whenever the therapeutic for the 1st degree of the analgesic pain scale proves to be inefficient, 95% of the TPs versus 60% of the UPs prescribe opioids (p=0,027).

In cases suitable for minor opioid therapeutic, 46.7% of TPs seldom or never prescribe them versus 5% of UPs (p=0,009). In cases suitable for major opioid therapeutic, 65% of TPs seldom or never prescribe them versus 80% of UPs.

#### Conclusions

It has been demonstrated the importance of specific training in the area of pain. TPs generally prescribe more opioids than UPs. The results of this study should not be extrapolated due to the reduced dimension of the sample universe thus, further and more comprehensive studies are desirable.

### P05.150

The prevalence of cardiovascular risk factors in patients with diabetes 2 and adherence of patients to using prevention of cardiovascular pathology

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The prevalence of diabetes is growing steadily every year. Cardiovascular diseases are the reason of death in 80% of patients with diabetes.

The aim of study was to establish the prevalence of cardiovascular risk' factors among the patients with diabetes type 2 and adherence of patients to using prevention of cardiovascular pathology.

Materials and methods. We have analyzed anamnestic data of 31 patients with diabetes type 2 of moderate severity (14 men and 17 women, aged from 59±1,5 years, duration of diabetes 9,9±1,7 years) with accent to presence of cardiovascular risk factors. The blood pressure, body mass index (BMI), levels of lipids, HbA1c, ECG were analyzed. Also the use of medications for cardiovascular disease prevention and the actual compliance of patients were studied. Statistical analysis was performed by using Excel 2010.

**Results.** The cardiovascular risk factors were present in all examined patients with diabetes: increased BMI -  $31,7\pm0,63$ , increased cholesterol -  $5,78\pm0,2$  mmol/l, dislipidemia, hypertension (blood pressure  $150\pm2,8$  /  $78\pm2,6$  mmHg), increased HbA1c -  $8,2\pm0,33$  %. Only part of patients really received prescribed treatment: 97% - antihypertensive medications, 9% - statines, 25% - acetylsalicylic acid, that caused by low knowledge of patients about a strict necessity of their use. In the result, 9 (29%) patients had a history of myocardial infarction after  $9\pm2,2$  years of diabetes onset, another 9 (29%) - stable angina after  $6,3\pm1,01$  years of

diabetes onset, and these patients had higher levels of cholesterol, HbA1c, BMI then other on the moment of the study.

**Conclusion.** The high prevalence of cardiovascular risk factors in examined patients with diabetes type 2 is accompanied with low adherence of patients to using prevention recommendations cardiovascular diseases that needs improvement.

#### P05.151

# The features of intestinal microbiocenosis in patients with ischemic heart disease

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The disbiosis of intestinal microflora occurs in 90-100% of patients with cardiovascular diseases, particularly in ischemic heart disease (IHD).

**The aim** of our work was to study the features of intestinal microbiocenosis in patients with IHD.

**Materials and methods**: We examined 32 patients as a main group (24 women and 8 men in average age  $58,5 \pm 1,2$  years) with diagnosis of IHD: stable angina I-II, without signs of heart failure and any diseases of gastrointestinal tract. Also 20 health persons (15 women and 5 men of the same age) were examined as a control group. The bacteriological examinations of feces using anaerobic technology and special nutrient media were conducted in main and control groups.

Statistical analysis was conducted with "Microsoft Excel".

Results: The \$1.25% (26) patients of main group had III-IV degree of intestinal disbiosis and 18.75% (6) patients had I-II degree of dysbiosis, when the 90.0% (18) persons of control group had I-II degree and only 10.0% (2) persons - III-IV degree of disbiosis. Pronounced changes in main group were observed in obligate intestinal microflora (bifidobacteria - 6,26±0,28 IgCFU/g, lactobacilli - 5,78±0,20 IgCFU/g, E. Coli with normal enzymatic properties -2,32±0,58 IgCFU/g) and in the pathogenic intestinal microflora (Enterobacteria - 1,39±0,51 IgCFU/g, Staphylococcus aureus - 0,36±0,20 IgCFU/g, Candida - 2,31±0,47 IgCFU/g).

The changes in control group were presented by only reducing of obligate intestinal microflora - bifidobacteria - 6,81±0,15 IgCFU/g, lactobacilli - 6,08±0,31 IgCFU/g, E. Coli with normal enzymatic properties - 2,99±0,69 IgCFU/g.

Conclusions: The patients with ischemic heart disease had more pronounced qualitative and quantitative changes of obligate and pathogenic intestinal microflora, III-IV degree of intestinal disbiosis, that can be caused by disturbance of intestinal circulation and needs correction.

## P05.152

# Ten-year risk of developing type 2 diabetes

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Type 2 diabetes mellitus (DM2) is a chronic disease that is expected to reach more than 20% of the population in 2050. The aging of population, changes in eating habits and sedentary lifestyle, contribute to its expansion, and the adoption of appropriate measures of primary and secondary prevention is important to identify as soon as possible all risk factors. The main goals of this transversal descriptive study were to identify, characterize and stratify the patients with increased risk of developing diabetes and to determine their capillary HbA1c. During a week of a primary care consultation the participants were asked to collaborate, excluding pregnant women and diabetics. Applied the Finrisk's questionnaire (estimate the 10-year risk for diabetes) and stratified according the risk score (low <7, significantly higher 7-11, moderate 12-14, high 15-20, very high> 20). The HbA1c was determined in users with high or very high risk score. Statistics and data analysis were made in Excel ®. 105 adults accepted the study. 24 participants had high and very high risk. From those

45,8% (10,5% from total population study) had HbA1c between 5.7-6.4% and 8,4%>6.5%. The increased risk of developing diabetes was not only related to obesity, increased waist circumference (a measure of central adiposity) and sedentary lifestyle, but also to hypertension. The Finrisk questionnaire was useful to identify the population at risk. The recognition of high-risk patients should be a concern for all healthcare professionals in order to act preventively to reduce the onset and progression of the disease.

#### P05.153

Evolution of practices and training of the staff responsible for the cold chain of vaccines in primary care centers (2007-2010)

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# Background:

The General Directorate of Investigation and Public Health of the Valencian Community performed annual audits of the cold chain (CC) in primary care centers (PCC). These audits are repeated every three years.

The existence of a staff responsible of the logistics of the vaccine in the centers is essential in improving the efficiency of vaccination programs.

#### Objective:

To assess changes in processes, habits and training of those responsible of the audited PCC, for years 2007 and 2010

#### Method

An analytical study has been done. A structured questionnaire was used to gather information on the characteristics of the vaccination center, the staff responsible for the CC, the infrastructure and control of the elements composing the CC, the procedures used in vaccine conservation and handling, and knowledge of the staff. The study has been done for 145 PCC that have been audited in

The study has been done for 145 PCC that have been audited in 2007 and 2010.

### Results:

It has increased the number of refrigerators where the temperature is controlled at least twice daily (19.8% in 2007 vs 28.4% in 2010 (p = 0.006)), also the percentage that have record sheets control of temperature (78.5% vs. 91.0%, p <0.000). The frequency of the supply has been monthly in 2010 ,55.2% (p = 0.014). 74.5% of the staff responsible of vaccines knew the Monograph cold chain in 2007 compared to 89.7% in 2010 (p = 0.001). 62.8% of the personal analysed in 2007 answered "right "to do before a CC incident and only 53.1% in 2010 (p = 0.096). The stratified analysis shows no changes between right answer to an incident and knowing the monograph (p = 0.964) or having received training in the last year (p = 0.617).

### Conclusions:

The practices in the CC control are improved in these three years. The knowledge of the CC staff are better now, but there are no changes in the right answer in a CC incident

#### P05.154

Evaluating the effectiveness of a program of "case finding" COPD applied in the emergency department of a tertiary hospital. A pilot study. Hospital Universitario Ramón y Cajal (EmergEPOC).

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COPD is a disease with high rate of under diagnosis. The application of a screening program for COPD in patients attending an emergency department, could allow diagnosis of COPD "de novo" in a significant number of patients.

Methods: A pilot, prospective, longitudinal study, which will evaluate 70% of the adult applicant of healthcare services in the

emergency department of a tertiary hospital in the period April to June 2010. Adult patients who come to the emergency room for any reason will be analyzed, during weekdays (Monday through Friday, except holidays) from 08:00 to 22:00 H. Nursing staff hired specifically to collect data, interview all patients over 35 years, they are asked if they smoked more than 100 cigarettes in your entire life. Those who answer yes will be informed that you are conducting a study and request consent to participate in the study and completed the COPD population screener. If the score is equal to or greater than 5, the patient is not diagnosed with COPD or other respiratory disease, no contraindication and would like to participate in the study, spirometry was performed with the ndd Easy One team and collected data about the history of smoking (active smokers or former smokers, number of pack-years).

Results: During the study period, 34,668 patients went to emergency. Among evaluated 31,215 attended Monday to Friday. 123 spirometry were performed on a very low number originally planned. The quality of spirometry was low (38% spirometry values). The main reasons that justify the low performance of spirometry are: severity of patients (25%), highly dynamic flows of patients (20%), refusal of informed consent (12%), high percentage of patients with known respiratory disease (30%), emergency department overcrowding (13%).

Conclusions: 1. The emergency department of a tertiary care hospital is not a suitable place for COPD screening programs, 2. Conditions for carrying out spirometry in the emergency room are not the most appropriate so its quality is low.

#### P05.155

#### Temporary work disability in immigrant population

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In the recent years, active populations in many European countries have seen the incorporation of a large pool of immigrants. In an attempt to characterize immigrant health status in the Basic Health Area of La Torrassa (L'Hospitalet de Llobregat, Barcelona, Spain), an analysis of the pathology groups leading to temporary work disability was undertaken based on cases arisen during the last semester of 2010. The results show that for both the immigrant and the native populations, trauma diseases motivated more than a quarter of the registered temporary work disabilities. Within them, spine pathologies and, in particular, those affecting the lumbar region accounted for the majority of the analyzed cases. Importantly, the vast majority of patients was completely healed or experienced enough improvement to be able to return to work. Finally, the results showed that the immigrant population not only suffered a smaller number of temporary disabilities than the local population, both also registered disabilities of a shorter duration.

#### P05.156

### Relation between platelet parameters and smoking status

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**Background:** Platelet distribution width (PDW) and Mean Platelet Volume (MPV) is affected in coagulation state. The effect of smoking in tromboembolic disease is well known. The aim of this study is analysis the effect of smoking on platelet parameters (MPV and PDW) in healthy individuals in early decades.

**Methods:** A total of 115 (smokers (n=60) and non-smokers (n=55)) healthy young participants were included into this cross-sectional study. Complete blood count and smoking status were analyzed. All parameters were compared in smoker and nonsmoker groups.

**Results:** Baseline sociodemographic characteristic features (age, sex, BMI) were similar in between two groups. We measured PDW, MPV and platelet counts by using complete blood count. Platelet count were not significantly different between groups. MPV

levels were higher in smokers than non-smokers  $(7,80\pm0,90 \text{ vs } 7,57\pm0,74, \text{ p>0,05})$  but not statistically significant. PDW levels were also high in smokers compared non-smokers  $(13,98\pm1,49 \text{ vs } 13,51\pm1,19, \text{ p>0,05}$  respectively), but these levels were not significantly different. However, high PDW levels (>13,5) were associated with smoking (p:0,032).

**Conclusion:** Smoking may affect paletelet activation in early decades by rising PDW, MPV and platelet count in healthy young individuals. This effect may occur distinctly in advanced years.

Table 1: Smoking status of participants according to RDW Rate

	PDW <13,5	PDW >13,5	Р	
Smokers	21 (%35) 39 (%65)		0.032	
Non-smokers	28 (%50,9)	27 (%49,1)	0,032	

Table 2: Comparing PDW and smoking status of each groups.

	Smokers	Non-smokers	P
Age, years	32,23 ± 4,56	31,68 ± 3,89	NS
Sex, M:F	1:0,52	1:0,54	NS
BMI, kg/m²	23,08 ± 2,13	23,67± 1,05	NS
Platelet count	13,99 ± 1,49	13,52 ± 1,19	NS
MPV	7,81 ± 0,91	7,56 ± 0,74	NS
PDW	13,99 ± 1,49	13,52 ± 1,19	NS

# P05.157 Quality of life after hemorrhoidal surgery

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Purpose: Hemorrhoids are normal component of anal canal anatomy, potential factors such as gravity or strain rend them symptomatic. Hemorrhoidal disease is one of the most common conditions to affect routine daily activities and symptoms can be costly when measured in time away from productive activities.

The aim of the study was the assessment of changes in the quality of life of patients who underwent hemorrhoidectomy using Short Form 36

Methods: Thirty patients, 24 male and 6 female (age 21 to 65), who were diagnosed with grade III and IV internal hemorrhoidal disease at the Istanbul University Cerrahpa şa Medical Faculty General Surgery polyclinic and treated with hemorrhoidectomy were enrolled in the study. They answered questions from Short Form-36 a week before surgery and one month after surgery. Data were analyzed using SPSS 15.0 for Windows and compared with Wilcoxon test, Student t-test ve Mann-Whitney U test.

Results: Physical health ( Physical functioning, Physical role, Bodily pain) results were improved after surgery (table1).

Conclusion: Hemorrhoidal disease affects quality of life and patients prefer to have a surgery as the result of developing methods and as hospital stays become shorter. Success of the operation can be evaluated by postoperative recovery, incidence of complications or relapses. Quality of life questionnaires are other methods to evaluate the success of the treatment by the patient's perspective. Quality of life evaluation has become an important issue in medical care since patients request a greater attention to the subjective experience of their disease and its treatment. Long-term studies in large groups of patients are needed to determine the effects of the surgery to the quality of life.

Comparison of the pre-op and post-op scores from SF-36							
N=30	pre-op mean+-SD	post-op mean+-SD	t/z	р			
SF-36 Subgroups							
+physical function	66.00- +20.73	76.83- +10.78	- 4.451a	0.001**			
++physical role restriction	30.00- +37.94	О	- 3.446b	0.001**			
++pain	39.00- +15.83	32.33-+8.97	- 2.633b	0.008**			
+general health	49.83-+6.36	48.16-+5.33	1.021a	0.316			
++vitality	59.83-+7.36	59.66-+5.71	- 0.145b	0.885			
++social function	47.50-+6.05	50.83-+6.51	- 1.814b	0.070			
++emotional role restriction	75.55- +31.48	71.11- +32.44	- 0.720b	0.471			
+mental health	58.80-+8.07	60.66-+5.56	- 1.676a	0.105			

### P05.158 Gonarthorisis

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Introduction: Gonarthrosis is a degenerative disease of a knee wrist which starts asymptomatically in the second and third decade of life and almost all persons have it when they reach cca. 70 years. The risks factors for getting gonarthrosis are: overweight, circulation problems, trauma, diabetes, hypothyroidism etc.

Aim: Defining the frequency, strength of discomfort and ability to perform daily tasks and activities at a patient with the diagnosed gonarthrosis.

Method: 60 patients with gonarthrosis have been questioned via KOOS questionnaire for knees.

Results: Analyzing the answers we obtained the following results: out of 60 questioned people 45 were women (75% of the sample) and 15 were men (25%). The average age of the questioned people was 63.6 years. The number younger than 60 years was 14 (23.3%), 31 persons (51.7%) were between 60-70 years and 15 persons (25%) were older than 70 years. In the taken sample 29 patients (48.3%) was over-weighted (BMI>25.0kg/m²). 12 patients (20%) described the pain as mild, 42 (70%) as moderate and 6 (10%) was extreme.

6 (10%) patients had constant pains which considerably interfered in their quality of life, 40 (66.7%) stated they had discomforts on weekly basis and 14 (23.3%) monthly. The knee swelling from time to time had 16 patients (26.7%). The knee pain when going up and down the stairs, longer standing and performing difficult house activities (carrying weight, cleaning floors...) had 48 patients (80%). 2 patients (3.3%) stated they had an earlier injury as a cause of their discomfort. When asked if they would change their life style (decreasing weight, regular walks, exercising, wearing more comfortable shoes...) only 5 people answered positively (8.3%).

Conclusion:

- -Gonarthrosis is a disease of older age
- -More frequent with women
- -Over-weight is one of the leading factors for its origination
- -Discomfort is the greatest when walking in the uneven terrain and going down the stairs
- -The disease has a progressive flow with the possibility for a person to become an invalid
- -Patients do not participate enough in the healing process (overweight, still way of life, exercises...)

#### P05.159

# Analysing effects of statin with sick persons with diabetes mellitus type 2 and dyslipidemia

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Introduction: Diabetes mellitus type 2 is a chronic metabolic disease in whose basis lies hyperinsulinemia and insulin resistance, which is often preceded by over-weight. Dyslipidemia is a regular finding in type 2 of Diabetes mellitus.

Paper aim: to show effects of statin on the diabetes dyslipidemia. Method: 70 patients of both sexes were questioned, 26 men (37.5%) and 44 women (62.5%) average age 67.2 years. After the laboratory analysis, statin was introduced into therapy in the dose 10-20 mg, with the diet and adequate regime of physical activity. Results: after three months a lipidogram was made and the following values were found: total cholesterol was decreased by 30.1%, HDL cholesterol values were increased by 16%, LDL cholesterol values were decreased by 38.5% and triglyceride values by 38.2%. The therapy aim was reaching the level of LDL cholesterol <2.6mmol/l, which we achieved with 42% of patients. Conclusion: the successfulness of therapy with 42% of patients indicates the need for further increase of statin doses and the need for a stricter following of regular and correct food consume and dosed physical activity of the patient. The statins therapy reduces the values of lipoprotein and in that way decreases the risk of getting hypertension, coronary diseases and other cardio-vascular diseases. Statin introduction into the therapy is obligatory with all patients that have diabetes mellitus.

# P05.160

# Effect of exercise on glycemic values in type 2 diabetic patients

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Introduction: Inadequate physical activity has been recognized as an independent risk for premature development of coronary heart disease. In addition to its cardiovascular benefits, exercise can also improve glycemic control. Treatment of patients with type 2 diabetes mellitus includes education, evaluation for micro and macrovascular complications, normalization of glycemia and control of cardiovascular and other long-term risk factors.

The aim of this study was to evaluate the prevalence of cardiovascular risk factors (CVRF) in a group of diabetic patients and identify the influence of a session of moderate exercise in their glycemic values.

Methods: Retrospective and interventional study about the prevalence of type 2 diabetes and CVRF of all patients of a health unit. The diabetic patients were invited to join a session of moderate physical activity oriented by a personal trainer. 17 diabetic patients joined the interventional group and we evaluated the glycemic values before and after exercise. A statistic analysis was made of all data collected.

Results: Of the 5216 patients studied, 4,8% had diagnosis of DM2. 55% were female. Mean age of patients was 64. For CVRF, 78,2% had hypertension, 83% had dyslipidemia, 4,8% were smokers, 35,3% were overweight and 43,6% were obese. Coronary artery disease is present in 15,5% of these patients. In the intervention group, the difference between glycemic values before and after exercise were statistically significant with p<0,001.

Conclusions: This study confirms that DM2 is frequently associated with other CVRF with high prevalence. Physical inactivity is a problem of public health and has to be considered an associated risk. Thus, to control all these risks, the treatment of these patients should be multifactorial.

# Change Management for teams Family Medicine in Bosnia and Herzegovina

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Background: The project "Improvement of the health sector in Bosnia and Herzegovina" Family Medicine occupies an important place. The course of control changing ways for teams of Family Medicine (FM) organized by the Ministry of Health Federation of Bosnia and Herzegovina and Republika Srpska aims to strengthen knowledge and skills in FM, their successful application in everyday work and to improve the quality and efficiency of services in the FM.

Aim and Method: Evaluation of the work of the course of control changing ways for teams of FM. The course was held at the Medical Faculty in Sarajevo in the period of February 2009- April 2010. Education for the one FM team lasted a week (divided into three sessions (2+2+1)).

Results: The course was attended by 203 participants. Doctors and nurses were from the Canton Sarajevo (9 Public Health Center (PHC)), Srednje-bosanski Canton (11 PHC) and Bosansko-podrinjski Canton (3 PHC). There were 14 teachers from the School of Public Health "Andrija Štampar", Zagreb-Croatia; with partners: Bocconi, School of Management- Italy; Bonex Enginnering-Belgrade; and 3 local consultants, Department of Family Medicine, Medical Faculty University of Sarajevo. Covered topics are: management, roles and key skills of successful managers, management of changes, strategic and project management, group management, knowledge management, reform of sector of primary care, prevention and promotion of health.

Conclusion: The management and continuous learning are inseparable in the process of improving the health sector and development of FM in BiH. Participants understood the responsibility and learned the main tools and techniques to improve quality and efficiency of services wich they provide in the Family medicine. The course will be followed for the other FM teams.

#### P05.162

# Reasons for assistance to the doctor without an appointment

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Purpose: To know the most common reasons for which our patients come to the office without medical appointment. Material and methods:

Design: Descriptive retrospective.

Location: Urban health center with two rural clinics.

Subjects: Patients who come to the office without appointment between June and September 2011.

Methods: We evaluate the age, sex, nationality, number of diseases of the patient, complaint of the same cluster grouping, if they make use of this service a week before or after the consultation, if it belongs to the oyr health center and prescribed treatment.

Results:

Were selected from the months of June to September 1 of each 10 days of consultation and analyzed 501 medical consultations. The mean age was 45.32 years. 87% of patients were of Spanish nationality. The second most common group of patients were born in Europe with 5%. 59.3% were women. 34.7% had no underlying disease recorded. 23.4% of patients had a single disease recorded, 25.9% between 2 and 3 disease and 16, 3% more than previous illnesses recorded. The main reason for the consultation group were diseases related to otolaryngology with 20.4% followed by 12.6% for skin problems and 11.6% for musculoskeletal consultations. Queries for recipes and for low / high labor occupied 8.8% of consultations. 13% (65 patients) patients made use of this service the week before the study consulted these days 43% (28 patients) for the same reason. 25.2% (126 patients) attended the following week, 60 patients consulted for the same reason. 68.3% of consultations were analyzed in patients who belonged to our

health. The 10.2% of patients required some form of treatment in consultation but the vast majority, 58.3% were home treatment was prescribed. At only 2.8% were derived for hospital emergencies.

Conclusions:

The consultation without appointment has a daily demand of patients, coming from their main reasons for otolaryngology, dermatology and musculoskeletal and in a period less than a week a large number of patients required further medical consultation.

#### P05.163

Smoking habit register in the electronic medical record and its variation according to risk factors

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Background: Smoking is a critical issue for Primary Care and identifying the exposure status is fundamental for professionals to make decisions in a relevant matter. Since 2005 in the Valenciana Community (Spain) the medical record is electronic (ABUCASIS-II) which allows collecting specific information on smoking habits, although the way on how this information is collected has changed over time.

Aim: Estimate the "smoking habit" field filling in ABUCASIS and its influence to have obesity, hypertension, dyslipidemia or diabetes mellitus

Desing and Methods: A transversal descriptive study was performed with a sample of patients over 18 years old attending at primary health care. Patients were surveyed. Measures of central tendency and dispersion adapted to each variable were used, odds ratio with a confidence interval of 95%, Chi-square and U of Mann-Whitney, with statiscally difference significant (ds) for p<0.05.

Results 175 patients were surveyed, without significant difference in age according to gender. 41.7% were classified as smokers, 44% as non-smokers and 14.3% as ex-smokers. The smoking habit was registered in 12% of cases, ds was present according to the smoker status (23.3% in smokers, 0.0% in non-smokers and 16% in ex-smokers). Those with some risk factor had higher probability of being registered, (OR: 1.98 CI 95%: 0.69-5.71). Higher rate of completing the field is significantly associated with the number of risk factors (0:7.8%; 1:10.7%; 2:18.4%; 3:18.8%), this association is stronger if smokers are selected (0: 9.4%); 1:26.1%; 2:46.2%; 3:40.0%).

Conclusions

The use of electronic medical records represents advancement in the patients's clinical management. Nonetheless, it is crucial for items of electronic forms are completed appropriately. Our study showed how a health determinant such as smoking is only found in 12% of the cases of the records reviewed. This percentage increases in 23.3% in smokers and reaches up 46.2% if it has more than one risk factor. It is likely that patients get asked about if they smoke, but this is only registered in the medical record only under determined situations. We must raise awareness of the importance of registering the "smoking habit" in primary health

#### P05.164

# Management of the Urinary Infections in Primary Care

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In Spain, the resistance rates of uropathogens to antibiotics to treat lower urinary infections is high. Only a third of them are

sensitive to common antibiotics. In non complicated cystitis due to the high resistance rates to Amoxiciline (50%), Cotrimoxazol (40%) and Pipemidic acid, it is not recommended the empirical use.

Short courses of treatment (3 days) and more recommended to use than longuer ones, due to lower side effects and complications and same effectiveness. Longer treatments would be recommended in patients with complications.

Our study was made with 111 positive urine cultures taken in an urban health center in Madrid, during 6 months , analyzing variables such as patients age, risk factors for complications, antibiotics given and the grown microorganism.

We could conclude in our study that the majority of our patients were middle aged women who were given a correct antibiotic treatment from their GP

The most frequent microorganism causing non complicated urine infections was E. coli.

It is demostrated that the best antibiotic of choice is Fosfomicine in a short treatment regime, less than 3 days. As alternative antibiotics Cotrimoxazol and Nitrofurantoine could be used.

There is a high resistance rate to traditional antibiotics used in urinary infections such as Fluorquinolones and Penicilines, even though FQ are still very effective due to its high penetrance in the urinary tract.

The antibiotic should be given empirically in patients with no recurrent urinary infections or complications.

Very few patients needed to be referred to hospital or secondary care, and in most pacients this was related with patients risk factors.

#### P05.165

#### Female sexual dysfunction in a Portuguese family health unit

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Introduction: Women's sexuality results from an interaction of factors and has three phases: desire, arousal and orgasm. Sexual dysfunction (SD) is highly prevalent, between 40% -70% in Portugal. Several studies consider aging or menopause as preponderant factors for these dysfunctions, however, other studies consider sexual dysfunctions in the reproductive age as underestimated. It lacks studies and results are heterogeneous, so more studies are needed. This study intended to estimate the prevalence of female sexual dysfunction in a sample of reproductive aged women, the prevalence of the various subtypes, and its associated factors.

Methods: It was an observational, cross-sectional and analytic study. 346 women in reproductive age, from the family health unit, were randomly selected and answered an anonymous, confidential and self-fulfilling questionnaire.

Results: The sample consisted of 215 women, average age 35.6 years, 26% had higher education or postgraduate degree; 69.8% were married, 72.6% were employed, with an average of 1.13 children. 60,5% uses hormonal contraception. 77,2% was the prevalence of female sexual dysfunction, 55,8% with the orgasmic disorder subtype. Stress was the most prevalent factor associated with 30.7%. Association between hormonal contraception and desire disorder was found (p=0,003), with 2.6 times greater likelihood of suffering from decreased sexual desire (OR = 2.598). There was a statistically significant relationship between sexual aversion and the existence of a prior history of sexual abuse, 7.8 times more likely to develop this disorder (OR = 7.818). Discussion: The data from this study allow us to conclude that the DSF is also highly prevalent in reproductive age and that it is a hidden problem and undervalued. The prevalence of subtypes of SD is high, the dysfunction of orgasm was the most prevalent, which leads us to question the role of partner and medication in future studies. Despite its difficulty to evaluate and different definitions of SF, this is a real problem that greatly affects the quality of life of women and their partners, and should be evaluated clinically and oriented, to provide a fully satisfactory sexuality.

#### P05.166

# Prevalence of Wrist Fracture in patients with Osteoporosis in a Health Center of Castilla y León (Spain)

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#### AIMS:

Using the records of the Medical Record Informatics (MRI) to determine the prevalence of Wrist Fracture (WF) in patients with osteoporosis (OP) to promote Preventive from the Primary Care Consultation.

### DESIGN:.

Most WF occurs in elderly patients with OP, consuming significant resources, health, social and economic in the process of diagnosis and treatment. The authors conducted a descriptive cross-sectional study of patients with WF in patients with OP record in the MRI of the PILARICA Health Center.

METHOD: From the list of selected patients with MRI 753 with a diagnosis of OP, we studied the OP prevalence and WF prevalence. We analyzed the causes of the fracture. The data is collected on an Excel spreadsheet and analyzed using SPSS 9.0 for Windows.

#### **RESULTS:**

-Patients with OP in our health center correspond to 20% of the population over 50 years.

-Of the 753 patients with OP: 687 women and 66 men. Ratio of woman OP / men OP: 10 / 1.

-Of the 687 women with MRI in the diagnosis of OP: 74 cases of WF. OP-WF women Prevalence: 10.7%

-Of the 66 men with MRI in the diagnosis of OP: 1 case of WF. OP- WF men prevalence: 1,5 %

-Falls at home was the cause in 75% of cases. For defects of vision, collision with obstacles and falls from ladders.

#### CONCLUSIONS:

20% of the population over 50 years of our health center, has recorded in his MRI OP the clinical process, with Ratio of woman OP / men OP: 10 / 1

and OP-WF Prevalence of woman / men 7 / 1, which justifying the implementation of a Health Improvement Plan, including Education Program for Health aimed at groups and the development of preventive activities in primary care consultation.

# P05.167

# The effects of Motivational counselling on Treatment outcomes in patients with Diabetes mellitus type 2

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**Background:** Diabetes is a chronic, manageable disease which requires major changes in lifestyle to optimize its management. Motivating behavior change in patients with diabetes is one of the most important tasks of family physicians.

Aim: The objective of the study was the analyses of correlation between motivational counseling and physiological/functional outcomes of treatment in the patients with diabetes mellitus type 2. Methods: The research comprised of 134 patients with diabetes mellitus type 2. The experimental group comprised of 64 questioners aged between 25 and 75, who had six month long motivational counseling conducted by their family physicians. Controlled group comprised of 70 questioners of the same age groups who had basic education about diabetes and its treatment. The treatment outcomes have been measured before the counseling began and at the end of counseling: according to the physiological parameters such as glucose in blood and Hb1Ac and functional parameters measured by Modified functional status questionnaire.

Results: The difference in treatment outcomes was not statistically significant at the beginning of research (p>0.5). The difference in glucose level after 6 months was statistically significant between two groups (p<0.001). The difference in Hb1Ac after 6 months was statistically significant (p<0.001). The difference in basic, intermediar, social activities, mental health and working ability after

6 months was statistically significant between two groups (p<0.001).

**Conclusion**: It has been established that motivational counseling improves patients' understanding of diabetes, their beliefs and expectations regarding treatment aspects and their motivation for behavior change what led to better functional and physiological outcomes of the treatment against controlled group.

Motivational Counseling should be implemented into daily clinical work in primary and secondary health care.

#### P05.168

### **Blood Pressure In Smokers and Nonsmokers**

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Cigarette smoking increases heart rate, arterial blood pressure, and plasma catecholamine levels. It is closely related to several known cardiovascular risk factors, but it may also have an independent effect on the risk of coronary heart disease (CHD). In this study, we analyzed the association between smoking and blood pressure.

Materials and Methods:

We searched 323 files of patients with hypertension. Age, sex, smoking status, systolic and diastolic blood pressure were examined. The results were recorded to the database SPSS-15 and statistical analysis was made.

#### Results:

There were 73 male and 250 female patients. The average age of the patients was 63(ranging 25-89) years old. 258 of them were non-smokers and 65 of them were smokers. Mean arterial systolic pressure was 142.8 mmHg in smokers and 151.55 mmHg in non smokers. Mean arterial diastolic pressure was 95.0 mmHg in smokers and 92.2 mmHg in non smokers. Compairing of both parameters shows that there is a slightly higher systolic blood pressure level and lower diastolic blood pressure level in non smokers. But there is no sytatistically difference between arterial sistolic and diastolic blood pressures among smokers and nonsmokers. (p=0.953 and 0.297)

Discussion:

Despite the acute actions of tobacco smoking on blood pressure, the blood pressure levels in nonsmokers has been found higher than smoking patients and antihypertensive treatment should not be replaced to smoke quitting program.

# P05.169

# Turkish family health care centers are geared up to adopt PCMH approach!

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Aim: With high expectations of patients, a new challenging initiative has been taken by American Academy of Family physicians (AAFP) with the name of Patient-Centered Medical Home (PCMH). This home has four main components: practice organization, health information technology, quality measures, and patient experience. Turkey has a very good primary health care system. However the system has some pitfalls. Therefore we conducted this study to highlight that whether our primary health care centers are ready for a paradigm shift to PCMH. Method: We conducted a pilot survey on randomly selected 5 main centers out of 29 total primary health care centers in Erzurum, Turkey during November and December 2011. The system of primary health care in entire Turkey is almost same. We used a PCMH checklist available at AAFP website. It has four domains according to services and every domain has four to five questions that further

divided into 3-5 options. Information was collected directly from key informants like physicians. Results: The results yielded that in quality measures domain, all centers do have registries for clinical information, however the other areas are not fully established. The responses regarding patients experience domain showed that they are following patient support in management and there is no problem of language as all physicians and other staff are Turkish. They also prefer to involve patients in decision-making. The health information technology is not fully established. Drug list is available and access to only physicians however community doesn't have access to any information. In the last but not the least, the finance part of practice organization is fully handled by higher authority at ministerial level while team development part can be handled at this level but most of the time by an individual effort. Conclusion: This study shows that the primary health care centers are far behind the concept of PCMH. Therefore we require three actions: to aware the health care workers by doing seminars, workshops or teach at under or postgraduate level, develop a model PCMH to convince ministry of health to develop prototype and enhance awareness among community for this approach.

# Association Between Blood Pressure and Serum Lipids

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Hypertensive patients frequently have higher cholesterol levels than normotensive patients. Positive relation between serum cholesterol level and blood pressure has been reported in many epidemiological studies, but the results have often been inconsistent across population subgroups, and some investigators consider the association to be of little biological importance. In our study, we analyzed the correlation between blood pressure and serum lipid levels.

Materials and Methods:

A retrospective study was conducted with 605 hypertensive patients. Serum total cholesterol, HDL cholesterol, LDL cholesterol, triglyceride, systolic and diastolic blood pressure at diagnose were examined from patient records. The results were recorded to the database SPSS-15 and statistical analysis was made.

Results:

There were 150 males and 455 females. The average age was 63 (ranging 25-89) years old. Only total cholesterol levels seemed to effect the systolic blood pressure levels. LDL cholesterol, HDL cholesterol and triglyceride levels do not effect blood pressure levels.

Discussion

The positive relation between systolic blood pressure and total cholesterol level suggests that there is a biological interrelation between the two major coronary heart disease risk factors.

Table: Correlation P status:							
	Systolic Blood Pressure At Diagnose	Diastolic Blood Pressure At Diagnose					
Total Cholesterol	P=0.05	P=0.08					
LDL Cholesterol	P=0.13	P=0.16					
HDL Cholesterol	P=0.38	P=0.76					
Triglyceride	P=0.58	P=0.95					

# Morton's metatarsalgia tackling in primary care ¿guide, treat or refer?

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**Aim**: To describe family doctors' (FD) tackling of patients suffering from Morton's metatarsalgia (MM).

#### Methodology:

Field of study: 18 patient loads (quotas) of FD working in Primary Care

Subjects: Identification of cases by registration of Neuroma Morton episode (CIAP = N94) in our Health Center software program (OMI-AP).

Design: Case series.

Variables studied: sex, age, patient loads of FD, risk factors, clinical information, initial diagnosis, referral to specialist, treatment and follow-up.

Analysis: Descriptive. x2.

Results: N = 151 patients (27.383 adults registered, prevalence = 0.55%) with high variations between FD (range = 1-26 cases). Age = 55.6 ± 11.3 years. 83.4% female. 61.6% medical records had some clinical information registered. Metatarsus pain was the most common symptom (88.2%). Significant variability regarding information and the initial diagnosis registration by FD (p <0.001) was found. Foot structural abnormalities (26.5%: 20 hallux valgus, 6 high foot arch and 10 trigger finger) were the most frequently registered risk factors. Initial diagnosis was made by FD in most cases (77.5%). 63.3% specialist referral (55.4% initially). 76.2% had additional tests ordered (electromyography the most frequent). NSAIDs was the most prescribed initial treatment (58.5%), while orthopedic was considered in 15.1% and 18.6% patients underwent surgery. As a result 90.7% got better. Subsequently 16.7% cases recurred (only female, p <0.01).

**Discussion**: It's striking that in an entity in which its diagnosis is mainly clinical, clinical information was absent in 60% of cases. Its large variability in the FD management and its high initial referral rate to specialist shows there's a knowledge deficit about management and follow-up of this pathology in our area. There is a big room for improvement in our Health Center. If MM treatment is mainly conservative (orthopedic, pharmacological and local corticosteroid infiltration), it should be tackled in primary care. Patients referred to second level should be carefully selected, choosing those prone to chronicity (foot structural abnormalities). Furthermore, as its natural development is favorable in most of cases, aggressive treatments should be avoided.

#### Conclusions:

Clinical information is absent in 38.4% of MM patients. High variability between FD in its identification and management. Most patients got better.

### P05.173

# Effects of acupuncture treatment on chronic pain

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Aim:Acupuncture is an alternative treatment method which is used for several illnesses. The purpose of this study was to assess effectiveness of acupuncture treatment on the patients with chronic pain.

Material and method: A prospective study was conducted during April to December 2011 at the Acupuncture Outpatient Clinic of Family Medicine Department of Ataturk University Medical Faculty in Erzurum, Turkey. Patients with chronic pain as well as migraine, back pain, neck pain, pain in joints, generalized body pain, and trigeminal neuralgia were included in the study. Needle acupuncture was applied to all patients. Totally 20 sessions were done within 2 months (from the beginning of the treatment 3 sessions per week for first month and 2 sessions per week for second month). A self-applied questionnaire with questions about demographic characteristics, severity of pain and functional status was applied to voluntary participants during the first and tenth sessions of the acupuncture therapy. Functional status was evaluated according to "daily activities section of the

COOP/WONCA charts". Intensity of the pain was evaluated with a visual analogue pain scale having a scale from 0 to 100.

Results: Results for 41 participants were analyzed. Mean age was 37.5  $\pm$  9.9 years. 32 participants (78%) were females while 9 participants (22%) were males. Functional health status improved from the initial value of 3.1  $\pm$  0.9 to 2.2  $\pm$  0.7 at session 10. This difference was statistically significant (t = 2.476, p = 0.027). Average initial pain score was 72  $\pm$  10.3 points, which dropped to 48.5  $\pm$  15.2 points. Also the decrease in pain intensity was statistically significant (t = 6.177, p <0.001).

Conclusion: In patients with chronic pain, therapeutic effects of acupuncture treatment on pain and functional status were determined. Acupuncture treatment may be a good alternative method for patients receiving polipharmacy, patients to whom analgesic use is contraindicated, and pain which is not responding to pharmacotherapy.

#### P05.175

#### Occupational Asthma on Primary Health Care

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**Scope:** Primary Health Care Centers from the Primary Health Service of Catalonia, Spain

**Objective:** To determine the prevalence of asthma patients attended by the public health service both, occupational and non-occupational that are deteriorated by their work activity.

To determine the proportion of patients diagnosed with occupational asthma that were treated by work insurance companies.

Method: Descriptive, cross-sectional and multicenter study.

Subjects: patients aged between 16 to 64 years who work or have worked and have been previously diagnosed with asthma.

- Appointment with each patient to explain the study. Sign the informed consent and fill the questionnaire sheet.
- Review the questionnaires by an expert team physician and classify each case as being common asthma (CA), occupational asthma (OA) or common asthma which aggravates as a consequence of their labour activity.

Results: With the help of 80 physicians, 482 patients with asthma have been recruited. 23.6% did not attend. With a final sample of 368 patients, the prevalence of OA was 18.2% and CA aggravated by their labour activity was 14.7%. Therefore, the prevalence of asthma related to work activity is 32.9% of the total of all asthma cases.

Of the patients with OA, only 16.4% (11 out of 67) had been treated for asthma by their work insurance and, of those, only 5 patients had been fully monitored by it, while the rest have been attended by the Public Health System. Thus only a 7.5% of patients with OA are followed up through their work insurance.

**Conclusions:** There is a considerable prevalence of asthmatic patients whose illness is caused or aggravated by their labour activity (32.9%).

The work insurance, who should attend to all these patients, only takes care of a minimal part. If they had to assume all the real costs related to the diseases caused by work, then fewer public resources would be spent. It is likely that they would undertake much stronger programs in security and health in the work environment and labour activities.

### P05.176

# Prevalence of Smoking in Primary Health Care in Castilla y León (Spain)

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AIMS: To determine the prevalence of smoking in our Health Center (H.C.) to provide consultation from Primary Care,

prevention, treatment and monitoring, according to the Phase that is Abandonment (precontemplation stage, contemplation stage, phase preparation and maintenance phase of action).

METHOD: We used Medical Record Informatics (MRI) from our PILARICA Health Center (Valladolid, Spain), MRI 1393 were recruited randomly among patients over 15 years of our H.C. We analyzed the presence of non-smoking log to determine the prevalence of smoking in the H.C. and compare the estimated prevalence in our Health Care Valladolid Este (Va): Va global prevalence = 23.3%. Va men prevalence = 28% and Va women prevalence = 18.9%.

#### **RESULTS:**

1-Target population,> 15th, 1393, 645 men, 748 women.

2-Smoking: 161 patients, 107 men and 54 women.

3-H.C.global smoking prevalence = 11.55%, H.C. men smoking prevalence = 16.59% and H.C. women smoking prevalence = 7.21%

#### CONCLUSIONS:

After analyzing the record of the diagnosis of smoking in MRI, it appeared low prevalence of smoking in the Health Center regarding the Area of Health:

H.C. / Va Global smoking prevalence = 11.55% / 23.3%, .HC./Va men smoking prevalence = 16.59% / 28% and H.C. / Va women smoking prevalence = 7.21% / 18.9%. This represents an underdiagnosis of 50.49%

Improvement Plan: Make smoking history of patients who come to our primary care consultations, make records for the diagnosis of smoking in the Computer History of our Health Center to enable us to determine the prevalence of people with this disease to develop a plan that includes prevention, treatment and monitoring from our Primary Health Care.

#### P05.177

# Personal Health Records: An opportunity for GPs and patients?

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#### Introduction

In Italy, Personal Health Records (PHRs) are currently being deployed experimentally. PHRs combine information from patients, health services and various health professionals, can be accessible online and managed by patients, and their purpose is to improve the efficiency and effectiveness of healthcare.

# Aim

The objective of our study was to determine whether the implementation of PHRs is useful or not according to Italian General Practitioners.

# Methods

A structured questionnaire was distributed to 195 GPs coming from all regions of Italy (mean age = 55.2, sd= 7.33). Initially, demographic data and information on their professional career were collected. Questions on the use and features of the PHRs were asked, while potential issues were also investigated.

#### Results

76.1% of the participants replied that PHRs would be useful or adequate tools for the development of electronic communication and 91.5% agreed that they could be of aid in a patient-oriented healthcare. Interestingly, 25.4% of the sample observed that integrating patient lifestyle monitoring in PHRs would increase their workload, while only 9.0% believed that such a method would contribute in patient's empowerment.

Furthermore, almost half of them (49.7%) considered that enabling patients to have access to personal health information had already caused issues in their work. In fact, the majority of the participants were contrary to enabling patients to manage their own information; a mere 10.3% would allow them to conceal documents of their choice and 21.5% would authorise them to edit their own clinical diary. Finally, the integration of automatic alarms for chronic diseases was considered useful for only 32.3% of them.

### Conclusions

Although putting PHRs into practice seemed to be valuable by the majority of the participants, they were regarded as a plain list of examinations and clinical evaluations. Nonetheless, many

considered the improvement of PHRs as favourable and supported the addition of other features that would integrate them with various communication platforms, facilitating on-line contact with patients, other GPs and specialists.

#### P05.178

Influenza Vaccination Rates, Knowledge and the Attitudes of Physicians and Health Care Workers of a Tertiary Care Hospital and Inference for Primary Care

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Aim: Like many other international health institutions, Turkish Ministry of Health strongly recommends vaccination against influenza among health care workers. The aim of this study was to assess the knowledge and attitudes of physicians and other health care workers (HCWs) among influenza vaccination at a Training and Research hospital.

**Methods:** This is a descriptive and cross-sectional study. The study participants were HCWs working in Konya Education and Research hospital. Self administered, anonymous questionnaires were applied to 192 doctors and 411 other HCWs (total=603) who accepted to participate in our study, through November 2011. Frequencies, percentages and chi-square tests were used in statistical analysis.

Results: The 64.1 percent (n=387) of the participants were female and 63% (n=380) of all have been working longer than five years. Seasonal influenza vaccination rates of 2011-2012 were noted to be 16.7% (n=101). Although 9.5% (n=57) of the study group had a chronic disease, 71.9% (n=41) of them did not administered influenza vaccine (p<0.05). Besides, 40.8% (n=240) expressed two or more influenza attacks annually and 82.9% of them had not been vaccinated. For the 12.9% (n=78) of participants, influenza caused absenteeism. Approximately 45% (n=271) of all has never been vaccinated, 27% (n=163) were vaccinated last year and 21.2% (n=128) were planning to be vaccinated next year. Among the influenza vaccinated group, 56.4% (n=57) had no side effects, 29.7% (n=30) had local side effects (swelling, redness etc. on injection side), and 22.8% (n=23) had flu like syndrome.

**Conclusions**: In our study, like other studies in the literature, vaccination rates are not at desired levels. According to our Hospital Infection Committee reports, vaccination rates were lower in our hospital comparing to the H1N1 pandemia in 2009. The underlying causes of abstaining from vaccination among health care professionals should be evaluated. As family physicians are responsible for the health of community and deal with acute and chronic health problems, it is important to increase their awareness of influenza vaccination.

# P05.179

# Evolution of lipid profile in patients with a first diagnosis of hypercholesterolemia

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**Background**. It is likely that the best results on the lipid lowering therapy are obtained in patients in whom raised cholesterol levels are detected for the first time

Aim. To determine the reduction in cholesterol levels and cardiovascular risk in patients after a first diagnosis of

hypercholesterolemia, according to European Guidelines for Cardiovascular Prevention.

**Materials and methods**. This is a longitudinal observational study of one year's duration carried out in a primary care setting on 266 individuals after a first identification of cholesterol  $\geq$  200 mg/dL. The following parameters were assessed: lipid profile, cardiovascular risk factors, cardiovascular risk, comorbidity, medication taken and sociodemographic characteristics.

**Results**. Initial mean cholesterol level in the sample was 232.3 mg/dL. Both total cholesterol and LDL-C were significantly reduced after 6 months of follow up (-8.5 mg/dL and -4.3 mg/dL, respectively), while at 12 months this reduction was only significant for total cholesterol (-6.3 mg/dL). After 6 months, 81.5% (95% CI: 75.9 - 87.1) of the subjects normalized their total cholesterol levels (< 200 mg/dL) and after one year this figure had risen to 84.6% (95% CI: 77.7 - 91.6). The LDL-C had dropped to < 130 in 68.2% of individuals (95% CI: 61.0 - 75.4) at 6 months, and after one year in 72.1% (95% CI: 63.3 - 80.9). The reduction in cholesterol was significantly higher in subjects aged over 65 years old (-20.10 vs - 1.69; p = 0.001).

**Conclusions**. In patients diagnosed with hypercholesterolemia for the first time, although the reduction achieved is modest, averaging around 10%, in most cases it is sufficient to obtain total cholesterol levels < 200 mg/dL and levels of LDL-C < 130 mg/dL, both considered as targets in primary care by cardiovascular prevention guidelines.

#### P05.180

# Determinants of compliance with lipid lowering drug in hyperlipidemic patients

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**Introduction:** In order to evaluate the compliance of lipid lowering therapy and to assess the determiants of compliance with a lipid lowering therapy, a prospective observational study of the hyperlipidemic patients was carried out.

Methods: The participants who were newly prescribed Rosuvastatin were enrolled from 32 family physicians in Korea from March 2009 to December 2009. The participants were regularly observed to ascertain the compliance associated with Rosuvastatin at intervals 12 and 24weeks. We collected risk factors for the compliance using a structured questionnaire. The criteria for evaluating compliance are to measure clinic attendance, to assess the continuity of therapy and to calculate the percentage of doses taken.

**Results:** During the study period, 2606 participants with hypercholesterolemia were considered and 2306 participants were included in the final analysis. 1403(54.1%) participants belonged to 'compliant' and 903(34.8%) participants to 'non compliant' group. In multiple logistic regression analysis, the factors for the compliance with lipid lowering drug were old age(OR 1.63, 95% CI 1.44-1.84), exercise(OR 1.62, 95% CI 1.43-1.83), previous statin therapy(OR 4.02, 95% CI 3.22-5.01), hypertension(OR 1.80, 95% CI 1.48-2.19), diabetes mellitus(OR 2.20, 95% CI 1.69-2.87), concomitant medication(OR 2.28, 95% CI 1.88-2.77), LDL cholesterol level(OR 0.46, 95% CI 0.40-0.51), and CHD risk category(OR 1.33, 95% CI 1.17-1.52) (P<0.05). Sex, education level, smoking status, alcohol

intake, BMI, central obesity, history of cardiovascular disease, and HDL cholesterol level showed no difference in the compliance. **Conclusion:** Short term compliance with the lipid lowering therapy was 54.1%, relatively low. Several factors for compliance were age, frequency of exercise, previous statin therapy, hypertension, diabetes mellitus, concomitant medication, LDL cholesterol level, and CHD risk category

#### P05.181

The Efficacy and Safety of a combined alendronate and calcitriol agent(Maxmarvil): A Postmarketing Surveillance study in Korean Postmenopausal Women with Osteoporosis

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**Introduction:** Combined therapy with alendronate and calcitriol may have additive effects on bone density. An observational study was performed to evaluate the efficacy and safety of Maxmarvil, a combinative agent of alendronate (5mg) and calcitriol (0.5 $\mu$ g), and to identify factors associated with efficacy.

**Methods:** Postmenopausal women with osteoporosis were enrolled by family physicians in 12 hospitals. The study subjects took Maxmarvil daily for 12 months. Questionnaires about baseline characteristics, socioeconomic status and daily calcium intake were completed at the first visit. Adverse events were recorded every 3 months and bone mineral density (BMD) in the lumbar spine was measured using dual-energy X-ray absorptiometry (DEXA) at baseline and after 12 months. We evaluated the efficacy and safety of Maxmarvil, and the factors related to BMD improvement

Results: The patient continuation rate for the medication was 93.8% and 82% of patients showed good compliance (i.e., ≥80% compliance). The median BMD was 0.81±0.12 g/cm² at pretreatment and 0.84±0.13 g/cm² after one year. The average BMD improvement was 3.4±6.4% (P<0.05), and 167(45.1%) of the 370 patients showed improvement. Factors associated with improved BMD were no history of osteoporosis treatment (odds ratio 1.83, 95% CI 1.06-3.15) and good compliance (odds ratio 2.55, 95% CI 1.27-5.13). Adverse events were reported by 35 of the 568 patients, with the most common being abdominal pain and dyspepsia.

**Conclusion:** Maxmarvil was found to be safe, well tolerated and effective in osteoporosis treatment. New users and good compliance were the factors associated with efficacy.

# Prevalence and Underdiagnosis of Chronic Obstructive Pulmonary Disease in Primary Care in Castilla y León (Spain)

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#### AIMS

To determine the prevalence of patients with Chronic Obstructive Pulmonary Disease (COPD) in our Basic Health Area to provide comprehensive care and continue to respond to physical, psychological and social development through prevention, promotion and rehabilitation.

METHODOLOGY:

1º-To determine the Global prevalence of COPD in our PILARICA-Valladolid Este Health Center(H.C) by using the records in the Electronic Medical Record (EMR) of our Health Center, based on the Service Portafolio SACYL (Health Castilla y León) of attention to patient with COLD, who meet the inclusion criteria of greater than or equal to 40 years of age who meet at least one of the following diagnostic criteria:

1. That they have been diagnosed with the following diagnostic criteria spirometry, FEV1/FVC below 70% and FEV1 below 80%. 2.with a history of smoking, cough, sputum and / or dyspnea and spirometry is appreciated as a reduction in the FEV1/FVC ratio below 70%.

 $2^{\circ}$ -Compared to the estimated prevalence of COPD in the Community of Castilla y León (CyL): Global Prevalence CyL = 10.3%, Men prevalence CyL = 15.0%, women prevalence CyL = 5.4%

**RESULTS:** 

1-Target population, > 40: 10,087(4693 men,5394 women).

2-COPD in 244(192men-52women).

3-Age distribution of patients with COPD:

.90-100:12men-4women.

.80-90:60men-12women.

.70-80:63men-9women.

.60-70:28men-17women.

.50-60:22men-7women

.40-50:7men-3women.

4-Global prevalenceH.C.=2.41% . MenPrevalenceH.C=4.09%. WomenPrevalenceH.C.=0.96%.

CONCLUSIONS:

It is observed that the COLD Global prevalence in our Health Centre is 2.41%, much lower than that estimated in CyL which is 10.3%, so does the prevalence of COPD in men's health center is 4.09 % and the prevalence of COPD in women is 0.96% % lower than the CyL Community are 15% and 5.5% respectively.

This represents an Underdiagnosis of 76.61%. Results largely in line with IBERPOC Study (COLD Prevalence in Spin,1997), and the EPI-SCAN Study (COPD Prevalence in people 40 to 80 years in Spain,2007) in which registration underdiagnosis of 78% and 73% respectively.

Knowledge of the prevalence of COPD helps us to plan strategies for disease management, develop a Plan for improvement, we need alternatives that include: spirometry, training and dissemination. to develop a plan that includes prevention, promotion and rehabilitation of COPD from our Primary Health Care.

#### P05.183

Evaluation of the patients who admitted to the family medicine outpatient Clinic of Ankara Ataturk Training and Research Hospital

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OBJECTIVES: Family medicine outpatient clinics are the health care units where the patients admit first. Thus the symptoms of the patients who admit to the family medicine outpatient clinics vary compare to the others. In family practice, management of the patients' symptoms is very important. The aim of this study is to define demographic properties and range of symptoms of the patients admitted to the family medicine outpatient clinics.

METHODS: This study was designed as a cross-sectional study. Totally 319 patients who admitted to the family medicine outpatient clinic of Ankara Atatürk Training and Research Hospital in June 2011 were included. Demographic properties, complaints, symptoms, clinical diagnoses of the patients were recorded. The analysis was done with SPSS 15.0.

RESULTS:319 patients were included in the study. 66.1% of them were women and 33,9% of the patients were men. Mean age of men and women were 52,7± 19,9 and 47,7± 18,4 respectively. The most common reason of the application to the out outpatient clinic was purpose of the control of chronic diseases (28,5%), the second reason was coughing (11,9) and the third reason was found as weakness (6,9%).

CONCLUSION: Family practice is the cornerstone of the heath care systems. Family physicians usually come against the patients who have undifferentiated symptoms. They should know how to diagnose, treat or follow these patients. In order to give qualified service, family physicians should identify the properties of his/her population.

### P05.184

#### Degree of self-caring heart failure in primary care patients

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#### Objective

To review the degree of self-care in patients who suffer from heart failure according to the European Heart Failure Self-care Behavior Scale (EHFScBS)

To determine if differences in self-care exist depending on age, NYHA class, time of evolution, type of heart dysfunction, number of hospital admissions due to decompensation.

Material and methods

Type of study

Cross-sectional descriptive study carried out between January and August 2011

Location

Urban primary care center (PCC)

Subjects

All patients diagnosed of Heart Failure (HF) in 8 of the 20 doctors in a PCC

Measures and interventions

Variables: demographic data, risk factors for HF, time of evolution, NYHA class, admissions due to HF in the last year and punctuation in the **EHFScBS** 

Statistical analysis, descriptive as well as multi and bi variant analysis

# Results

157 patients were included 91 female (61%) mean age 78.8 (SD 11.4) 140 of them answered the **EHFScBS**. Mean score was 24 (SD 7.7) No correlation was found between age and score (Pearson -0.24 p= 0.778) Statistical association with NYHA class (ANOVA p=0.383) was not found. None of the variables was associated with poorer results in the **EHFScBS**. Compliance with medication was the item were higher scores were found (Mean 1.4) and to weigh oneself was the one with poorer scores (Mean 3.2)

Conclusions

Patients in our study showed a moderate degree of self-care, in accordance to previous studies carried out in HF units.

Association was not found between self-care and age, time of evolution, NYHA class, type of dysfunction or number of admissions due to decompensation.

# Determinants of family satisfaction with inpatients palliative care in Korea

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**Backgroud:** Understanding the determinants of family members' overall satisfaction with palliative care may provide guidance to quality improvement of the palliative care services. We aimed to identify which structures and processes of care are the key determinants that significantly contribute to overall satisfaction with palliative care.

**Methods:** We conducted a nationwide, multicenter, crosssectional questionnaire survey with 501 bereaved family members of terminal cancer patients. Structures and processes were evaluated by the Care Evaluation Scale (CES). Data were analyzed by univariate and multivariate logistic regression analyses.

**Results**: In univariate analyses, all domains of the CES were significantly associated with overall satisfaction of care. In multivariate analyses, "Physical care by physician(adjusted odds ratio [aOR] = 1.91, 95% confidence interval [CI] = 1.00 - 3.67)", "Physical care by nurse (aOR = 2.26, 95% CI = 1.23 - 4.18)", "Environment (aOR = 2.23, 95% CI = 1.07 - 4.65)", and "Coordination (aOR = 3.12, 95% CI = 1.37 - 7.13)" were among the CES domains that positively influenced the overall satisfaction. After case-mix adjustment, "Physical care by nurse", age of patients, and lower education level of bereaved remained as significant determinants of overall satisfaction of care.

Conclusions: Our finding that nursing is the most critical determinant of the overall satisfaction among many domains of structures and processes has an important implication for clinical quality improvement and resource allocation. Significant influence of patients and family member characteristics on the overall satisfaction level prompts the need to develop proper case-mix adjustment methods for the comparative assessment of palliative care services.

#### P05.186

# Is there a profile of heart failure patients with more hospital admissions ?

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### Objectives

To determine if there is a profile of Heart Failure (HF) patients who visit emergency departments more often or are admitted to hospitals

Material and methods

Cross sectional descriptive study

Revision of medical records, including all HF patients diagnosed by 8 General Practitioners, between January and August 2011 Variables

Demographic data, echo-cardiogram (ECHO) data (ejection fraction, type of HF) time of evolution, NYHA class, use of ACE inhibitors/ARBs, Bbloquers, consumption of NSAIDS, number of urgent visits or admissions to hospital

Bi-variant statistical analysis

Results

157 patient record's were reviewed, 91 female (61%), mean age was 78.8 years old (SD 11.4)

140 of them (89%) had an ECHO done. Systolic dysfunction was found in 25(18%) of them, and diastolic in 82 (59%) of them, mixed dysfunction in 3 (2%) and 32 (23%) of them didn't show a dysfunction.

17 of them were classified as NYHA class I, 100 of them as class II, 35 of them as class III and 1 was classified as class IV. In 4 patients the class was unknown.

58 of them (37%) visited the A&E department once, 21 (13%) of them visited it at least twice. 61 of them (39%) were admitted to hospital and 17 (11%) of them were admitted at least twice.

Bi-variant logistic regression analysis showed that Dilated Myocardiopathy was associated with more visits to A&E (OR 3.7 IC 95% 1.3-10.7) Meanwhile the use of ACE inhibitors or ARBs presented a negative association with visits to hospitals. (OR 0.4 IC95% 0.16-0.87)

The only variable associated to hospital admissions was Dilated Miocardiopathy (OR 3.4 IC 95% 1.2-9)

Conclusions

In our sample of HF patients, the use of ACE inhibitors or ARBs reduces the number of visits to A& E departments

Dilated Miocardiopathy is, in our sample, the only variable associated with more visits to A&E departments and admissions to hospital

#### P05.187

#### Ventricular dysfunction in primary care patients. What typhe?

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#### Objective

Heart Failure (HF) is the first cause of admissions to hospitals in patients over 65. Prognosis and therapeutical approach depends on the type of ventricular dysfunction

The aim of the study is to determine the type of dysfunction found in our HF patients and if that dysfunction entails differences in morbidity, NYHA class, treatment and hospital admissions.

#### Material and methods

Cross- sectional descriptive study

Medical records from 9 general practitioners were reviewed (previously trained in HF) regarding HF patients between January and August 2011

Variables: demographic data, echocardiogram (Ejection Fraction <45, Diastolic dysfunction, ventricular hypertrophy, enlarged left atrium) Time of evolution, NYHA class, treatment (Ace inhibitors/ARBs, BBloquers) and hospital admissions in the last year

Statistical analysis: chi-square test, student's T test and logistic regression

#### Results

157 patients were included, 91 female (61%), mean age 78.8 years old

Systolic dysfunction was found in 25 (18%) of the patients, diastolic dysfunction in 82 (59%), mix dysfunction in 3 (2%). NYHA class was not associated to a particular type of dysfunction.

There was a significant association between diastolic dysfunction and chronic obstructive pulmonary disease (COPD) (OR 3.6 IC95% 1.2-10,6). Dilated myocardyopathy (OR 0.14 IC95% 0.04-0.5) and valvulopathy (OR 0.5 IC95% 0,2-1) were significantly associated to systolic dysfunction

The use of ACE inhibitors/ARBs was associated to systolic dysfunction (89% V 66% p=0.002) and the use of BBloquers did not show any statistical differences (47% V 42% p=0.567) .

# Conclusions

Patients from our sample, predominantly present a diastolic dysfunction (61%) which is associated to COPD and to the fact that they take less ACE inhibitors/ARBs than those with systolic dysfunction who suffer more from dilated myocardyopathy and valvular diseases.Both type of dysfunctions don't show any differences regarding NYHA class, number of admissions or treatment with betabloquers

#### Evaluation of thyroid disorders in morbid obese patients

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OBJECTIVES: Obesity is a major health problem and prevalence of obesity is increasing worldwide. Various hormones, cytokines and chemokines secreted by adipose tissue has important role in regulation of homeostasis. Obesity affects all systems. Thyroid function is also affected by obesity. We aimed to evaluate the relation between morbid obesity and thyroid function.

DESIGN: This study was designed as a retrospective study. One hundred and seventy morbid obese patients (BMI>40) admitted to Endocrinology Department of Ankara Atatürk Training and Research Hospital, between August 2007 and February 2009 were included in the study. Body Mass Index (BMI), thyroid ultrasonography, thyroid hormone levels of 170 morbid obese patients were evaluated. The analysis was done with SPSS 15.0. RESULTS: This study includes 170 patients with morbid obesity. 21.8% of patients were male, 78.2% of patients were female. Age of patients ranged from 18 to 80. The median age was found 54.5(IQR=18). BMI values ranged from 40 to 91.4 kg/m2. When the results of thyroid ultrasonography of morbid obese patients were evaluated; 70.2% were in accordance with thyroiditis and 56.2% were in accordance with nodular thyroid gland (single or multiple nodules). Only 1.5% of patients had normal ultrasonographic evaluation. Rate of the patients with hypothyroidism and hyperthyroidism were 26.5%(n=45) and 2.4%(n=4) respectively. %71.2 of patients was found euthyroidic. Four patients (%2,4) were diagnosed as papillary thyroid cancer. CONCLUSION: Frequency of thyroid disorders in morbid obese patients is higher than general population. Physicians should be aware of obese patients about thyroid disorders. Thyroid function and thyroid gland of obese patients should be evaluated (by ultrasonography) regularly.

# P05.192 Menopause as risk factor

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Introduction: Menopause is additional risk factor in women. Due to decreasing levels of estrogen in postmenopausal women the risk of osteoporosis, cardiovascular disease (CVD), diabetes, cancer, thyroid disorders, urinary incontinence etc. increases. The aim of the work: to examine the representation of risk factors: smoking and obesity, and presence of CVD disease, diabetes and thyroid disease in women after menopause. Subjects and Methods: The survey was conducted in an urban environment, in a family medicine clinic in Sarajevo. Samples are consisted of 126 consecutive women, a patient of a family physician, which are in natural or surgical menopause, age 43-65 years. Parameters were taken from medical records, namely: age, age of onset of menopause, information on smoking, BMI, and data provided if suffering from CVD (hypertension, confirmed angina, heart attack or stroke), have diabetes or thyroid disease. Results: The average age of respondents is 58.3 years. SD 5,05 years. Minimum age of menopause is 33 years and maximum 56 years and an average age is 48.3 years.

44.4% (56) of respondent women were smokers, only 18.2% (23) is of normal nutritional status BMI  $\leq 25$ . Overweight, BMI> 25  $\leq$ 29,9kg/m2 is 32.5% (41), 31.7% (40) is obese BMI> 29.9 <35 kg/m2 and 17.4% (22) is extremely obese BMI  $\geq$  35 kg/m2. CVD has a 58.7% (74) respondents, 11.1% (14) Diabetes and 9.5% (12) thyroid disease. Conclusion: 44.4% of subjects, menopausal women are smokers; only 18.2% were of normal nutritional status, while the remaining 81.8% were from being overweight or obese. CVD has 58.7% women, 11.1% diabetes and thyroid disease 9.5%. These data bind a family physician to work on the modification of risk factors - smoking cessation, weight reduction in

women after menopause in order to prevent disease of the healthy subjects while simultaneously working to secondary prevention of suffering. Our survey also confirms that women in menopause require reinforced medical supervision

#### P05.193

Estimation of bone fracture risk on patients diagnosed with osteoporosis using the FRAX index

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Introduction: In 2008, the WHO proposed the estimation of the risk of bone fracture based on several factors: the FRAX index, a new tool easy to use. Clinical decision thresholds based on FRAX are not available in Spain. In the USA, treatment is recommended over 20% (major osteoporotic fracture) and 3% (femur fracture).

Objective: To use the FRAX index in our patients with Osteoporosis (OP).

Material and methods.

Type of study: Descriptive, cross-sectional.

Location: Urban Primary Health Centre.

Subjects: Random sample of patients in a PHC diagnosed with osteoporosis.

Variables: Age, sex, weight, height, fracture due to fragility in patients over 50, parents with hip fracture, tobacco consumption, glucocorticoids, rheumatoid arthritis (RA), secondary osteoporosis, alcohol consumption, last bone mineral density (BMD), FRAX estimation and treatment.

Results: n=251, 244 women, age 70.1 (+10.1 standard deviation), 27.5% with previous fracture, parents with hip fracture 26, 13 smoking patients, 4 with RA, 5 alcohol consumers, glucocorticoids 15 and 17.9% with secondary osteoporosis due to premature menopause. According to BMD, 41% suffer osteoporosis and 89.3% receive treatment.

BMD results show that 20.3% do not suffer osteoporosis and 62.7% of those patients get treatment. FRAX result major fracture >20=31 patients, 77.4% of them receive treatment. FRAX result femur fracture >3=78, 20.4% of them get no treatment. Most usual treatment: calcium tablets + D vitamin + alendronic acid. 23% receive no treatment.

Conclusions: There is a high percentage of patients diagnosed with OP without previously having measured their osseous density. Most patients with both pathological BMD and a high FRAX index receive treatment.

#### P05.194

### Clinical study on the use of new oral anticoagulants

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Aim

To compare the efficacy and safety of new oral anticoagulants (dabigatran or rivaroxaban) with Low Molecular Weight Heparin (LMWH) for thromboprophylaxis after orthopedic surgery and discharged home.

To assess the incidence of thromboembolic and hemorrhagic complications and then to distinguish the different anticoagulants used

Design & method:

Descriptive longitudinal study

We include people undergoing hip or knee arthroplasty in the hospital in the last 6 months, who have the treatment with LMWH or new anticoagulants and followed for primary care physicians. Measurement:

We analyze age, sex, surgical-elected, treatment performed and complications of patients attending a primary care after hip and

knee surgery. If there are any complications, to find out which anticoagulant therapy and how serious are.

Results:

We included 159patients (45 men and 114 women). 71%women. Average age 73.

The findings were that 86 cases (54.1%) were scheduled surgery knee replacement and 73(45.9%) of the hip replacement.

Anticoagulant therapy in these patients was 42.76% of cases with bemiparina 3.500, 25.17% rivaroxaban, 17.61% dabigatran and 14.46% enoxaparin 40 mg.

There were complications in 15.1% of cases. One confirmed case(0.63%) of serious DVT with enoxaparin and one hemorrhagic complication(0.63%) with bemiparin. Clinical thrombotic were observed in 4.4% of cases. 9.44% other complications(infectious, hemodynamic...).

#### Conclusions:

In our study, patients undergoing hip or knee arthroplasty, has not been observed higher incidence of hemorrhagic or thromboembolic complications in patients treated with the new anticoagulants with respect to LMWH.

#### P05.195

#### Software-hardware supply of GP's prevention activity

#### S. Khanenko.

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«Primary health care is the base of health care in general.» World Health Organization.

General practice-family medicine is worldwide proved model of effective primary health care providing.

Ukraine has serios problem - permanent demographic crisis.

One of the main reasons - abcence of quality, continous and affordable primary health care.

Conclusion - this care has to be organized and provided to Ukrainian people.

### VALUE-ORIENTED ORGANIZATIONAL SYSTEM

General practitioner has to get regular payments per capita instead of direct payment for service provided. It motivate preventive activity, early diagnostic and efficient resource spending. Also, it motivate constant professional and personal growth.

#### **EDUCATION**

Doctors have to get special training. As result, they have to be ready to perform primary manipulation in many directions - internal diseases, ophthalmology, otolaryngology, neurology etc. Organizational system motivate them to increase their knowledge and skills. Special attention has to be paid to preventive activity; health level, adaptation, environment assessment techniques and influence tools.

# SOFTWARE-HARDWARE SUPPLY

Value-based organizational system performance requires specific software and hardware supply.

Software functions - collecting, proceeding, storage and exchange of information. Personal information, automatic analysis of medical data, financial analysis, accounting, report and planning - all this will put GP's work on higher professional level.

In order to collect enough diagnostic information and to stay mobile in the same time, General practitioner needs compact interconnected set of diagnostic equipment and professional software.

Diagnostic modules don't have to bring duplicate microprocessors and indicators (monitors). Modern laptops are able to collect diagnostic data from connected detectors, process it with diagnostic software and reflect results on its own high-resolution monitor.

Informational and technical component have to be provided with common GP-friendly interface.

Conclusion - Value-oriented system requires highly educated professionals, effective and efficient hardware-software supply. Example

#### P05.196

How family doctors can offer a satisfactory service to patients: a qualitative study of older people

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#### Introduction

Patient's satisfaction is a frequently used measure of healthcare quality yet it is not precisely defined. There is little literature on engagement of older patients in healthcare assessment. This topic is important because European society is aging, and older patients with multiple morbidity will increasingly require healthcare. The aim of this study was to explore older patients' meaning of satisfaction after a family doctor consultation.

### Methods

A qualitative study "Experiences of general practice patients aged 65 years and above" was conducted among patients attending family doctors in Bialystok and Krakow in Poland. The data were obtained from in-depth interviews. A purposive sampling strategy was used for sample variability. Our research question was: what do older patients mean by the word 'satisfaction' with visits to the family doctor and how do they use the word? The interview guide explored the meaning of satisfaction with a consultation. Content analysis was used.

#### Results

Average age was 74 years (range 65 to 87) and 18 were women. The opinions of 30 patients defined satisfaction in various ways. Four themes emerged (box 1):

Box 1: Emergent themes	;
Communication between doctor and patient	"If the doctor asks about the illness, I will answer, and he will give advice and talk to me." (Int 7)
Treatment effectiveness and doctor's competences	"The doctor correctly diagnosed me, gave me the correct treatment." (Int 10)
Doctor's characteristics, personality, attitude	"Because I can see that he particularly cares about me, not to fob me off as others do. He is quite friendly and a clever man." (Int 19)
Accessibility of the doctor	"When I go and the doctor takes me in without waiting and prescribes medications." (Int 14)

# Conclusions

The determinants of satisfaction resulting from a visit to the family doctor practice for older people are numerous and depend on the way that care is provided and the reasons for the visit. Satisfaction as a quality assessment should be regarded with caution because of the complex nature of the interaction. Doctors who look after older people should listen to the patient and give consideration to them as people.

### P05.197

Illness representation among GP tutors, trainees and patients from a primary health care center

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Introduction and Aims: Health information is provided by GPs to patients during consultations, that includes GP registrars that also are asked to give information to patients during their surgery hours. That information often depends on oneself's beliefs about the diseases, illness representation (IR) and it may have influence on patients's attitude towards their disease.

Aims: -To assess the IR of arterial hypertension of GP tutors, GP registrars and patients from a Primary Health Care Center. -To analyze the IR in GP registrars of different years of their training programme in a Health Area of Murcia, Spain.

Material and Methods: Design: Descriptive and transversal study. Subjects: 19 GP tutors, 31 GP registrars, 98 patients. Systematic

sample (confidence level 95%; precision of 8 %). It was administrated the Spanish adaptation of the Implicit Models of Illnes Questionnaire (CCSE) which has 36 items, with a 5 point Likert-scale, grouped into 9 factors (Identity, Cause, Disability, Cure, Localization, Personal responsibility, Controllability, Changeability and Chance) to assess IR of hypertension.

Statistical analysis: Student's t-test for independent samples and Chi-square test. Results. Mean age: GP tutors  $47.3 \pm 9.3$ , GP registrars  $29.23 \pm 4.05$  and patients  $60.63 \pm 12.17$  years. Globally, there were differences in IR between physicians and patients (p=0.01). There were significant differences in IR between GP tutors and trainees in factor 7 (Controllability), and also between Specialty Trainee (ST) 4 and GP tutors in factor 6 (Responsibility). There were significant differences among ST1 and the others ST in factor 9 (Chance), and also among ST4 and the others registrars in factor 6 (Responsibility).

Conclusions: Our findings suggest that to prevent differences in illness perceptions between GP tutors and registrars, especially in Specialty Trainees 4, who are about to finish their training, it's important to follow a medical protocol or guidelines. Health information must be suitable and precise and it's the responsibility of both GP tutors as well as registrars to ensure that information is accurate to reduce the different illness perceptions between patients and doctors.

#### P05.198

# Internet use in adolescents in lower secondary education: a cross-sectional study in a Greek urban area

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Purpose: To describe the habits of adolescents in lower secondary education concerning internet use, in order to detect the possible need for General Practitioners' (GPs') intervention in their community.

Methods: Pupils aged from 12 years old and over, studying in three high-schools in the urban area of Evosmos, in Thessaloniki, were interviewed on their habits in internet use. The study was supervised by the 3<sup>rd</sup> Health Region Authority (Macedonia). The Director of the local health centre informed the principals of the nearby high schools about the purposes of the study and arranged the visit at the school campuses. Pupils' guardians were previously informed by a leaflet about the purposes of the study and they were asked to provide informed consent. GPs visited the school campus helping children to answer questions about the way they use internet and demographics. Participation was optional and anonymity was preserved. Approval from the Greek Ministry of Education was obtained for this study.

Results: 913 adolescents, aged from 12 to 19 years old, 459 (50.3%) male, from all three classes of high-school participated in the study (response rate 74%). 684 (75%) of the participants declared using internet one to two hours daily, while 169 (18.3%) more than three hours daily. 793 (86.9%) adolescents had internet access at home, 409 (44.8%) used internet to play games and 585 (64.1%) had a profile in Facebook. 360 (39.4%) declared that they are font and very font (in a 5- point likert scale) of social networking sites. Boys were found to spent more time on internet games and had in compared to girls (55.6% vs 33.9%, p<0.001). The percentage of adolescents that used Facebook was higher in the third class of high school compared to the first and the second class (A: 56.5%, B: 64.9%, C: 72.2%, p<0.001).

Conclusions: High internet use in adolescents was found, especially in playing games online and using social networking sites. GPs should have increased awareness of this condition and pursue relevant continuous educational programs in order to confront effectively the risk of internet addiction and the related health issues in adolescents.

#### P05.199

# Investigation Into The Effects Of Biopsychosocial Factors On The Attitudes Of Old People To Being Old

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**Introduction:** In our study, we aimed to observe the psychosocial tendencies of people who are 65 or over.

Materials and methods: In this study prospective, observational and analytic methods were used. Old people 65 or over who agreed to take part in the study and whose mental state was suitable were studied. The age, gender, mental status, number of years of schooling and the number of people in the home of the people who took part in the study were recorded. The Geriatric Depression Scale and The Fatih-Bursa Scale of Attitudes Towards Being Old were applied these people. The scale of measurement consisted of 5 factors and 21 characteristics. The cahracteristics mesured were awarded points on a 5 point Likert-type scale. The factors measured were: Thoughts about Aging (TA), Thoughts about Life and Death (LD), Family Status (FS), Aims and Ideals (AI) and Social Status (SS). We compared the factor sores by taking the averages. Analysis was carried out using the SPSS statistics program.

**Result:** 54 men and 46 women took part in our study. We calculated the average factor scores of the measures. There was negative correlation between age and Thoughts about Life and Death (LD) (r = -0.213, n = 100, P = 0.034). There were positive correlations between Years of Schooling (YS) and Thoughts about Aging (TA) ( r = 0.444, n = 100, P 0.001), as well as between Thougts about Life and Death (LD) (r = 0.302, n = 100, P =0.002) and Aim and Ideals (AI) ( r = 0.319, n = 100, P = 0.001). There were negative correlations between geriatric depression scores and Thoughts about Aging (TA) ( r = 0.342, n = 100, P = 0.001), as well as between Family Status (FS) ( r = -0.270, n = 100, P = 0.007) and Socail Status (SS) (r = -0.229, n = 100, P = 0.002).

**Conclusion**: It is advisable to consider people's attitudes to aging, taking into account factor of gender, age and years of schooling and to plan the advisory service accordingly.

# P05.200

# Study of prevalence pathology in anticoagulated patients

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Title: Study of prevalence pathology in anticoagulated patients. Keywords: Anticoagulation, Prevalence, Pathology.

Objective: To study the prevalence of diseases causing anticoagulation (OAC) among the patients in our healthcare centre, checking if there are differences in the control degree in various diseases according to sex.Material and methods: We reviewed the medical records of our patients treated with acenocumarol and two with warfarin, performing a cross-sectional study with a random sample size of 160 patients, analyzing sex, age, original disease, control degree trough last three determinations. Statistical inference was made using measures of two proportions central tendency and dispersion and chi-square test for qualitative variables. Results: The sample consisted of 80 men (M) and 80 women (W). The most prevalent pathologies were: Atrial fibrillation (AF) 57.5%, Cerebrovascular Accident (CVA) 8.125%, Deep-Vein Thrombosis (DVT) 10.625 %, Pulmonary Embolism (PE) 5%, Valvular disease (V) 3.125, Valvular Prosthetic (VP) 10.625%, other 5%. According to sex, for M were 61.25% AF, 6.25% CVA, 13.75% DVT, 2.5% PE, 0% V, 7.5% VP and other 7.5%. For women were 53,75% FA, 10% CVA, 7.5% DVT, 7.5% PE, 6.25% V, 12.5% VP and other 2.5%. There were no significant differences between the diseases frequency by sex or between the control degree according to pathology and sex (except for VP and others, where no statistical inference could be made because of their small size)

Discussion: It would be necessary to implement measures to improve the patients percentage with the three tests rights according to disease in all groups. Atrial fibrillation is the most common disease that needs anticoagulation in our series

Pathology according to sex								
AF CVA DVT PE V VP OTHER								
MEN	61,25	6,25	13,75	2,5	0	8,75	7,5	
WOMEN	53,75	10	7,5	7,5	6,25	12,5	2,5	

#### P05.201

The importance of the carotid intima-media thickness in the prediction of cardiovascular events in patients with vascular disease

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**Background and objectives:** The carotid intima-media thickness (IMT) is an independent predictor of the cardiovascular events in the general population and an important marker regarding the evaluation of subclinical vascular damage. Currently, little is known about the relationship between the IMT and new cardiovascular events in patients with manifest arterial disease. We investigated whether IMT is associated with cardiovascular risk in patients who already have vascular disease and atherosclerotic risk factors.

Materials and Methods: The study was performed between 2008-2011 and included 283 patients with manifest arterial disease or atherosclerotic risk factors, aged >50 years, mean age 63±5 years, 68% men and 32% females, registered in family medicine offices from Timis County. IMT was measured at baseline in both of the carotid arteries by high resolution ultrasound as agreed in Mannheim consensus. Increased IMT (>0.9 mm) or the presence of the carotid atherosclerotic plaques are evidences of subclinical vascular damage.

**Results:** Major vascular events were vascular death, ischaemic coronary events, or stroke. Adjusted for age and sex, an increase in the carotid IMT of 1 SD (~0.32 mm) was associated with an increased risk of any vascular event (Hazard Ratio-HR 1.17; 95% CI 1.04-1.30). Increasing IMT was most strongly related to ischaemic stroke incidence (HR 1.37; 95% CI 1.16-1.58), than to myocardial infarction incidence (HR 1.21; 95% CI, 1.04 to 1.38).

**Conclusions:** IMT is associated with the occurrence of new vascular events, mostly for ischaemic stroke, in patients with manifest arterial disease or atherosclerotic risk factors.

# P05.202

Educational needs of doctors concerning radiologic risks: Italian survey

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# Aim and background

In recent decades, patients' exposure to ionizing radiation during diagnostic examinations has increased a great deal. X-ray requests do not always conform with the principle of "justification", which emphasises the real utility and necessity of the examination. Awareness of radiologic risks of doctors prescribing x-ray examinations is shown to be extremely poor in many studies. Limited radiation knowledge and guideline use indicate suboptimal justification of referrals.

The aim of the study, carried out by the Italian scientific associations members of WONCA, is to assess the level of

knowledge of doctors regarding radiologic risks in order to single out their educational needs.

Material and methods

A questionnaire of 13 items, structured into three sections, was given to 737 medical Italian doctors including general practitioners and specialists, but excluding radiologists.

Data is entered in an open source spreadsheet and analyzed statistically. The questions regard educational needs concerning: delivered doses of x-ray examinations, biological damage of tissues exposed to radiation, justification principle and referral guidelines.

The maximum total score of answers is 13.

Results

Data show a percentage of: 36.46% of correct answers for the section "delivered dose for each examination", 41.90% for the section "biological harm of tissues exposed to radiation" and 38.68% for the section "justification principle and referral guidelines". The overall mean score is 5.03 correct answers out of 13 questions (38.68%).

Only 4 doctors out of 737 know referral guidelines concerning the appropriate use of imaging techniques.

Comparing data regarding family doctors, paediatrics, and specialists we found out that specialists have a better score, but also lower than 50% (43.85%).

Conclusions

The survey confirms the literature data regarding an inadequate level of knowledge of radiologic risks, indicating that the educational needs of doctors concern particularly the knowledge of existing referral guidelines.

However for all the sections of the survey the level of knowledge is less than 50%, suggesting the need to improve the quality of graduate and post-graduate education of radiologic risks and to plan suitable CME in order to increase appropriateness in x-ray examinations.

#### P05.203

Analysis of the factors of herbal medicine use in cancer cases in Turkey

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Aims: Patients with diagnosis of cancer may use herbal medicine in addition to medical treatments. The aim of this study was to determine the types and prevalence of herbal medicine used by cancer patients.

Methods: The subjects consisted of cancer patients who seek medical advice at the Family Medicine Department of the Ondokuzmayis University between January and February 2011. Data were analyzed by a statistical program.

Results: 49 cancer patients participated in this study. Of the cases, 20 (40.8 %) were women and 29 (59.2 %) were men. The mean age was 53.1 ± 2.6. Of the cases, 28 (57.1 %) were graduated primary school. 14 (28.6 %) high school and 7 (14.3 %) university. Of the cases, 27 (55.1 %) used herbal medicine after the diagnosis of cancer. Of these 27 cases, 11 (40.7 %) were using nettle, 3 (11.1 %) were using honey and 3 (11.1 %) were using flax seed, frequently. When patients explained the causes of using the herbal medicine; 11 (40.7 %) were using to support the medical treatment, 7 (25.9 %) to support the nutrition, 5 (18.1 %) with the doctor's recommendation and 5 (18.1 %) has thought herbs for the last choice of the therapy. Of these cases, 12 (44.4 %) had already advised herbal medicine to other cancer patients. 16 (59.2 %) of them did not share their herbal medicine usage with their doctors. When the patients were asked why they did not share, 8 (% 50) said that they did not think about this, 5 (31.2 %) said that they did not pay attention and did not know as important to say and 3 (18.8%) said that doctor did not ask using herbs. 37 (75.5 %) of the participants explained that doctors did not ask about using herbal medicine.

Conclusion: This study concluded that there is a high prevalence of herbal medicine use by the cancer patients. Communication between patients and family doctors should initiate dialogues on this topic for a better understanding of patient choices with regard to treatment options.

Long-lastning itching subcutaneous granulomas and contact allergy to aluminium in children after diphtheria-tetanus-pertussis vaccination

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### Background and aim

Persistent itching subcutaneous nodules or granulomas at the vaccination site and contact allergy to aluminium were known as rare adverse events after the use of aluminium containing vaccines until the 1990ies, when a high frequency (740 cases/76000 children) was reported in clinical trials on Danish diphtheria, tetanus and pertussis (DTaP) vaccines in Sweden. 77% of the children were sensitised to aluminium. Unfortunately, a rising number of cases is reported also after the aluminium adsorbed DTaP-polio-Hib vaccines for infants which are currently used in the Child Health Care in Sweden (Infanrix® and Pentavac®). Our aim is to describe the clinical course and long time prognosis of itching vaccination granulomas and the incidence aluminium allergy in children after vaccination with Infanrix® or Pentavac®.

### Methods

We were spontaneously contacted by colleagues in the Child Health Care concerning children with itching nodules on the thigh where they had received the vaccine. The children were followed by regular interviews for up to 11 years. Contact allergy to aluminium was demonstrated by epicutaneous tests. Results

59 children had typical symptoms with intensely itching subcutaneous nodules, often exacerbations during respiratory tract infections, and local hypertrichosis and hyperpigmentation in the itching area. The symptoms began late after the vaccination (months or years) and could last as long as 14 years. Hypersensitivity to aluminium was demonstrated in 53/54 children. Three children were investigated for malignancy when the condition was not recognised. Booster vaccination with aluminium containing vaccines was denied or postponed by parents due to the problems the itching nodules and the aluminium allergy had caused.

### Conclusions

Itching vaccination granulomas and contact allergy to aluminium are poorly known adverse events to commonly used vaccines in the child health care all over the world, but important to recognize since the intense itching may have great impact on family life, the nodules may be mistaken for malignancies and further vaccination is adventured. Aluminium allergy excludes future use of antiperspirants. The incidence of itching granulomas after Infanrix® and Pentavac® can not be estimated by this study but should be investigated.

#### P05.205

# Clinical evaluation of secondary hypertension in family medicine

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Background: Patients with high blood pressure are common problem in everyday practice of family medicine. In the evaluation of patients with high blood pressure, family physician has clearly defined objectives such as: detection and confirmation of hypertension, detection of target organ damage, identification of other risk factors for cardiovascular disease and to detect the causes of secondary hypertension.

Objective: To analyze the prevalence, causes and assessing the effectiveness of secondary hypertension in practice of family medicine

Material and Methods: Retrospectively were analyzed 416 records of patients with established hypertension, that fall under Team 1 of Family Medicine of the Health care Center in Kalesija. As a tool for determining the cause of secondary hypertension was used ABCDE mnemonic abbreviation of the U.S. National Committee of prevention, detection, evaluation and treatment of hypertension (JNC-VI): A: Accuracy, Apnea, Aldosteronism, B: Bruits, Bad kidneys; C: Catecholamines, Coarctation, Cushing's syndrome; D: Drugs, Diet, E: Erythropoietin, Endocrine disorders.

Results: 402 (96.6%) patients had essential hypertension. Secondary hypertension was found in 14 (3.4%) patients. The most common cause of secondary hypertension in 5 (35%) patients were endocrine disorders, hyperthyroidism and hypothyroidism. In 3 (21%) patients the cause is drug side effect -NSAIDs and COX-2 inhibitors. In 2 (14%) patients the cause is erythropoietin side effect (use in chronic renal failure for anemia, polycythemia in COPD), and in 2 (14%) bad kidneys (Diabetes mellitus). In 1 (7%) patients pregnancy-induced hypertension, and in 1 (7%) the cause was Cushing's syndrome (excess glucocorticoids).

Conclusion: There was small percentage of patients with hypertension caused by secondary causes. Proper clinical evaluation of secondary hypertension reduces the risk of serious complications, including heart disease, kidney failure and stroke. ABCDE mnemonic acronym is an useful tool for family physicians for efficient clinical evaluation of secondary hypertension.

#### P05.206

Contribution and limits of Power and Triplex Doppler Ultrasound in the diagnosis of abdominal tumours in children.

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Important achievements have been obtained in paediatric oncology in the last period of time in the domain of diagnosis and therapy. To obtain a good evolution in a malign process on a child, it is very important to diagnose it in a early stage. If a tumour is present in a 1-6 months old child, the chances of that tumour to be malignant are about 70%.

We reported a prospective study over a period of five years on 30 children with abdominal tumours which had been proven to be malignant.

As an initial diagnostic method the power and triplex ultrasound was the main investigation technique and this proves it's importance for screenings in paediatry. Colour Doppler with contrast enhancing substance was also used. Access to investigations based on images, alongside with biological markers and biopsy, was useful to make a diagnosis correctly and quickly. Doppler Triplex proves to be a very efficient method with a high value in diagnosis of vascular anomalies of neoformations and it certifies usually the malign invasion. If the abdominal tumour is solid, there is a suspicion of a malign tumour and then CT and MRI are necessary.

Ultrasound allowed us, to appreciate tumour vascularity at the level of malign formations, through the presence of vascular neoformations in the periphery, as well as in the interior of the nodule, and also the differentiation of these vessels from the zones of necrosis and tumour hemorrhage. Liver tumours occupy the 3rd position in frequency with children, after nephroblastoma and neuroblastoma.

Based on the data, we have established some significant ultrasound markers, for malignant liver tumors. We performed an ultrasound score value indicative for malignancy.

Doppler ultrasound permits the identification of vessel neoformations, of necrosis and of malign tumour calcifications, as well as the identification of structure and local invasion elements which sustain its malign character.

# How do general practicioners treat patients after myocardial infarction in the Czech Republic?

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Objectives: The main aim of the study was to find out how do czech general practicioners (GPs ) treat patients in secondary prevention of myocardial infarction (MI). According to the evidence- based medicine (EBM) each patient after MI should use beta blocker (BB), statin, ACE-inhibitor or angiotensin receptor blocker (ARB) and anti-platelet therapy, when these are not contraindicated.

Method: Data about patients after MI, that were attended by GPs only, were collected during the year 2011. GP's medical software was used. Patient's gender, age, year of MI and drug anamnesis were obtained. We focused on the prescription of BBs, statins, ACE-inhibitors or ARBs, anti-platelet agents and combinations of all of these drugs. For statistical analysis we used the statistical software (SPSS 16) and MS Excel.

Results: There were 18 GPs with 491 patients (69,25 % men, mean age 71  $\pm$  11,60 years) after MI included in the study. 79,02 % of patients were on BB, 79,02 % on ACE-inhibitor or ARB, 77,39 % on antiplatelet therapy (9,78 % on warfarin only) and 77,19 % on statin. Only 44,4 % of patients used all four recommended drugs for secondary prevention of MI. 32,79 % of patients had three, 17,11 % had two and 5,3 % had one of these drugs.

Conclusions: Our results correspond to that from other countries. As we do not expect that more than 20 % of patients have some contraindication for the use of recommended drugs, we think that there are still some reserves in their treatment. We could presume, that with appropiate treatment, mortality of patients after MI would further decrease. On the other hand we did not observe the possible contraindications for that the recommended drugs could not be prescribed.

# P05.208

# Flurbiprofen micro granules for the treatment of sore throat

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Background and Aims: Antibiotic therapy is inappropriate for the majority of sore throats associated with upper respiratory tract infections (URTIs); ~80% are caused by viruses. Flurbiprofen, a non-steroidal anti-inflammatory drug with analgesic properties, is an alternative treatment for sore throat symptoms. This study determined the analgesic properties of 8.75 mg flurbiprofen micro granules in patients with sore throat. Methods: In this randomised, double-blind, placebo-controlled, multiple-dose, multicentre study, participants presenting to GPs with sore throat associated with URTI of <4 days duration received either 8.75 mg flurbiprofen micro granules (n=186) or matching placebo (n=187). Throat soreness, difficulty in swallowing and sore throat pain intensity were recorded at baseline and, together with sore throat relief, at regular intervals up to 6 hours. These measurements were recorded daily for up to 3 days (except sore throat pain intensity). Patients were discharged, 3 hours after the first dose, with enough medication for 3 days (to be taken as required up to 5 doses/day) and paracetamol rescue medication. Endpoints included area under curve (AUC) change from baseline from 0-2 hours (AUC<sub>0-2</sub>) for throat soreness (primary) and AUC<sub>0-6</sub> for throat soreness, difficulty in swallowing, sore throat pain intensity and sore throat relief (secondary). ANCOVA was used for statistical analysis. Results: Flurbiprofen significantly reduced AUC<sub>0.2</sub> for throat soreness vs placebo (p=0.0049) and this effect was maintained for up to 5 hours (p=0.0051). Difficulty in swallowing was significantly reduced for up to 6 hours with flurbiprofen vs placebo (p=0.0003), as was sore throat pain intensity over the same time period (p=0.0021). Sore throat relief was significantly greater with

flurbiprofen vs placebo from 1 minute (p=0.0006) and for up to 6 hours (p=0.0043). Multiple dosing of flurbiprofen improved sore throat relief at 24 hours (p=0.0259) and difficulty in swallowing on days 1, 2 and 3 (p=0.0183, p=0.0157 and p=0.0324, respectively). No safety issues were reported. Conclusions: Flurbiprofen 8.75 mg micro granules provide fast and effective symptomatic relief from sore throat and represent a potential over-the-counter treatment option for patients with sore throat associated with URTIs. This study was funded by Reckitt Benckiser.

#### P05.209

Manchester Triage System: experience and initial report after six months of implementation in a Brazilian Emergency Department

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This work describes initial experience with Manchester Triage System (MTS) in an Emergency Department: Assistência Médica Ambulatorial (AMA) in São Paulo, Brazil. AMA meets population's natural demands (General Practice/Pediatrics) non-scheduled low complexity appointments. Emergency service represents an important component of Brazilian public health service (PHS). To the reality of overloaded AMA is very important to have a reliable triage system. MTS was described in 1997 and is nowadays adopted around the world. MTS was implemented in AMA since March of 2011. It's allows a evaluating each patient by clinical criteria. The system used previously was an empiric classification based in non-scientific evidences. MTS clinical patient risk classification criteria layer the risk in five distinct urgency levels. The aim of this report was to describe the initial experience with MTS for the risk assessment of patients in AMA as improvement at the PHS approach. Methods: This is an initial descriptive study, patients' reports were evaluated and the risk was classified, using MTS in AMA. It's a quantitative survey where data collection was done through attendance records of adults and children up to 24 hours in the institution who sought the sector classification of risk in a period of 6 months total visits. Discussion and Results: Previously there was an empiric classification based in non scientific evidences. MTS is considered a sensitive tool to detect, at the entry door of the emergency services, patients who will need critical care. The medium length of this procedure is around 1 minute 30 seconds. Risk classification is a dynamic process of identifying patients who need immediate treatment, according to the potential risk. Since March 2011 the MTS was implemented in AMA. Conclusion: Risk classification is a relatively new in Brazilian AMA activities, has increasingly conquered its space. Risk classification is an identification dynamic process of who need immediate treatment, according to the potential risk. Care should be prioritized in line with the severity of the patient's clinical condition, instead of the order of arrival at the service. This brief report may contribute as improvement model to other public emergency health services.

#### P05.210

Examining of the peripheral arterial disease (PAD) with ankle brachial index method and evaluating the risk factors in primary care

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Objective: The aim of this study is to determine the prevalence and risk factors of peripheral arterial disease.

Method: In this cross-sectional study 250 adults with 45 years and older, randomly selected from a primary care health care center in Balcova, Izmir. Participants were invited for filling out a questionnaire which includes demographic data, PAD symptoms, risk factors, drug use, cardivascular history, smoking, blood lipid,

fasting glucose, HbA1c levels and BMI measurements. Also ABI measurements, medical recommendations have been covered. The PAD1 group was consisted of the patients ABI levels with  $\leq\!0.9$  and PAD2 was consisted of the patients between  $\leq\!0.9$  and  $\geq\!1,3.$  Data analyzing was performed through the SPSS 11.5 and chi square and t-test were used for significance analyses, p  $<\!0.05$  considered as significant.

Results: The prevalance of PAD1 was %17,6 in total, %21,8 in women, and 12,1 in men in this study. The prevalance of the PAD2 was %29,2 in women, %28,1 in men. %52,3 of and %63,0 of patients were asymptomatic in regard with PAD1 and PAD2. There was relation between PAD1 and age, gender, hypertension, cerebrovascular disease, osteoporozis, use of ACE-inhibitor, ca channel blockers, pentoxifylline and clopidogrel; PAD symptoms, and HbA1c values. There was also relation between PAD2 and age, hypertension, coronary arterial disease, use of ACE-inhibitor, pentoxifylline, and clopidogrel; PAD symptoms, HbA1c values and triglyceride levels.

Conclusion: PAD is a common disease in primary care and determination of the asymptomatic PAD in primary care is possible by using ABI method among patients who are at risk group and provide early diagnosis and treatment.

#### P05.211

# Electrocardiography knowledge of family physicians in Samsun- Turkey

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Aims: We aimed to evaluate the knowledge about Electrocardiography (ECG) of family physicians graduated several universities in several years.

Methods: We developed a questionnaire about demographical data and ECG samples of atrial fibrillation, ventricular fibrillation, sinus bradycardia, first-degree AV block, normal sinus rhythm, inferior myocardial infarction (MI), left bundle branch block, anterior MI. We performed the study on the participants of a conference in October 2011.

Results: There were 66 participants, 43 (65.2%) were male, 23 (34.8%) were female. Mean age was  $37.95 \pm 7.89$  (23-56) years. Experience in medicine was 13.69 ± 7.88 years. Of the participants, 57 (86.4%) already had an education on ECG and 9 (13.6%) did not have education. 50 had undergraduate education and 16 of them thought that was not enough, 37 had a postgraduate education. The answers of the statement "I have trouble while evaluating ECG" because: "I forgot" 23 (34.8%), "I don't use" 14 (21.2%), "Never taught" 0, "Not enough" 27 (40.9%), "No structured education" 24 (36.4%), "Anxiety of missing diagnosis" 34 (51.5%), other 6 (9.1%). Of the participants, 55 (83.3%) had ECG equipment in their institutes, while 11 (16.7%) did not. Of the 55 who has ECG, 37 (67.27%) had been performing ECG. The answers for the questions: atrial fibrillation 52 (78.8%) were correct. 14 (21.2%) were false, ventricular fibrillation 60 (90.8%) were correct, 6 (9.1%) were false, sinus bradycardia 59 (89.4%) were correct, 7 (10.6%) were false, first-degree AV block 58 (87.9%) were correct, 8 (12.1%) were false, normal sinus rhythm 61 (92.4%) were correct, 5 (7.6%) were false. The answer for the questions: normal ECG 41 (62.1%) were correct, 25 (37.9%) were false, inferior MI 54 (81.8%) were correct, 12 (18.2%) were false, left bundle branch block 42 (63.6%) were correct, 24 (36.4%) were false, anterior MI 65 (98.5%) were correct, 1 (1.5%) were false.

Conclusion: Although some family physicians achieved better in ECG interpretation, they have an anxiety of missing diagnosis. Some confuses in twelve leads. The lowest error rate was in anterior and inferior MI in twelve leads.

#### P05.212

# The association of certain risk factors in patients with different subtypes of ischemic cerebral disease

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AIM: The present study examined the association between certain risk factors and different subtypes of ischemic cerebral disease. METHODOLOGY: Patients (n=75) with ischemic brain infarction (IBI) were consecutively recruited and classified into subtypes by computed tomography (CT) and Bamford's classification (the size and site of the infarct) as one of the following: total anterior circulation infarct (TACI), partial anterior circulation infarct (PACI), posterior circulation infarct (POCI), and lacunar infarct. Control group was recruited among individuals hospitalized for a reason other than cerebrovascular disease (normal CT and neurological status) at the same institution. RESULTS: study group (patients) and control subjects were matched for age, sex and anthropometric parameters. Of the 75 patients with an acute ischemic stroke, 14% were classified as TACI, 45% as PACI, 16% as POCI and 25% as lacunar infarct. BMI, serum cholesterol and diastolic arterial pressure values were similar in both groups. Diabetes mellitus or absolute arrhythmia was not registered in control group vs. 23.3% of diabetes and 5.3% of absolute arrhythmia in study group (separately, 10% in TACI vs. 5% in group with lacunar infarct). The history of cerebrovascular disease (stroke or transitory ischemic cerebral attack/TIA) was registered 18.7% in study group (separately, TACI group 10%, PACI group 26%, POCI group 8%, and lacunar infarct group 15%) vs. 9.5% in control group. The history of cardiovascular disease (angina pectoris or myocardial infarction) was registered 26% in group with lacunar infarct, 25% in POCI group, 44% in PACI group, and 20% in TACI group. Mean common carotid artery intima-media thickness was prevalent in patients (80%) vs. controls (28.5%). The prevalence of smoking and diabetes was 25-50% and 21-40%, respectively. CONCLUSION: However, the most prevalent risk factor in different subtypes of ischemic cerebral disease was hypertension (60% in TACI vs. 80% in PACI.

#### P05.213

#### Control degree in anticoagulated patients.

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Title: Control degree in anticoagulated patients. Keywords: Anticoagulation. Control. Sex

Introduction and objectives: Treatment with oral anticoagulants (OAC) in patients with thromboembolic disorders increases survival and reduces complications. We have studied anticoagulation levels through last three controls, analyzing the right level degree in the therapeutic range and assessing whether there are differences in sex or age.

Material and methods: Cross-sectional study of a random sample of 160 patients treated with COA in eight outpatient clinics, checking the International Normalized Ratio (INR) levels in the three last measurements and classifying them according to age, sex, determination averages and even if that determinations are rights according to pathology. All patients were treated with Acenocumarolin varying doses, although two patiens were with Warfarin.

Results: The sample size is 160 patiens with 80 men and 80 women, with 2.5297 obtained in three determinations average (SD: 0.3597; CI  $\pm$  0.056). According to the gender, the mean INR was 2,495 (SD: 0.3515; CI  $\pm$  0.0761) for men and 2, 5537 (SD: 0.3763; CI  $\pm$ 0,0824) for women. The total mean age was 73.1187, 72.2125 for men and 74, 025 for women. No significant differences according to the T Student non parametric test applied for means and the sex and age determination averages in both groups.

Results according to the percentage of determinations with pathology showed that were right in 41.875%, 46.25% for men and 37.5% for women. For INR between 2-3 were 44.75%, 46.57% for men and 42.85% for women and for INR between 2.5-3.5 were

17.65%, 42.85% for men and 0% for women. No statistically significant differences between sex were found.

Discussion: It is necessary to improve the management of patients anticoagulated, watching the diet, medication and the interactions with other medicaments, especially in those pathologies that require a tighter INR control (2.5-3.5).

Correct Determinations								
0 1 2 3								
MEN%	2,5	25	26,25	46,25				
WOMEN%	11,25	18,75	32,5	37,5				
TOTAL%	6,875	21,875	29,375	41,875				

#### P05.214

Fears of General Practitioners prescribing opioids: how the years of clinical practice influence the prescription?

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Introduction: Chronic pain is one of the most frequent complaints in Primary Health Care. Despite the few of studies, isolated data indicate a low opioid consumption at this level. In the 90s we have witnessed the spread of its use in patients with nonmalignant chronic pain after the publication of the several papers that dispel the belief and fear of a rapid tolerance and frequent drug dependence.

Purposes: Understand the fears and other obstacles when prescribing opioids in moderate to severe chronic pain by General Practitioners (GPs) and if the years of clinical practice influence prescription.

Material and Methods: An observational, descriptive and inferential study . A questionnaire was given to 68 GPs of five health centers, with internal and external validation. Analysis included descriptive and inferential statistics.

Results: The response rate was 51.5%. Average age of 51.8 years, corresponding 54.3% to female. Divided the sample into two groups: group A-practices GPs for 25 years or less (45.5%) and group B-GPs practices more than 25 years (54.3%). Group A 31.3% feel safe in prescribing any opioid while in Group B only 21.1%. The major concern when prescribing opioids in both groups are the adverse effects (75% group A; 52.6% group B) and in both groups the greatest impediment beyond the fears in the prescription of opioids is the lack of training (43.8% group A, group B 36.8%). In both groups, most describe their attitude of prescription opioids as favorable (75% group A; 68.4% group B). Inferential analysis found no statistically significant differences between both groups.

Discussion: We found that regardless time of exercise of GPs, fears and impediments in the prescription of opioids are the same. The GPs should be encouraged to prescribe opioids because they are essential for the treatment of pain and suffering resulting therefore uncontrolled pain can have deleterious physical effects and destroy the autonomy, dignity and capacity of decision. It is recognized that opioids can cause physical dependence, but the "balance principle" states that efforts to address abuse should not interfere with legitimate medical practice and patient care.

#### P05.215

### Diabetic patients followed in a health centre

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Introduction: Diabetes Mellitus (DM) is known to be a world epidemic, affecting about 180 million people worldwide. In Portugal, the prevalence in the 20 to 79 year old group is 12,3%. As multidisciplinary team in primary care, we have an important role following and controlling this disease and its complications. Thus, this study aimed to characterize the diabetic population in a 14488 patient health centre. As variables, the authors analyzed the DM type, glycemic control, associated cardiovascular risk factors (as Hypertension, Dyslipidemia, Overweight or Obesity and Smoking), therapy and micro or macrovascular complications.

Methodology: Descriptive and transverse study about followed diabetic patients registered in the health centre diabetic software. These variables were gathered in May 2011, consulting this software, then analyzed by SPSS®, version 19,0.

Results: The DM prevalence in this health centre was 7%. 572 diabetic patients were registered as being followed by the primary care physician. The mean age of the sample was 67 years, and females were in a greater proportion than males (54% vs 46%). 98% had type 2 diabetes and 66% had glycated hemoglobin level ≤ 7%. The associated complications were retinopathy in 3,3%, nephropathy in 1.7%, neuropathy in 0.9%, ischemic heart disease in 10.5%, cerebrovascular disease in 5.4% and peripheral vascular disease in 4.5%. Regarding cardiovascular risk factors, 69.8% had hypertension, 50% had dyslipidemia, 69.3% were obese or overweight and 5.8% were smokers.

83% of patients received oral antidiabetic therapy, being 3.7% insulin and 6.3% combination therapy. The antidiabetic drug more frequently used as monotherapy was biguanides (63%) followed by sulfonylureas (27%).

Conclusions: This study shows the importance of multidisciplinary team care in reducing the human and economic expense of diabetes through a continuous, proactive, planned and patient-centered care.

#### P05.216

Barreers and facilitating factors of cooperation between the rfugee clinic and the health workers in Qubec city,Canada

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Introduction:The Health Clinic for refugee-immigrants located in Quebec City screens for health problems at arrival and facilitates access to local health and social services for refugees in the region of the National Capital.

Method:This study explores if the organizational perspective in which the Health Clinic is involved is the best to fulfil its mandate. It consists of an organizational analysis of health services for refugees based on a conceptual frame built upon two conceptual pillars: Gamson's coalition theory and the archetypes of Hinings and Greenwood.

Results: Results suggest ways to reinforce collaboration between implicated actors which would lead them to better respond to the needs of refugees.

Conclusion: Sufficient ressources are the key to quality of services and access to these services. The definition of the competencies required to work with refugees would be an add.

Cancer in patients on dialysis: Cancer screening frequency in a Turkish Hemodialysis Center

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Background: The frequency of cancer has been reported to be higher in patients on dialysis than in the general population. We aimed to evaluate the frequency of cancer and use of screening tests in patients with dialysis-dependent renal failure.

Material and Methods: This cross sectional study included 142 patients on hemodialysis at Baskent University, Istanbul Dialysis Unit in June 2011. We analyzed retrospectively the hemodialysis period and the diagnosis of any cancer during this period. We also analyzed previous cancer screening tests in patients 40-70 years of age, including colonoscopy, mammography, PAP smear, PSA test, and prostate examinations.

Results: The mean age of 142 patients (55 women , 87 men) was 62.9  $\pm$  14.0 years (min=22, max=90). The mean period of hemodialysis was 66.8 months (median 35.2 mounths, min=1, max=322). Twenty patients (14.1%) had cancer. In 8 patients (5.6%) cancer was diagnosed during the hemodialysis period, including breast cancer (3), lung cancer (2), larynx cancer (1), stomach cancer (1), and malignant mesenchimal tumor (1). The mean interval between initiation of hemodialysis and diagnosis of cancer was 145.5 months (median=161 months, min=3, max=261).

There were 51 men and 31 women between 40-70 years of age. Colonoscopy had been performed in 27.5% of men and 41.9% of women (p=0.13). Other screening tests included PSA test in 47.1% and prostate exam in 27.5% of men; and PAP smear test in 67.7% and mammography in 61.3% in women. Among this subgroup, there were 5 women with cancer including breast (4) and colon cancer (1); and 4 men with cancer, including lung cancer (2), renal cancer (1), and a malignant mesenchymal tumor (1).

Conclusion: Consistent with the literature, we found a high frequency (14%) of cancer in patients undergoing hemodialysis with end stage renal failure. Female hemodialysis patients tended to be more commonly screened for cancer than males. While an increased risk of cancer may suggest a rationale for routine screening in hemodialysed patients, life expectancy and additional risk factors should also be considered on individual basis.

### P05.218

Possible uses of modern information technologies in family medicine, with emphasis on patients` attitudes toward e-mail communication with their physicians

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#### Background:

General application of new information technologies (IT) modifies doctor-patient communication in family medicine. In the study, patients' attitudes toward IT, with emphasis on e-mail communication, were explored.

### Research question:

What are the patients' attitudes toward the use of e-mail communication with family physicians associated with?

#### Method

In March 2011, 35 family physicians asked every fifth patient, who came to the examination or consultation, to voluntarily and anonymously complete a questionnaire, constructed and tested for the purpose of the study, which consisted of 48 (sets of) questions, all with adequate internal consistency (Crobach  $\alpha \!\!\!> 0.7$ ). Each physician was supposed to gather data from 30 patients and by the end of May 2011, 967 out of 1050 planned questionnaires (92.1% response rate) were received. The software package SPSS, version 19.0, was used to perform bivariate and multivariate analysis.

#### Results

In the sample of 967 subjects, there were 585 (60.5%) women and 382 (39.5%) men, aged 40.8 $\pm$ 13.5 years. They were mostly

married (559 (60.2%)) or single (242 (26.1%)), 514 (53.7%) living in urban, 290 (30.3%) rural and 143 (16.0%) in a suburban environment. In multiple linear modelling, the factors independently associated with the acceptance/rejection of e-mail, as a mean of communication with family physician were determined, explaining 57.6% of the variance. Factors related to the characteristics of information technologies, not the social or demographic characteristics of respondents, were found more important.

#### Conclusions:

Patients` attitudes toward the use of e-mail communication with family physicians were associated with computer literacy in patients and the purpose of such communication (i.e. notifying doctor's unavailability at the clinic).

#### Points for discussion:

What are the experiences in other countries? What is your viewpoint about this?

#### P05.219

Contribution of Low Level Laser Therapy, in red and infrared spectrum, for treatments of rheumatic affections in general medical practice.

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This study has in purpose to show the results of Low Level Laser Therapy treatments, made with two types of probes with red and infrared emission in rheumatism affections and a comparison with classic therapy methods. The laser treatment as revealed in this article is very well tolerated by the patients with very good therapeutically results. No side effects and interactions with pharmaceutical products were encountered. Physical quality of the laser causes some clinical effects such as:

- ♦ analgesic effect (A)
- ♦ muscle relaxation
- ◆ effect non inflammatory (E)
- effect of bio stimulation and tissue regeneration (B)
- ♦ vasodilator effects (V)
- ♦ bactericidal effect (D).

In this study we combined the application of red and infrared laser radiation for the treatment of rheumatism affections. Also classic medication and methods were administrated for comparison. The studied cases were divided in three: Group 1 include patients who followed just LLLT., Group2 contain patients treated with non steroid anti inflammatory treatment and LLLT and Group 3 include patients treated with Laser, AINS and physiotherapy procedures. These was made from 200 patients with rheumatic diseases and same affection equal for each group.

The therapeutically protocol that we followed was: radiation density between 4 - 10 J/cm2, pulsed emission 9- 10 Hz, for IR spectrum radiation 870 nm; radiation density between 4- 8 J/cm2 continuous emission, for red 675 nm emission, total number of exposures 10 exp./2 weeks, with a periodicity of 5 exp./week. We have evaluated for each patient the following elements: pain / in a scale from 1 to 10 before and after treatment; functional status of the joints/ segmental motility, before and after treatment; personal life quality of the patient on a scale before and after treatment; also radiological findings were observed.

The laser treated patients from the first group showed no side effects after the treatment, in the second and third groups some side effects specific to AINS were reported. The association laser and AINS improved the final result just with 8%. The treatment association laser and AINS and physiotherapy procedures, showed no significant statistical improvements.

# The Influence of Twenty-minute Yoga Exercises on the Values of Pulse and Blood Pressure

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An arterial hypertension enters into the group of the most frequent chronic disinfections diseases of a contemporary man. There are numerous risky factors for an appearance of this disease: heredity, obesity, smoking, an excessive weight and as the most important factor- stress. One of essential aims of yoga is exactly the release from stress, therefore it became incredibly popular in the West as the aspect of fitness and aerobic training.

<u>Objective:</u> To analyze the values of pulse and blood pressure before and after twenty-minute exercising of yoga and five-minute meditation, in fact running relaxation.

<u>Material and methods:</u> Researching group consisted of 30 healthy volunteers who exercise yoga- 15 male and 15 female. An average age is 28 years. The values of pulse and blood pressure were measured before and after exercising ( with indirect method by Korotkow-mercury manometer).

<u>Results:</u> The value of pulse increased from 81 to 86 beats in minute after exercising. The results got by measuring of blood pressure show the drop of value from 122/80 mmHg to 115/75 mmHg

<u>Conclusion</u>: Correlation between the values of pulse before and after exercising as well as the values of blood pressure before and after the exercising of yoga show high statistical significance for the level of error p>0.05.

#### P05.221

# Primary Care Physician role on the follow-up of CPAP therapy for Obstructive Sleep Apnoea Syndrome

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### Introduction

Pressure Continuous Positive Airway (CPAP) is the first-line treatment for moderate to severe Obstructive Sleep Apnoea Syndrome. The diagnosis, confirmation and monitoring of these patients is performed in hospital. However, considering the high prevalence of this disorder and the high waiting time for first appointment, it is expected that in future the Primary Health Care (PHC) will become more interventionist in the management of this patients.

. Objectives

To define the parameters that should be evaluated in PHC in long-termcare, after the patient have been established satisfactorily to CPAP and have been discharged from hospital.

Metodology

A literature review in pubmed, family medicine and pulmonary medicine publications. The survey period ran from October to December 2010 and the articles were selected for the last ten years (2000-2010).

Results

The parameters that should be periodically reviewed are: symptoms control (slepiness evaluation, side effects, weight changes, comorbidities), the CPAP report (apnea / hypopnea index, compliance, air leaks, air pressure) and CPAP equipment (interface, headgear, filters).

Conclusion

The Family Physician occupies a privileged position to follow these patients. From our point of view, while impoving the ability to evaluate OAS patients and comorbidities, we warrant a more cost-efficient health care.

#### P05.222

Prevalence and characteristics of cardiac manifestations among HIV-infected children attended at Kilimanjaro Christian Medical Centre (K.C.M.C)

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**Background:** There are very few published studies of heart disease in HIV infected children living in sub-Saharan Africa, a region with more than 70% of the world's population of HIV infected patients.

**Objectives:** To determine the prevalence and characteristics of cardiac manifestations among HIV infected children attended at K.C.M.C.

**Methodology:** Ninety six (96) HIV infected children attending the Pediatric Infectious Disease Clinic at KCMC were recruited by simple random sampling in a cross-sectional study. The children were evaluated clinically, and investigated by electrocardiography and echocardiography.

Results: Ninety-six (52 males and 44 females) vertically infected HIV children were recruited. The age of the enrolled patients ranged from a minimum age of 6 months to a maximum of 14 years.

The prevalence of heart abnormalities were detected in 32 (33.3%) children by echo and/or ECG. Cardiac abnormalities were significantly more frequent in children with stage 4 clinical disease than in children with lesser disease severity, it was as well more frequent in children who were symptomatic (87%) than asymptomatic (16.4%). Heart abnormalities were observed in 38.5% of children on ART and 22.6% of children who were ART naïve. Heart disease was found to be associated more with zidovudine-containing (44.4%) regimens as compared to stavudine-containing (42.1%) regimens or second line treatment (10%). However there was no statistically significant difference between exposure to zidovudine over stavudine and heart disease. Conclusions: Heart abnormalities were common especially in children with symptomatic HIV disease and included sinus tachycardia, left ventricular systolic dysfunction and right ventricular dilatation. The detected heart abnormalities, except left ventricular systolic dysfunction, had non-specific clinical features.

#### P05.223

# The effect of the newborn on the older sibling

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OBJECTIVES: The aim of this study is to investigate the effects of the newborn sibling and the other factors' contribution on previous sibling's behaviors.

METHODS: A face to face interview (with questionnaires form) is done with mothers of 123 children (median age=4.5, IQR=7.0 months), who has been followed up in well-child policlinic of Gazi University Faculty of Medicine, Department of Pediatrics, about the behaviors of the previous siblings at pre-school age. A mother survey of 18 questions is used to learn about the demographic data and previous sibling's reactions after the arrival of the new baby. SPSS v.15.0 software is used for statistical calculations. Chisquare test is preferred to compare data. The value of P <0.05 is considered as significant.

RESULTS: The mothers, who were interviewed, were young aged, belonged to middle-income group, most of them were graduates of the University, and lived in nuclear families. %36,9(n=45) of them were working in a job. The older children had been informed about the coming of a new baby during pregnancy (%88,6; n=109). First informers were mostly the mothers (%59,3; n=67). 66,4%(n=77) of mothers reported that their children were happy at their first reaction. Sleep disorders were reported in %52,9(n=64) of the children. Loss of appetite was reported in %30,3(n=37) of the children. The behaviors of requesting help while eating (%30,6;n=37), requesting to suck the mothers' breasts (%29,8;n=36), regressive speech (%48,8;n=59), clinging to mother (%44,6;n=54), urinary incontinence and bed wetting (%19,1;n=23) and violence to new baby(%45,5;n=55) were reported. The opinion about loss of appetite in their children were higher on loweducated mothers (%42,4;n=14), housewives (%35,5;n=27) and in low-income groups(%41,7;n=10/ p<0,05). The time that mothers spent with their older children after the newborn was usually decreased (%59,5;n=72), which was more significant among well-educated mothers (%77,4;n=41).

CONCLUSION: With the arrival of a new baby, pre-school aged older siblings' behaviors like sleeping, nutrition and speech may be affected negatively, and these changes may be contributed by mothers education, level of income, family type, employment status of the mothers and some other factors. Such factors may be some of the underlying causes of the sibling rivalry.

#### P05.224

# Reporting patients' views regarding antihypertensive treatment in a rural practice of Northern Greece

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#### Aims

One of the most important causes for insufficient control of the blood pressure is the limited compliance to the suggested antihypertensive treatment and lifestyle changes. The objective of this report is to describe patients' knowledge and attitudes about hypertension and related therapy in a rural area of northern Greece.

#### Material and Methods

Following ethics approval from the General Hospital of Kozani, a questionnaire was developed based on daily practice observations, including items on patients' knowledge about hypertension and beliefs. Demographic data of the group population were collected. A primary care setting in the region of Siatista, Northern Greece was involved in the questionnaire survey. Data were collected over an 8 week period between April 2011 and June 2011.

## Results

A total of 145 patients participated in the survey. The male to female ratio was 0.7:1. The median age was 68.5 years (range: 43-90 years). More than half of the respondents (90/145, 62.0%) were on therapy with antihypertensive agents for over five years. Twenty-nine patients (20.0%) were smokers. One hundred and eight (108/145, 74.4%) of the participants reported that experience much stress in their lives. One out of four (37/145, 25.5%) relates medication intake according to daily blood pressure monitoring and 124/145 (85.5%) of patients believe that using blood pressure medication everyday can increase side effect occurrence. Seven out of ten respondents (99/145, 68.2%) believe that lemon juice and other herbs are 'sufficient agents' for blood pressure lowering. Conclusions

Socioeconomic, cultural and emotional factors can affect compliance to blood pressure treatment. Physician's role is important by means of convincing patients about the link between treatment risk and benefits, mainly when an asymptomatic condition such as hypertension is under discussion.

#### P05.225

### Following the low-risk Pregnancy

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**Introduction:** In Portugal, the maternal, fetal, newborn and child morbidity and mortality, decreased due to improved socioeconomic conditions and creation of programs for sexual/reproductive health seeking to improve the care of assistance. It is up to the Primary Health Care to monitor the low-risk pregnancy and identify risk factors that require appropriate referral.

**Objective:** Plan the monitoring of low-risk pregnancy regarding laboratory tests and ultrasounds as well as their timing, in order to

track, prevent and treat situations that could endanger the mothers and/or fetal or perinatal health. Identify conditions and situations requiring referral to specialist consultation in hospitals.

**Methods:** Bibliographical research of technical guidelines of Portugal published between 2004 and 2011 and textbooks of Obstetrics, in Portuguese and English.

Results: It is important to recognize the frequency of appointments and the laboratory tests and ultrasounds in the periods recommended by the Portuguese guidelines. In the first Appointment should be developed the clinical history, physical examination, assessment of prenatal risk and fill the pregnant book. Those guidelines recommend ultrasound screening examinations in well-defined periods: 1<sup>st</sup> Trimester (11-13 weeks and six days), 2<sup>nd</sup> Trimester (20-22 weeks) and 3<sup>rd</sup> Trimester (30-32 weeks); laboratory tests to be held in each trimester: ABO and Rh factor, search for irregular agglutinins, complete blood count, screening for gestational diabetes, syphilis, rubella, toxoplasmosis, HIV, hepatitis B, assymptomatic bacteriuria, Streptococcus Group B and cancer of the cervix. They also warn to the prevention of severe forms of hemoglobinopathies, Rh isoimunization prophylaxis, prenatal diagnosis of congenital heart disease, oral health promotion and medical certification of the time of pregnancy. The postpartum appointment should include clinical examination including pelvic, breast and cervical smear, beginning of contraception and surveillance according to national cancer guidelines.

**Discussion**: The reduction of maternal and perinatal mortality and morbidity depends on the health care provided to pregnant women and newborn. The family doctor plays a key role following the low-risk pregnant, recognizing the key periods for health education and implementation of diagnostic tests.

# P05.226

Frequency of depression in two ambulance of family medicine Primary health care center Prijedor and Trebinje, B&H.

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Introduction: Depression is a serious medical disease characterized by swing of mood, will, thoughts, behavior, with varying degrees of sadness and suicidal impulses. According to the WHO as a health problem of depression is in fourth place with a prevalence of 121 million patients. Aim: To explore the degree of depression in relation to sex, age and presence of chronic diseases, arterial hypertension, diabetes mellitus and thyroid disease

Method: The study was conducted in two Primary Health Centre Trebinje and Prijedor, in perod from 15<sup>st</sup> January 2010 to 30<sup>st</sup> May 2010. The information were collected by using Beck questionnaire, self- created questionnaire and medical records.

Results: The study included 100 patients, 55 (55%) female and 45(45%) male. In 25-34 year-old male patients 3 (23%) were depressive, in 34-44 year-old 6 (46%) were depressive and in 45-55 year-old 24 (53%) were depressive. In Prijedor were 14 (58%) male depressive patients, in Trebinje were 10 (48%). In 25-34 year- old female patients 9 (43%) were depressive, in 34-44 year-old 6 (46%) were depressive and in 45-55 year-old 13 (62%) were depressive. In Prijedor were 14 (54%) male depressive patients, in Trebinje were 14 (48%). 10 (22.2%) male patients had mild depression, 5 (11.1%) had moderate depression and 9 (20%) had severe depression. 16 (29%) female patients had mild depression, 8 (14.5%) had moderate depression and 4 (7.3%) had severe depression. Of the 52 depressive patients with arterial hypertension, 4 (7.7%) developed severe depression, 6 (11.5%) with diabetes developed severe depression and 5 (9.6%) with thyroid disease have developed a mild depression.

Conclusion: Depression is more common in the elderly population, in females, and in correlation\_with chronic disease. It is necessary to develope plan of screening population with high risk on family medicine level.

Urinary incontinence: Is it a problem?

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Background: Urinary incontinence is a hidden epidemia in society which becomes a symptom when the patient has a complaint, becomes a finding when shown by examination and finally becomes a diagnosis after a fully evaluation. The aim of this study is to investigate to what extent Turkish women give importance to urinary incontinence and to state halting points of doctor-patient relation in terms of the health promotion and to improve the awareness of society about urinary incontinence.

Materials and methods: This study includes 1061 patients applying consecutively to the Gynecology and Obstetrics policlinics of Ankara Atatürk Education and Research Hospital between May-July 2009. Patients' socio-demographic characteristics (age, education, level of income, job, marital status), their menopausal status, obstetric information (the number of pregnancy, the number of maternity, the number of abortion and the number of curettage), reasons of application to the hospital, duration of complaints, and urinary incontinence symptoms and also the reasons of why they do not say those to their doctors were asked to the patients. Face to face interview method was used.

Results: According to the results of all data the mean initiation age is 38.75 (min 15-max 88), most of the patients are graduates of primary school, their income level are between 500-1000TL, most of them are housewives, married and in premenopausal cycle, the number of patients giving natural childbirth and the number of patients giving birth to more than one child are pretty much. The number of patients applying to hospital more than once is high. The most frequent complaint is inguinal pain. The most common reason of not telling the complaints such as urge incontinence, stress incontinence, dyspareunia and fecal incontinence to doctor was not giving enough importance to them.

Conclusion: Urinary incontinence is a growing medical, social and economic problem for women. We investigate the society about urinary incontinence and its treatment.

# P05.228

# Vitamina D levels in a population of Barcelona

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INTRODUCTION Vitamin D we can obtain food or exposure to solar radiation. According to the latitude there are areas that are more protected than others, and so far it was believed that our population was protected from deficiency of vitamin D for its geographical location. We know that is more closely related vitamin D deficiency with diseases not only musculoskeletal but also carcinogenic processes, cognitive deficit or increase in falls in the elderly.

OBJECTIVE To determine the levels of vitamin D in our population DESIGN Cross-sectional study

FIELD OF STUDY Urban Health Center

SUBJECT 140 users of the center

MESURES AND INTERVENTIONS We measured vitamin D in the general analytical or control by any chronic disease patients randomized to 140

RESULTS Of the 140 patients studied, 77 were women (55%). For the study we divide the population into three age groups: 15-45años (8 users), 45-75 (67) and> = 75 (65). The vitamin D deficiency (levels <30ng/dl) was detected in a total of 29 patients (20.7% study population), with values deficiency (vitamin D <20ng/dl) in 5 of these patients. Vitamin D deficiency is found in only one person of the group of 15-45 years (12.5%), in 11 of those aged 45-75 years (16.4%) and 17 of those over 75 years (26.1%)

CONCLUSIONS The deficit in vitamin D, we found 21% of the study population randomly, with the age group over 75 years in which more than this deficit was found and where it would be necessary.

#### P05.229

Hospitalizations due to diabetes in municipalities of Central-West Brazil

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Interventions relating to chronic diseases (especially for diabetes) at primary care level are very effective and is associated with improvement in process indicators or in intermediate results. The rate of hospitalizations due to diabetes and its complications measures the effectiveness of the healthcare service indirectly. Primary care-sensitive conditions as diabetes are health conditions that can be dealt with through care provided at the first level of care within the healthcare system. The objective was to analyze rates of hospitalization due to diabetes and its complications as a primary care-sensitive condition. This ecological study on 16 health's district (246 municipalities in the state of Goiás, Central-West Brazil), between 2009 and 2011, used data from the Hospital Information System. Ministry of Health, Brazil. The hospitalization rates were calculated as the ratio between the number of hospitalizations due to diabetes conditions and the population between 30-59 years. The data were evaluated according to sex, municipality of residence, whether the individual belonged to the metropolitan region, distance from the state capital and living conditions index. The variability of the rates was evaluated using the t test and ANOVA. A total of 7,981 hospitalizations occurred due to diabetes and its complications (man 45.88% and female 54.11%). The hospitalization rates was 11.29/10,000 (male: 10.58; female: 11.97). There was a reduction in hospitalization rates for both males (10.8 to 9.71) as for women (12.7 to 10). The highest rates occurred in areas of greatest need of health services including primary health care. The rates of hospitalization due to diabetes and its complications decreased in the period analyzed. This reduction was greater in females perhaps because the population that benefits most of the services of primary health care. The lack of structure of health services can significantly influence the behavior of these rates.

## P05.230

The measurement of relative efficiency of general practice: empirical evidence from Italy

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General practice (GP) - or family medicine - is the core discipline of primary care and the cornerstone of many health care systems. Efficiency analysis and benchmarking techniques are widely used methods to identify systematic variations in performance between health care providers, with the purpose of improving the overall quality of care across the delivery system. The purpose of this study was to compare the efficiency of GP in Italy across the 20 Regional health systems.

Efficiency in the delivery of GP services has been analyzed in two stages. First, we calculated the Regional efficiency scores by means of Data Envelopment Analysis. Then, we carried out a regression analysis to relate the efficiency scores to contextual factors -outside the control of policy makers, to investigate their influence on the efficiency in the provision of general practice services.

Six Northern Regions were identified as efficient using the best combinations of general practitioners to deliver a given level of GP outcomes. Compared with peer benchmarks, inefficient Regions

used more (on-call and regular) general practitioners with important underproductions of outputs (e.g. avoidable hospitalizations). The regression analysis showed a negative relationship between efficiency and the Regional total health care expenditures as percentage of its gross domestic product.

Improving efficiency of GP services delivery is likely to result in reduced health expenditures. Since there is a general tendency in Europe to decentralize governmental systems of countries and Italy can be seen as an extreme example of this trend, we consider our findings of high relevance for international comparative studies on performance of primary care systems.

#### P05.231

### Gastroprotection in elderly patients

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Introduction: The use of gastroprotection has experienced a significant increase above all in elderly patients. We often make overprescribing without taking into account its adequacy, thereby decreasing the safety of our patients and increasing drug costs. Objective: Assess the adequacy of gastroprotection in patients older than 65 years in Primary Health Care.

Methods and Materials: Cross-sectional studies. Urban field. Review of computerized medical records of all patients over 65 years of three medical contingents who use gastroprotection. List obtained in May 2011. Independent variables were: age, sex, previous illnesses and usual medical treatment. Dependent variables were: adequacy of gastroprotection prescribing for patients over 65 years according to scientific evidence and CatSalut current guidelines.

Results: 165 patients over 65 were included. 64% of patients were women. The mean +/- standard desviation age was 74.09 +/- 6.04. In 96.9% of cases were treated with proton- pump inhibitors , omeprazole EFG was the most prescribed representing 88.8%. The prescription was considered appropriate in the 58.28% of cases: gastroprotection 71 (80.68%), symptomatic gastroesophageal reflux 13 (14.77%), gastritis 2 (2.28%) and duodenal ulcer 2 (2.28%). Inappropriate indications in 41.72% of cases: Polypharmacy 28 (44.44%) and other 35 (55.56%).

Conclusions: Stress the excessive use of gastroprotection, which may be considered as inappropriate in a large number of patients examinated.

#### P05.232

### Written consent form fulfillment revisited

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Informed consent is both an ethical obligation and a legal requirement. The written consent form is only a part of the whole process of communication but it is important to record it properly because written consent forms document the process and the form can serve as evidence that informed consent indeed took place.

Aim: to retrospectively assess if a written consent form was properly fulfilled.

Methods: we retrospectively review the clinical record of 155 patients that underwent exercise stress testing. For this procedure, The Spanish Society of Cardiology has endorsed a written consent form with several blanks to be filled in, some of them by physicians

and some others by patients. We selected the following required yes or no items to be analyzed: written consent form, physician who informed the patient, physician who is going to do the test, proper patient identification (social security number or clinical record number), patient name and surname, date of the procedure, signature of the patient, physician's stamp. We also recorded sex and age

Results: There were 110 males (70.5%), mean age 56.9 years. Only 1.9% patients had all the studied items properly filled in. In 3.2% the clinical record did not include a written consent form though the patient underwent the procedure. Physician who informed the patient was missing in 28 (18.1%) physician doing the test was recorded in 43,2% cases.Proper patient identification was present in 105 (67.7%) cases and patient name and surname in 94 (60.6%) cases. Form included date of procedure in 63.2% of the records. There was a signature in all the reviewed forms, in all minors a legal representative signed it. Finally, the physician's stamp blank was present in 7.1% forms.

Conclusions: First, in this sample of patients we have found that most of the clinical records included the written consent form but it was missing in a minority of them. Second, the fulfillment of the form was not correct in most of the cases due to a lack of several compulsory items. Therefore, we must pay more attention and interest to this issue in order to improve these data

#### P05.233

Treatment options in nonarticular pathology in a Primary Care Centre

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Introduction: Within the therapeutic arsenal for the treatment of nonarticular pain, local infiltrations are one of the possibilities.

Objective: Determine the effectiveness of the use of intiltrations in nonarticular patholoy in Primay Care.

Materials and Methods: Prospective longitudinal descriptive study. Study period: January 2011 to December 2011. Urban area. It included patients who consulted about pain from nonarticulate origin. Exclusion criteria: previous diagnosis of fibromyalgia. Pain was measured by visual analogue scale (VAS). All patients included were prescribed anti-inflammatory treatment (NSAID) before. If no improvement, they were subjected to infiltration of the affected area. Evaluation of the answer to the treatment after 5 days. If pain persisted they would be subjected to a second infiltration.

Results: Of the 139 patients, 85 women (61.1%). Ages 26 to 87 years (mean 59.3 +/- 7.1 years). Main pathologies treated: The painful shoulder (subacromial syndrome) 44 cases (31.7%), trocanteritis 23 (16.6%), anserina bursitis 20 (14.3%), epicondylitis 16 (11.5%), talalgia 13 (9.3%) and other ones 23 (16.6%). None of the patients previously treated with NSAIDs had made significant improvement. VAS scale score of 4 or higher.

Average infiltration: 1.61 per pacient, 128 with improved pain (92.1%), 11 patients (7.1%) were referred to the orthopedic by lack of response.

Conclusions: Subacromial syndrome was the main pathology treated. The infiltrations were effective in 92.1% of cases, being well tolerated.

## Approach towards to death and the terminally ill patients

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Aims: The aim of this study was to investigate the attitudes of physicians toward death and terminally ill patients and the relationship between the sociodemographic variables of the physicians and these attitudes. Also, this study aimed to find out the relationship between the death anxiety of the physicians and their avoidance behavior of informing patients about their diagnoses and the necessity of education on how to approach patients with terminal illness.

Methods: The study subjects were 26 (50%) physicians and 26 (50%) students. A questionnaire about sociodemographic information, the Death Anxiety Scale and an 18 item questionnaire prepared to evaluate the attitudes of physicians were applied to the participants.

Results: There were 52 participants, 25 of them (48.1%) were female and 27 (51.9%) were male. Mean age was  $26.15 \pm 2.75$  (23- 36) years. Participants were faced with the typical 3 response choices in a Likert scale like "agree", "not agree" and "no idea" and they were agree with the high rate to the following statements;

"A patient has the right to learn about treatment options, prognosis and reject treatment whatever his/her diagnosis is." 47 (90.4%), "Patients who learned that they have a fatal disease pass through psychological stages (denial, anger, depression, acceptance etc.) which cause them to give different responses to their environment and the treatment team" 48 (92.3%), "When telling the diagnosis and treatment to a patient with a fatal disease, his/her life span should not be told exactly" 44 (84.6%), "Whatever the diagnosis and prognosis of the disease is, good death and providing it by health professionals is possible" 37 (71.2%). Most of the participants 43 (82.7%) agreed that education on how to approach death and terminally ill patients should be given during or after the medical education. The responses to the questionnaire were found to differ according to variables of death anxiety, specialty, and gender.

Conclusion: This study explored the difficulties of the physicians when approaching death and the terminally ill, which is a neglected but important area in medical practice.

#### P05.235

# From oral hypoglycemic drugs to insulin: what is the take of GPs?

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IntroductionAccording to several studies, GPs are often unwilling to set up an insulin therapy for patients with type 2 diabetes mellitus (T2DM), even when they are aware of the suggested guidelines.

Aim The aim of the study was to investigate the spread of insulin treatment among GPs in Greece and explore the issues that prevent them from setting it up.

**Methods** An ad-hoc questionnaire was distributed to a sample of GPs, who were selected randomly from the registry of the Greek Association of General Practice. Besides demographics and professional data, it included questions on their T2DM treatment strategies and actual practice, their training and the problems they usually faced.

Results 106 GPs replied to the questionnaire (response rate: 53%). The mean number of patients with T2DM examined by GPs was 63.18 per month. 13.2% of the GPs were unable to carry out any HbA1c tests due to lack of laboratories, as their practice was located in a rural area. The mean HbA1c was estimated at 57 mmol/mol. Four out of ten GPs did not receive any specific training on diabetes and only 23.6% attended postgraduate courses.

85.6% of the GPs managed patients on insulin and 74.2% of them initiated insulin treatment on their own. GPs that had attended specific seminars on insulin treatment were 6 times more likely (95%CI: 2.17-17.24) to start prescribing it independently. Conversely, 36 out of 42 GPs who did not start insulin treatment on their own, replied that they did not feel confident to set it up, although they did recognise its efficiency. The issue of communication skills and patients opposing to insulin therapy was

raised only by 6 out of 42 GPs. Finally, 95.2% of the total sample considered as essential the training of health personnel (such as nurses) in order to overcome the boundaries for the management of patients on insulin.

#### Conclusions

Insulin treatment seems to be widespread, but the study, albeit its limitations, underline the necessity of specific training during or after the specialisation to enable GPs to set up and manage such a treatment.

#### P05.236

Uptake of influenza and pneumococcal polysaccharide vaccine in at-risk population in two different cities of Turkey.

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Aim and Background: Influenza and pneumococcal diseases are important causes of morbidity and mortality. Risk factors include older age and medical conditions that increase the risk for complications from infections. Each year these diseases are associated with hundreds of thousands of hospitalization, tens of thousands of deaths, and high health care costs. It is for these reasons that risk group and all individuals 65 years and over is included as an indication for influenza and pneumococcal vaccination in Turkey. We aimed to present the results of an audit of influenza and pneumococcal vaccination.

Material and Methods: We interviewed total 667 patients at age of 18 or older and a questionnaire was completed in a face-to-face interview in May 2009 and January 2011 at three different primary care centers in Samsun, one in Trabzon and at Ondokuzmayis University Hospital Family Medicine Clinic. Data obtained were analyzed by a statistics program.

Results: Of the 667 patients, 66 were 65 years and over (group A) and 166 were 65 years and over or have an indication for influenza and pneumococcal polysaccharide vaccination (group B). In group A, patients who had been vaccinated with influenza were 26 (39.4%) and pneumococcal polysaccharide 0 (0.0%) vaccines once, respectively. In group B, patients who had been vaccinated with influenza were 63 (38.0%) and pneumococcal polysaccharide 10 (6.0%) vaccines once, respectively.

Conclusions: Despite being part of the national adult immunization program, uptake of pneumococcal polysaccharide and influenza vaccines in certain recommended risk groups and 65 years and over population is low in these cities. Although the influenza and pneumococcal vaccines are provided free of charge, no incentive is provided for primary care health professionals to achieve a high vaccination uptake. This is in contrast to childhood vaccinations, and the only way to change this would be for the Government to lead the way. Family physicians must pay more attention on immunization of at risk patients.

# P05.237

Tetanus vaccination coverage among adults aged 18 years and older in Samsun and Trabzon cities of Turkey.

E. Kadioglu<sup>1</sup>, F. Yaris<sup>1</sup>, M. F. Dikici<sup>1</sup>, F. A. İgde<sup>1</sup>, H. Aktas<sup>2</sup>; 
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Turkey.

Aim and Background: Tetanus occurs worldwide and is endemic in developing countries and in developed countries it may still cause death, particularly in individuals above the age of 50. Vaccination against tetanus is effective and is currently advised for entire population. The administration of tetanus toxoid has been part of the childhood immunization program in Turkey since 1962 and the vaccine is free of charge for all age groups. We aimed to present the results of an audit of adult vaccination against tetanus.

Material and Methods: We interviewed total 667 patients at age of 18 or older and a questionnaire was completed in a face-to-face

interview in May 2009 and January 2011 at three different primary care centers in Samsun, one in Trabzon and at Ondokuzmayis University Hospital Family Medicine Clinic. Data obtained were analyzed by a statistics program.

Results: 241 (36.1%) of those included in the study were male, and 426 (63.9%) were female. The mean age was  $43.97 \pm 15.14$  (range 18-87). Of the 667 patients who had been vaccinated with tetanus within the preceding 10 years were 284 (42.6%). Of the 667 patients, 66 were 65 years and over and patients who had been vaccinated with tetanus within the preceding 10 years were 10 (15.2%). In all age groups who had been vaccinated with influenza were 170 (25.5%), and hepatitis B 110 (16.5%) vaccines once, respectively.

Conclusions: In all age groups tetanus vaccination rate is higher than influenza and hepatitis B vaccination rates and the rate of tetanus vaccination was approximately three-fold higher in all age group than the 65 years and over aged. Tetanus vaccination is free of charge in all age groups and tetanus vaccine administration during school, military service or pregnancy may explain this. Tetanus vaccination rates in these cities still low when compared with U.S.A (in all age groups 61.6% in year 2008). Immunization programs for tetanus should be extended to adults and the aged population in addition to children and pregnant women. Family physicians must pay more attention on immunization of adult patients and especially 65 years and over aged population.

#### P05.238

# Chronic kidney disease and associated diseases as risk factors for renal failure

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Chronic kidney disease (CKD), also known as chronic renal disease, is a progressive loss in renal function over a period of three months or more, that has arisen due to abnormalities of structure or function of the kidneys. The fifth stage of chronic kidney disease is called Chronic Renal Failure.

The main causes are: primary - glomerulopathy, secondary - diabetic nephropathy, hereditary diseases and vascular diseases.

To determine the number of patients with chronic kidney disease as a consequence of hypertension, diabetes and primary renal failure, and the number of those who are in the terminal phase of illness

#### Methods

We analyzed 1543 medical records of the patients who visit family medicine clinic in the period from October 10, 2011 to December 31, 2011, and who suffer from chronic diseases such as hypertension, diabetes and primary renal disease.

#### Results

We found that 66 patients suffered from chronic kidney disease, 24 (36.4%) women and 42 (63.6%) men.

32 patients (48.5%) suffered from hypertension and chronic renal disease, 20 (30.3%) patients had diabetes associated with CKD, (11 patients had DM and hypertension), 12 (18.2%) patients had CKD due glomerulopathy and 2 (3%) patients due to inherited polycystic kidney disease.

29 (43.9%) patients are in end-stage of the disease, 12 women (41.4%) and 17 (58.6%) men. 22 (75.8%) of them are on hemodialysis, 7 (24.2%) patients have severe CKD and take medical therapy.

The remaining 37 (56.1%) patients had elevated creatinine and they are under regular pharmacological treatment and on a special diet.

#### Conclusion

By revision of 1543 medical records from patients who suffered from the chronic diseases we found that 66 (4.3%) patients are with chronic renal failure. 29 (43.9%) of them are in end-stage of CKD. The leading causes of CKD, found in this study, are

hypertension and diabetes mellitus, followed by primary renal disease.

Abnormalities in laboratory tests usually precede onset of symptoms. This indicates the need for regular checkups and regular blood and urine tests. It is necessary to include healthy food intake and physical activity, regular blood pressure and blood sugar level checkups before irreversible changes occur.

#### P05.239

# The Effects Of Anxiety And Depression Scores In Social Tendencies

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**Introduction:** Our aim is to define social tendency in anxietic and depressive groups.

Materials and methods: In this study prospective, observational and analytic methods were used. Patients who admitted Ankara Education And Research hospital Family Medicine Clinic were classified and elected. Economic independent adults were choosen who accepted to join this study. The age, gender, marital status, number of years of schooling, reading and the physical activity habituals who took part in this study were recorded. In this study Beck Anxiety Scale, Hamilton Depression Scale and Fatih Social Tendency Scale were used. Fatih Social Tendency Scale consisted

of 6 factors and 22 characteristics. The characteristics measured were awarded points on a 5 point Likert-type scale. The factors measured were: Social Adaptation Status (SAS), Drug Avoidence (DA), Economiz Status (ES), Violence Avoidence (VA), Family Status (FS) and Aims and Ideals (AI). We compared the factor scores by taking the averages. Analysis was carried out using the SPSS statistics program. Factorial analyses were made by ANOVA. Scores with a P level below 0.005 considered to be statistically meaningful. Significant varies of ANOVA were valued with paired comparison and correlation analyses.

**Result:** 15 men and 22 women took part in our study. The average age was  $37.6 \pm 15$  years for the males and  $35.8 \pm 12$  years for the females. We calculated the average factor scores of the measures. In the Factorial ANOVA comparisons, the following results were obtained: Hamilton Depression Scores in Social Adaptation Status (SAS) ( P = 0.022 Effect size 0.17), age scores in Violence Avoidence (VA) ( P = 0.038 Effect size 0.147), gender factors in Violence Avoidence (VA) ( P = 0.013 Effect size 0.2) and Beck Anxiety Scores in Family Status (FS) ( P = 0.011 Effect size 0.2).

Conclusion: The Fatih Social Tendency Scale, which was developed earlier, is a valid measure in identifying attitudes towards social tendencies. It is advisable to consider people's attitudes to social tendencies, taking into account factor of gender, age, anxiety and depression scores and to plan the advisory service accordingly.

#### P05.240

A randomized multicenter placebo-controlled trial of the effectiveness of mobile phone text-message reminders to improve compliance among hypertensive patients

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Introduction/Object: For effective management of hypertension, life style modification and improvement of drug adherence are important. There have been several studies showing that using short message reminder services improved the attendance of lipid lowering therapy or diabetes care. Therefore, we investigated the

effects of mobile phone text-message reminders on hypertensive patients in outpatient clinics.

**Method:** The study was performed at family medicine outpatient clinics of n hospitals of South Korea, from July 2008 to June 2010. During the study period, 1,453 patients were included in the study and prescribed angiotensin-2 receptor blocker (candesartan cilexetil 8 mg) Patients were divided into two groups randomly: the mobile phone text-message reminder group and the control group. Patients were followed up for 12 weeks after the inclusion; mobile phone text-messages (contents: regular medication, regular exercise, low salt diet, lowering alcohol consumption, weight-control) were sent to the reminder group at 2, 4, 6, 8 and 10 weeks by the coordinating center. Chi-square test was performed to compare compliance (attendance, regular medication) and performance index of hypertension (proper blood pressure (BP), weight loss, cut down on drinking, regular exercise, low salt diet) with two group.

Results: During the study period, 719(49.6%) participants were included in the mobile phone text message reminder group and 730(50.4%) participants were included in the control group. Attendance rate were 92.8% in the reminder group and 94.7% in the control group (P=0.142). During 12 weeks, 96.3 % of the reminder group, 97.8% of the control group took regular medication (P=0.130). The target blood pressure was attained in 75.8% of the patients in the reminder group (under systolic BP <140 mmHg and diastolic BP <90mmHg) and 75.4% of the patients in the control group, while their differences were not statistically significant (P=0.870). Attainments of weight loss, cut down on drinking, regular exercise and low salt diet also did not show significant differences between the reminder group and the control group.

**Conclusion:** In our study, mobile phone text reminders did not show any significant positive effects on management hypertension.

#### P05.241

# Knowledge, Attitude And Behaviour Of Parents About Rotavirus Vaccination

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Objective: Rotavirus is one of the most common cause of gastroenteritis in children and newborns all over the world. Incidence of rotavirus infection is similar in developed and developing countries. This similarity shows that improving personal and community hygiene and sanitation are not enough for preventing infection. For this reason, the main method of protection against rotavirus infection is vaccination. This study was carried out to determine the knowledge, attitude and behaviours of parents who have children at the age 2 years old and below.

Methods: Study was carried out by applying the survey to families admitted Ankara Training and Research Hospital pediatrics polyclinic and pediatric emergency service between April-May 2011. The statistical analysis were performed with SPSS-17 program.

Results: Survey was applied to 1005 parents. The 61% of the parents' education level were primary school and below. 56% of parents had lower incomes. 857 (85,3%) cases did not know rotavirus vaccine, 873 (86,9%) cases were not informed about rotavirus. The number of the parents who knew about rotavirus vaccination was 148. The rates of information resources about vaccination were; , 17,6% from physician, 14,2 % from nurse, 7,4% through media, 65,5% through a friend. It is found out that 36 children have been already vaccinated and 33 of them were vaccinated before being caught diarrhea.

Conclusion: We think that vaccination is important for the prevention of rotavirus infection. In this study awareness about rotavirus vaccine and vaccination rates were found lower than expected. Actually, there are many factors that effect vaccination such as education status of parents, level of incomes, severity of previous diseases, frequency of doctor visits, physician's attitudes about vaccination. Physician is the most important factor for determining about vaccination. To increase vaccination rates,

particularly physicians and health care providers should inform parents about rotavirus vaccination.

#### P05.242

# Parents Perception of Competence about the Nutrition of Their Children

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Aim: Nutrition is one of the most important factors in both physical and mental development in early childhood period especially for infants. This study is performed on people who are responsible for 0-12 month infant care in order to investigate their opinion on their own knowledge and skill level about nutrition and to point out the current necessity for education.

Methods: From January to June 2011, a 10 question survey based on a five level Likert scale is performed on volunteer parents of patients who applied outpatient to Ondokuz Mayis University Pediatric clinics and their knowledge-skill levels about nutrition is investigated.

Results: 111 participants involved for the study and their ages varied between 19-49 years and the average of age was 29.11. 38.7 % of participants were primary school graduates and 61.3 % were secondary school graduates. There was no significant statistically difference between the knowledge level of the primary and secondary school graduates on the topics; how to feed an infant with a baby bottle, how to make a balanced diet plan, how to choose the food and how much to feed the infant and how to identify diarrhea and constipation. However, a considerable difference is found out on the topics; expected duration for putting on weight of an infant (p=0.02,  $\chi$ 2=18.8), normal growth retardation values (p=0.03,  $\chi$ 2=40.6), the best formula milk (p=0.04,  $\chi$ 2=9.57). Conclusions: Educational programs about infant care have been held in the developed countries for many years. It is also obvious that it is a fundamental necessity in our country. Family physicians whose follow almost all the pregnancy cases and watch over 0-12 month infants should be considered as the best doctor group to satisfy this requirement.

# P05.243

# The Effects of Regular Exercise on the Quality of Life

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Introduction: According to the WHO, psychological pathologies are increasing. Psychological pathologies are a cause for the loss of labor and put a load on the economy. Some factors that may cause psychological pathologies include stress, loneliness, genetic factors, chronic diseases, and a sedentary lifestyle. It has been determined that the quality of life for those effected by a psychological pathology decreases by a significant rate. It is a known fact that exercise increases the quality of life.

**Method:** This was a randomized, cross-sectional field work study. 36 women participated, without any absences, in a 12-week step and aerobic exercise program. Participants who could not complete the 12-week exercise program in its entirety, due to a health problem, were not included in this study. At the start and end of each workout, each participant was measured according to the SF-36 Quality of Life Assessment.

**Findings:** The mean age of female participants in this study was 32.05±6.24(21-37). When the quality of life in participants was examined, aside from the values of psychological health, all other values had shown an increase. It was determined that the difference caused by standard deviation had prevented an increase in values for psychological health. When the participants who had been the cause of this difference were left out of study, the values obtained for psychological health was found to be 58.21±15.70. Aside from this parameter, all values had a statistically significant increase (p<0.05)(Table-1).

**Discussion:** Health should not only be defined by an individual's physical wellbeing, but should also be shaped by their biopsychosocial condition so that in order to be considered healthy, one should not only be physically well, but also be psychologically and socially well. Family physicians are not only responsible for treating their patients, but are also responsible for the wellbeing of their patients through preventive care. Therefore, family physicians should help their patients see the benefits of proper diet and exercise on the quality of life.

Table1

TableT									
	n	Minimum	Maximum	Mean	Std. Deviation				
SF-36 values before exercise program									
Physical function	36	40,00	100,00	76,2500	14,56				
Physical strength	36	30,00	100,00	66,9118	29,97				
Pain	36	31,00	100,00	56,5455	15,48				
General health	36	37,00	77,00	56,7778	11,34				
Vitality	36	40,00	90,00	55,6250	11,20				
Social function	36	25,00	100,00	61,7647	14,41				
Emotional strength	36	40,00	100,00	55,8824	30,40				
Mental health	36	36,00	100,00	58,9091	13,76				
SF-36 values after	exer	cise prog	ram						
Physical function	36	70,00	100,00	93,3824	10,28				
Physical strength	36	25,00	100,00	80,0000	24,10				
Pain	36	21,00	100,00	69,0833	20,18				
General health	36	47,00	97,00	68,9714	12,66				
Vitality	36	50,00	100,00	77,7778	13,65				
Social function	36	50,00	100,00	72,5694	15,76				
Emotional strength	36	30,00	100,00	79,4118	30,72				
Mental health	36	31,00	100,00	57,4000	19,13				

P05.244 Increased dietary salt intake - the old enemy of the hypertensive patient

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Excess salt in the diet involves incalculable risks and generates increasing degrees of disability, the frequent use of health care and increased mortality from cardiovascular disease. It was estimated that 45.6% of the Portuguese population were hypertensive patients. The World Health Organization recommends an average intake of 6 g/day of salt, but it is known that the Portuguese consume twice as much. The objectives of this study were to characterize the hypertensive patients and determine their daily consumption of salt.

Observational and analytical study. Convenience sample: hypertensive adults that were consulted in January of 2011, excluding those with impaired renal function. Studied anthropometric data (age, sex, BMI), mean arterial pressure, antihypertensive therapy, signs of cardiac overload (CO) on echocardiography, and urinary excretion of sodium (UENa) through the urinary ionogram 24hours.

Collaborated 40 hypertensive patients. Predominantly female (53%). Aged 44 to 89 years (mean = 67.2 years±12.8). Most are overweight or obese (mean BMI men: 29.0 kg/m2± 3.79 and women: 30.5 kg/m2±3.79) and had blood pressure classified in "Prehypertension" or "Stage 1 hypertension". Average number of antihypertensive drugs was 2.6. The UENa was 184.2±61.3mmol/24h, which corresponds to an average of 10.8g of sodium ingested daily (UENa men: 218.9mmol/day± 82.7, women: 194.7 mmol/day±67.0). From those 57.6% had signs of CO such as left ventricular hypertrophy.

In this study, the hypertensive patient type was about 67 years old, overweight or obese with "Prehypertension" and was medicated with an average of 3 different antihypertensive drugs. The UENa average was about 184.2±2.7mEq/L corresponding to the average consumption of 10.8g of salt per day. This excessive consumption of salt should be a concern of the family physician. Primary prevention should be strengthened especially with changes in lifestyle (healthy diet with low salt intake), in order to gain health and prevent serious diseases in our population.

P05.245
Parents Perception of Competence about the Healthcare
Knowledge of Their Children

A. Alper Gurz, F. A. Artiran Igde, M. F. Dikici, F. Yaris; Ondokuz Mayis University School of Medicine Department of Family Medicine, Samsun, Turkey.

Aim: The study is performed on people who are responsible for 0-12 month infant care in order to learn their opinion on their own knowledge and skill level and necessity for education.

Methods: From January to June 2011, a 10 question survey based on a five level Likert scale is performed on volunteer parents of patients who applied outpatient to Ondokuz Mayis University Pediatric clinics and the knowledge-skill levels about healthcare of participants is investigated.

Results: 111 participants involved for the study and their ages varied between 19-49 years and the average of age was 29.11. Surveys are filled out with mothers 72.3 %, (n=81), fathers 25 %, (n=28) and other relatives 2.7 %, (n=3). 38.7 % of participants (n=43) were primary and 61.3 % were secondary school graduates and some results are illustrated in the following table:

and some results an	-2 I"m not confident at		-1 !"m not		0 no idea		1 I am confident		2 I am totally confident	
	n	%	n	%	n	%	n	%	n	%
Knowledge of the vaccine schedule	15	13,4	5	4,5	10	8,9	27	24,1	55	49,1
Knowing the regular follow-up visits schedule of the baby	20	17,9	5	4,5	12	10,7	25	22,3	50	44,6
Recognize the symptoms of ear infection	28	25,0	9	8,0	21	18,8	23	20,5	31	27,7
Recognize the diaper dermatitis	13	11,7	5	4,5	4	3,6	23	20,7	66	59,5
Recognize the signs of teething	14	12,5	5	4,5	9	8,0	25	22,3	59	52,7
Knowing the normal growth and development values of a baby	22	19,6	2	1,8	17	15,2	28	25,0	43	38,4
Knowing to weigh a baby	17	15,5	7	6,4	10	9,1	26	23,6	50	45,5
Using the liquid medication for the baby	24	21,8	6	5,5	10	9,1	19	17,3	51	46,4
Calming crying baby	10	9,1	7	6,4	7	6,4	30	27,3	56	50,9

Conclusions: Infant care programs organized by family physicians are needed to be provided for the parents living in a variety of community settings.

### Carrier Screening of Food Industry Employees Data from Ondokuz Mayis University Family Medicine Department

**A.** Alper Gurz, F. A. Artiran Igde, E. Genc, S. Aydin, M. F. Dikici, F. Yaris:

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Aim: The employees in food industry play a great role in dispersion of the contaminated diseases. This study has been held in Ondokuz Mayis University Family Medicine clinic and defines the carrier screening data of the food industry employees.

Methods: The food industry employees who have applied to the Ondokuz Mayis University Family Medicine clinic for carrier screening in December 2010 have been included into the study. Participants are examined for chest x ray, nasal sample, oropharynx sample, HBsAg and parasite in the faeces.

Results: The total number of participants was 94 and their ages varied between 20-50 years. The average of age was 33.85 and 64 employees (68.1%) were male while 30 (31.9%) were female. In 80 of the chest x rays (85.1%), there were no pathology diagnosed and in 11 of them (11.7%) pathologic indicators have been detected. In 65 of the nasal sample (69.1%) were normal flora, in 21 (22.3%) of them metisilin sensitive stafilococcus aureus is detected. 92 of the oropharynx samples (97.9%) resulted as normal, while 1 (1.1%) resulted as streptococcus pyogenes and 1 (1.1%) as proteus mirabilis. Also 92 of the HBsAg tests (97.9%) resulted as negative and 2 of them (2.1%) resulted as postive. In faeces tests, there were no parasite detected in 92 of the samples (97.9%) but in 2 of them (2.1%) giardia intestinalis was detected.

Conclusions: Food industry employees are needed to be educated about the diseases contaminated via food and should be informed on how to protect themselves from them and to be more sensitive about check up. These check up held by family physicians are needed to be performed regularly in order to provide a protective health service.

# P05.247

# Evaluation of nutritional evolution on frail elderly in primary care

**B.** Castillo Trillo, F. Muñoz Cobos, A. Soto Pérez, A. Canalejo Echeverría, N. Acero Guasch, R. Cuenca del Moral; C.S. El Palo, Málaga, Spain.

AIMS: To evaluate the nutritional status evolution in frail elderly cohort attending in primary care.

DESING AND METHODS: A cohort of 120 frail elderly with malnutrition risk detecting in primary care (medical setting or domiciliary visit) was prospectively evaluated (every 6 months) between 2003-2011. Anthropometrics measurements: Body Mass Index (BMI), arm and leg periphery (AP, LP), triceps skinfold (TSF), midarm muscle circumference (MAMC). Functional status: Barthel Index. Malnutrition was defined by two or more anthropometrics measurements under P50 to Spanish elderly people male/female reference. Types: marasmus, kwashiorkor and protein-energy malnutrition. Severity: low (p50-p25), moderate (p25-p10), high (<p10). Individual intervention was made in malnutrition elderly. We compare the results of six first consecutive evaluations using 2-sided paired sample T test. Statistical analyses were performed by SPSS 15.0.

RESULTS: Patients were 70% female. At first evaluation they had an average age 83+0,67 years; BMI 22.9+0.4; TSF 14.67+0.61mm (p50-p75); AP 23,52+0.29 cm (p25-p50); MAMC 19,13+0.27 (p25-p50). Malnutrition were present in 76,7% of patients: 35.1% kwashiorkor, 39.4% protein-energy, 25.5% marasmus; 52% low severity, 40% moderate and 8% high. At sixth evaluation (mean follow time 33.36 months) there is no statistical significance in the anthropometrics parameters change: TSF -0.89 (-2.37-+0.58); AP 0.39 (-0.47-+1.2); MAMC 0.72(-0.15-+1.58), except for BMI 1.39 (95% CI:-0.003-+2.80, sig 0.05).

CONCLUSIONS: There is a very high percent of frail elderly with malnutrition. Individual nutritional intervention only maintains but do not improve nutritional status on these patients, but BMI decreases over time.

#### P05.248

# How informative is visceral fat measurement by bioelectrical impedance?

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Although obesity is a powerful risk factor for developing metabolic syndrome (MetS), it is not present in all obese individuals. Increased visceral adipose tissue is the hallmark of this syndrome. In this cross sectional survey abdominal bioelectrical impedence was used to measure the visceral adipose tissue (VAT) and trunk fat percentages (TF%) in participants. A total of 286 patients (196 female and 90 males) were enrolled in the study. In both sexes VAT was significantly positively correlated with body mass index, waist circumference, TF%, HOMA IR, fat percentage, fasting plasma glucose and triglycerides. Strongest correlations were between VAT and TF%, VAT and device measured waist circumference and between VAT and manual waist circumference (r=0.95, r=0,94, r=0.92 respectively in female and r=0.99, r=0,93, r=0.94 respectively in male participants). The mean VAT and TF% in MetS(+) groups were significantly higher than patients in MetS(-) groups in both sexes. The areas under the ROC curves were 0.730 (95% CI: 0.661-0.791) for female VAT and 0.702 (95% CI: 0.654-0.749) for male VAT in predicting MetS. We suggest that using such a device in clinical practice is an alternative technique for examining and follow up of patients with MetS.

Sensitivity and specifity of VAT for predicting MetS at certain cut off values in male and female								
	MALE	MALE	FEMALE	FEMALE				
VAT	SENSITIVITY	SPECIFITY	SENSITIVITY	SPECIFITY				
7.25			100	29				
9.75			90	50				
11.75			57	69				
14.75	92	28	25	90				
16.00	90	40						
19.75	70	53						
30.25	15	90						

#### P05.249

Active and passive electronic cigarette and tobacco cigarette smoking: Effects on complete blood count

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BACKGROUND: Alternative smoking strategies such as the electronic cigarette (e-cig) may contribute towards reducing the threat to public health caused by the tobacco epidemic. However, the latest World Health Organisation regulatory consultation on the safety of electronic nicotine delivery devices called for intensified research efforts assessing the health effects of e-cigarette use given the lack of available evidence.

METHODS: A total of 15 smokers (≥15 cigarettes/day, 8 males, 7 females, 36.83±9.85 years) and 15 never-smokers (8 males, 7 females, aged 28.87 ± 10.45 years) volunteered. The group of smokers underwent a control trial, an active tobacco cigarette smoking trial, and an active e-cigarette smoking trial. The group of never smokers underwent a control trial, a passive tobacco cigarette smoking trial, and a passive e-cigarette cigarette smoking

RESULTS: In smokers, active tobacco smoking increased white blood cell count, lymphocyte count, granulocyte count (P<0.05),

while and e-cig smoking did not affect the complete blood count indices studied (P>0.05). In never smokers, passive tobacco cigarette smoking caused a significant increase in white blood cell count, lymphocyte count and granulocyte count (P<0.05), whereas passive e-cig smoking did not affect complete blood count (P>0.05).

CONCLUSIONS: Acute active and passive e-cig smoking does not do not appear to influence the indices of complete blood count in smokers and never smokers, respectively. In contrast, acute active and passive tobacco cigarette smoking increase white blood cell count, lymphocyte count and granulocyte count in smokers and never smokers, respectively. More research is needed to evaluate the safety of e-cig use.

#### P05.250

Is there a relation between the parents' attitudes towards their children of 13-15 years' computer usage and the characteristics of family life and child rearing?

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#### Aim<sup>.</sup>

The relation between family life and child rearing characteristics and parents' attitude towards their children's computer usage in second stage of primary school is investigated in this study. Method:

This study is performed among 935 primary school students selected with simple random sampling method from Bursa province. A survey inquiring children's computer usage characteristics and PARI (Parental Attitude Research Instrument), which measures parental, attitudes have been used as data collection tools.

# Results:

Average age was 14 $\pm$ 0.88 and 418 (44.7%) were male, 517 (55.3%) were female among total of 935 students.

According to declarations of families, 73.6% were performing certain limitations to internet usage (i.e. purpose of usage and internet sites), 36.2% of families were using filters, 78.8% of families using time limitations and 22.6% were handling computer usage either as a penalty or a reward.

Child rearing attitudes and family life characteristics were not observed to be related with parents' attitudes towards their children's computer usage. The most important determinant for parents' attitudes towards their children's computer usage was observed as the education level of the mother and the father. The other factors that effect children's computer usage were found as the number of siblings and whether to have Internet connection at home.

#### Conclusion:

Computer and Internet usage by children is relatively a new subject for parents, which brings a dilemma between supporting their children's computer usage to provide access to information and catch-up their peers and potential hazards of computer usage, which had been, recently attracted significant attention. While efforts for developing appropriate attitudes towards healthy computer usage for primary school students are running, it is suggested that having families as a part of these ongoing efforts is utmost important.

# P05.251

#### Control of the patient with diabetes and number of drugs.

J. Garcia Paine, I. Pérez Enríquez, **B. Castillo Trillo**, J. Santa Cruz Talledo, A. Manteca González, A. Canalejo Echeverría; C.S. El Palo, Málaga, Spain.

Objective: To assess glycosylated hemoglobin levels and the number of drugs used in our diabetic patients.

Design: Retrospective study.

Location: urban health center with two rural clinics.

Subjects: Patients, aged between 31 and 74 years, having been asked for glycosylated hemoglobin checks from January to October 2011.

Method: We analyzed, in patients who have been requested to check their levels of glycated hemoglobin, the number of drugs they are taking to control diabetes mellitus. Assessment is performed about whether they take it alone or in combined therapy and what are their glycosylated hemoglobin levels are.

Results: We have analyzed 592 patients. Of these, 51.35% (304) are following treatment with a single drug, 38.34% (227) with 2 drugs, 7.93% (47) with 3 drugs and 2.3% (14) with 4 drugs. The average glycosylated hemoglobin values in patients treated with a single drug was 7.209 with a confidence interval (CI) of 95% (from 7.050 to 7.367). In those treated with 2 drugs it was 7.978 CI (7.768 to 8.189), with three drugs CI 8.056 (7.659 to 8.452) and for patients treated with 4 drugs the average was 9.350 CI (8.254 to 10.446). There are statistically significant differences (p <0.000) between the average value of glycosylated hemoglobin of the group of patients treated with a single drug and groups using combinated therapy with 2, 3 or 4 drugs. There is also statistically significant differences between being treated with 2 or 4 drugs. No statistically significant differences (p> 0.005) exist between the groups treated with 2 and 3 drugs and between groups treated with 3 and 4 drugs. In addition to the statistical differences we have observed clinical differences between the groups.

Conclusions: Patients treated with a single drug have lower glycosylated hemoglobin levels than patients treated with combinated therapy. The general level of control is not within the optimal values in any case, being even worse when using more drugs. More aggressive measures seem necessary in the general treatment in patients with diabetes.

#### P05.252

Are HbA1c control objectives met in diabetic patients (both with and without insuline)?

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Objective: compare the control of glycosylated hemoglobin in diabetic patients treated with insulin and without it and see if they meet the stated control objectives.

Design: Longitudinal descriptive.

value of all the studied patients is 7.62.

Location: urban health center.

Methodology: 573 patients have been analyzed, with ages between 31 and 72 years. They are classified according to whether they are being treated with insulin or not. The glycemic control measurement parameter is the glycosylated hemoglobin (HbA1c), whose objective value is equal or less than 7. By comparison of means using Student t and significance level 0.05. Results: The average age of the 573 patients is 62 years. 30% of them are being treated with insulin and the HbA1c average value is 8.13, with a significant difference, p <0.0001, while the average HbA1c value of all the non insulinated is 7.36. The mean HbA1c

Conclusions: The control of HbA1c in our study population is close to the target control value, since in non insulinated patients the control objective is almost met, while the objective for insulinated ones is far from compliance.

#### P05.253

# What motivates patients to want another doctor?

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# OBJECTIVE

Know causes that motivate patients to ask for change of assigned primary care physician in a health center (HC).

#### MATERIALS AND METHODS

A retrospective descriptive study at urban HC that attends about 25000 inhabitants. We review all requests for change of physician delivered by patients in 2011. We analyzed age and sex of patient, physician name assigned, reasons for the change expressed in free text and grouped by categories and steering response (acceptance / rejection).

RESULTS

We analyzed 158 requests for change of physician. Applicants: 54 men and 104 women. Average age: 53 years.

Average of 8 applications per physician

Of the 19 team doctors, 5 (60%) had 10 or more applications and 4 grouped 53% of them. Only a doctor did not have any. Of the 5 doctors with lower long-term sick or maternity leave during 2011, 3 were among those with 10 or more applications. The doctor with more applications (27) was prior to retirement.

Only 3 patients gave more than 1 reason for the change and and in 9 requests any reasons were not reflected. Most common cause: family reunification (30%), followed by prolonged absence of the assigned doctor (12.5%), not empathy (11%), personal reasons / indeterminate (11%) and less than 10%: poor attention, incompatibility of schedules, requested medical good references, preferably by a female doctor, disagreements with medical decisions, high waiting list to get an appointment and high hopes to enter visit.

88% were granted a change of doctor requested: 75% to the doctor ordered and 13% to another doctor for excess to other patients assigned

CONCLUSIONS

- 1-The 60% of change requests corresponded to 26.3% of medical equipment (5 / 19)  $\,$
- 2- Among them were 3 physicians in long-term sick leave and one about to retire.
- 3-It is noteworthy that the prolonged absence of the physician was the 2nd cause expressed, coinciding health system budget cuts and decreased sick leave coverage.
- 4 The leading cause of change of physician was family reunification. There was no malpractice record, although they may be hidden in the concept "personal reasons".

#### P05.254

Factors related to GP's non-adherence to prescription guidelines for Proton Pump Inhibitors : a cross-sectionnal study

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Background

PPIs are frequently prescribed outside of guidelines.

Aim

To identify factors explaining the deviations between PPI prescriptions practices and guidelines.

Design

Observational survey

Setting

Local data from GP surgeries, France

Method

The practices of 144 lecturers in general practice were covertly observed by their trainees. Without the knowledge of the GP, the trainees were asked to report from the first consultation where the GP prescribed a PPI. They were required to fill in a grid, describing characteristics of the consultation : contextual elements, preferences expressed by patients, physician's use of his/her knowledge of the patient, discussion concerning the care. For the analysis, the EBM and SDM theoretical models were used. Results

112 observations reported PPI prescriptions, either in GORD indication, or in co-prescription with NSAIDs. In the GORD subgroup (n=76), the prescriptions were more often in line with the guidelines if the patient was under the age of 65 years (OR=0.11 Cl95% [0.02-0.55] p=0.007), if he/she had undergone oesogastroduodenoscopy (OR=0.06 Cl 95% [0.11-0.29] p=0.0006), or if there had been a discussion with the patient concerning OGD (OR=0.04 IC 95% [0.003-0.483] p=0.01). In the

NSAID subgroup, non-compliance was related only to age below 65 years (p=0.003).

Conclusion

Oesogastroduodenoscopy appears to be fundamental for a treatment complying with scientific data. As far as patient's age is concerned, further research should determine whether there may be a link with GPs' individualised evaluation of the risk for each patient. Patients' involvement during consultation should not be considered as a barrier to guidelines implementation.

#### P05.255

The effects of health interventions to address the risk factors for chronic non-communicable diseases

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**Aim** of this study was to investigate the effect of a six-month health interventions to reduce or eliminate risk factors in the study population.

Method: The study was conducted at the Health Centre "Vracar". The research project included 45 patients with BMI> 25 kg / m 2 and to 25 women and 20men. The average age of respondents was 54 years. On the first inspection assessed the status of all risk factors. Health interventions included the individual health-educational work, rational nutrition and physical activity and medication therapy.

Results: All respondents were overweight, average weight loss (BMI) was 7%. At the same time is based on the index found that WHR is 1 / 3 of respondents had gynoid type of obesity, and 2 / 3 android, which has proven to be a greater health risk. In women, waist circumference reduction amounted to approximately 7 cm, and hip circumference 5 cm and 9 cm in male waist, hips 7 cm. Hypertension had about 80% of respondents of both sexes. The reduction of average blood pressure was 12%. Hyperglycemia had 32% women and 8% of men. The reduction of high serum glucose level was 19% for women and 8% for men. Hypercholesterolemia had 72%women and 40% of men. The reduction of mean values was 10% for women and 14% for men. Hypertriglyceridemia had 56% of women and 40% of men and it is normalized for all women, and decreased by 32% in men. About 32% of women and 75% of men are smokers. The intervention reduced smoking intensity and the percentage of smokers remained the same. Low physical activity had more than 3 / 4of respondents of both sexes, and after six months 1 / 2 is improved their physical activity.

**Conclusion**. Health interventions gave positive results for all risk factors. Given the importance of synergistic effects in several risk factors, most of the respondents had3-4 risk factors, the suppression and elimination of all risk factors reduces the risk of HNO. The application of preventive measures is the first and most effective way to combat these diseases.

#### P05.256

Metformin usage analysis in diabetic patients in a health center

B. Castillo Trillo, **I. Pérez Enríquez**, J. García Paine, J. Santa María Talledo, A. Canalejos Echevarría, A. Manteca González; Centro de salud El palo, Málaga, Spain.

Objective: To study the use of metformin in diabetic patients and control of glycosylated hemoglobin (HbA1c) compared to patients who don't take it.

Design: Descriptive cross.

Location: Urban health center.

Subjects: Patients 31 to 74 years old diagnosed with diabetes mellitus, attached to a basic health area. Non-random sampling. Methods: 573 patients were analyzed. They are classified according to whether they are being treated with metformin or not. Glycemic control was assessed using glycated hemoglobin (HbA1c) as a parameter for measuring . The target control value for HbA1c is lower or equal to 7. Comparison of means is done using Student t, significance level 0.05.

Results: 83.1% of patients are being treated with metformin and 16.9% are with other treatments. The average value of HbA1c is 7.62. Patients treated with metformin have average value for HbA1c of 7.56, being it higher (7.91) in patients not treated with metformin, the difference being significant with p = 0.043. 42.4% of patients had HbA1c lower or equal to 7. The average age is 62 years.

Conclusions: In our health district metformin is used in most diabetic patients, so that it complies with international recommendations. Almost half of the patients meet the target control value. The use of metformin significantly reduces HbA1c in diabetic patients.

#### P05.257

# The Frequency of Antibiotic Prescriptions in a Family Medicine Center

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**Introduction:** According to the WHO, "the rational use of medicines refers to the correct, proper and appropriate use of medicines. Rational use requires that patients receive the appropriate medicine, in the proper dose, for an adequate period of time, and at the lowest cost to them and their community." In developing countries, the use of antibiotics is greater. This is mainly due to preconceptions that both physicians and patients have. The unnecessary prescription of antibiotics in primary care results in drug resistance and costliness. In our study, we aimed to examine the frequency of antibiotic prescriptions and its implications.

**Methods:** We examined annual patient records in a family medicine center. Through a cross sectional retrospective study, we listed the number of patients who were prescribed antibiotics, their diagnoses, and their antibiotic group. SPSS-15 was used to perform descriptive analyses.

Results: 22% (n=1320) of patients were prescribed antibiotics. The most commonly prescribed group of antibiotics was from the penicillin group with a rate of 68.6% (n=906). Among these, amoxicillin-clavulanate was prescribed the most with a rate of 67.5% (n=67.5). The second most commonly prescribed antibiotic group was that of cephalosporins with a rate of 16.4% (n=216). Among these, cefuroxime was prescribed the most with a rate of 7% n=93 and cefprozil with a rate of 5.8% (n=77). The most common diagnosis in patients was upper respiratory tract infections seen at a rate of 90.6% (n=1196). Antibiotic prescriptions varied between doctors. In particular, it has been seen that physicians who have recently completed their specializations prescribe antibiotics less frequently. Antibiotics were more frequently prescribed in winter to children with high fever and who had an upper respiratory tract infection.

**Discussion:** Although there has been a decrease in the use of antibiotics in Europe, it is still not at the desired level. When both drug resistance and the economy, including cost to patients, is taken into consideration, it becomes clear how important it is for physicians to pay special attention to the rational use of medicines. It is important that medical students and practicing physicians are educated on the appropriate use of medicines.

#### P05.258

# Prevalence, risk factors, control, and treatment of atrial fibrillation in primary care

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**Aims and background.** The prevalence, control and treatment of atrial fibrillation have had important changes in recent years. The objective of this study is to evaluate the prevalence, risk factors, control, and treatment of atrial fibrillation in general population.

**Methods.** A descriptive, cross-sectional study was carried out in an urban primary health care center in Barcelona, Spain, with 18,125 persons of 15 years old or older. All of the patients with atrial fibrillation of the center were studied (electronic database). The variables studied included demographic data, risk factors for atrial fibrillation, treatment (anticoagulant or antiplatelet therapy, and drugs for control of rythm), and control of anticoagulant therapy (good control was defined as 60% or more of the controls an INR between 2 and 3).

Results. 289 patiens had an atrial fibrillation (1.6%; 95% CI 1.4-1.8). The mean age was 78 years old (SD 9.4), and 59.2 % were women. Prevalence of risk factors for atrial fibrillation was: 78.5% hypertension, 27.7% diabetes mellitus; 3.1% alcoholism; 11.4% valvular disease; 6.9% cardiac failure, and 16.6% myocardial ischemia. The 95.5% of patients received anticoagulants or antiplatelet drugs, with a mean of 53.6 months of treatment (SD 40.5). The treatments were: 72.3% coumadin drugs, 15.6% aspirin, 2.1% clopidogrel, 1% dabigatran, and 4.4% combination of these drugs. The 76.8% received drugs for rythm control, and the most frequently prescribed were: 22.5% beta blocking agents, 17.6% digoxin, 15.2% calcium channel blockers. 4.2% amiodarone, 1.4% flecainide, 1.4% propafenone, and 14.4% combination of these drugs. The good control of anticoagulant therapy was present in 73.5% of patients.

**Conclusions.** Atrial fibrillation is a frequent disease. Most of the patients received anticoagulant therapy and drugs to control their rhythm. The control of anticoagulant therapy is rather high.

#### P05.259

# Computer Aided Self-Care in the future of the doctor-patient relationship

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#### Introduction

We discuss a future model of doctor-patient relationship in the management of chronic diseases based upon an increased patient autonomy in the presence of access to valid information: Computer Aided Self-Care.

Under question is the capacity of young people, future patients, to discern valid and accurate medical information among the multitude of data available and the extent at which this capacity can be used to improve the care for the chronically ill patient.

#### Method

An objective measure of the ability to access valid medical information was obtained through a 38 questions diabetes knowledge test.

The test was applied twice to 264 students from three universities, technical, humanistic and medical respectively. The first score was used as a reference point while the second test followed a period of two months in which the students were requested to find information concerning the diabetes self-care, their reward being dependent upon the difference between the two scores.

### Results

We compare the scores obtained by the non-medical students with those obtained by the medical students (during and after their diabetes training). Initial results were identical for technical and humanistic universities 1<sup>st</sup> year students (mean score 39.1%) and significantly higher for 5<sup>th</sup> year medical students' score before their diabetes training (58.9%). After their training, medical students increased their score to 77.0% average, while technical university

students increased their average to 55.3%. 6<sup>th</sup> year medical students (tested one year after their diabetes training) showed a decline of their average score to 68.8%.

## Conclusion

Non-medical students were able to raise their actual knowledge, mainly from Internet available data, to the level of 5<sup>th</sup> year medical students before their speciality training. This improvement must be considered according to the perceived importance of their reward (10 to 25% of the course grade) as opposed to the importance of one's health, for a patient actually suffering from a chronic disease.

#### **Acknowledgements**

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#### P05.260

Design of a non-randomized cluster-controlled study of a multi-professional integral intervention targeting community-dwelling frail elderly people: the CareWell-program.

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#### Background:

Currently the care for frail elderly persons with multiple health and welfare problems often lacks integration and coordination. These frail elders are believed to benefit greatly from a coordinated health care delivery system in which the domains of cure, care and welfare are integrated.

#### Objectives:

The CareWell-primary care program consists of four key components: 1) pro-active care plans, based on the individual patients' health-related goals and needs in concordance with the findings of the Easycare-TOS, 2) face-to-face multidisciplinary team meetings (primary care physician, nurse, gerontological social worker and elderly care physician), as well as virtual communication in a secured web-based environment, in which care plans are monitored and updated, 3) each participant is assigned a case-manager, responsible for the coordination of care and providing patient-support in goal-setting and self-management, and 4) medication review.

The CareWell-primary care study examines the (cost-) effectiveness of this program.

Methods: In both the experimental and the 'care as usual' control arm six primary care practices each include fifty frail elders with the use of EasyCare-TOS, a stepwise frailty-identification instrument. Data will be collected at baseline and after twelve months of follow-up. Primary outcome measures are functional status (Katz-ADL), total costs of the intervention and the incremental cost-effectiveness ratio. Mixed-effects regression models will be used to assess the interventions' effects on the changes in functional performance between baseline and follow-up, at both individual participants' and at primary care practice level

Results: We expect the CareWell-primary care program to improve (or prevent further decline in) functionality of community-dwelling frail elderly people against reasonable costs.

Conclusions: When the efficacy and cost-effectiveness of the CareWell-primary care program from a societal perspective is shown, it offers opportunities for structural financing within the Dutch health-care system.

from those without care-complexity. The domains 'physical functioning', 'functionality in daily life' and 'mobility/falls' appear to contribute the most to this difference. Furthermore, the costs of the care-consumption differ between the frail elders with- and without care-complexity. (At the time of presentation, these results will be available and thus shown.)

We expect the CareWell-program to improve functional status and quality of life with a (relative) reduction in the costs of careconsumption.

#### P05.261

# Association of Nonalcoholic fatty liver disease with the prevalence of the Metabolic Syndrome

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Background: Nonalcoholic fatty liver disease (NAFLD) refers to a wide spectrum of liver disease ranging from simple fatty liver (steatosis), to nonalcoholic steatohepatitis (NASH), to cirrhosis (irreversible injuring of the liver). Alanine aminotranferase (ALT), gamma aspartate aminotransferase (AST) and glutamyltransferase (yGT) are common markers of liver injury. NAFLD is considered the primary fatty liver disease. The secondary fatty liver diseases include those that occur in other types of liver disease. Thus, alcoholic liver disease is the most frequent secondary fatty liver disease. Secondary fatty liver can also occur in chronic viral hepatitis (B,C), chronic autoimmune hepatitis and Wilson's disease.

**Aims:** The aims of this research was to investigate the association of NAFLD- in fact relationship between aminotransferases, and the metabolic syndrome (MeSy).

Design & Methods: The epidemiological, four month long research included 279 patients, aged 18-70 years (mean 45), without previosly established MeSy and NAFLD, but with present CVD risk factors. The SCORE system was used for the assessment of CVD risk. Establishment of MeSy diagnosis was based according to the IDF criteria. Elevated aminotransferases in the blood and AST/ALT ratio <1 imply fat liver accumulation and NAFLD. The classic ultrasound found a fatty liver like a hyperechoic (bright) liver. The data was analyzed using the SPSS program.

Results: Metabolic syndrome was established in 215 patients, and in 185(86.04%) of them, aminotransferases were mildly elevated, and had NAFLD. These patients had no other known cause for these enzyme elevations or for the fatty liver, particularly no significant alcohol use. In 182 (98.37%)of them AST/ALT ratio was <1. Only in 19(29.68%) participants without MeSy, aminotransferases were elevated, but in 16(84.21%) of them AST/ALT ratio was a value >2.

**Conclusion:** Association of NAFLD and the MeSy is very often. Aminotransferases ratio constitutes may be a marker of the metabolic syndrome among "healthy" adults. ALT and AST/ALT ratio <1 imply NAFLD and has been related with insulin resistance, which plays a major role in MeSy, and could be useful for distinguishing the etiology and severity of different liver damage.

Compliance with Topical Beta-Blockers Therapy in a Cohort of Romanian Geriatric Patients with Open-Angle Glaucoma

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Aim(s) and background Topically administered beta-blockers are frequently recommended as first-line therapy in glaucoma elderly patients because they lower the intraocular pressure by decreasing aqueous humor production in the ciliary body of the eye. The aim of our study was to assess the compliance of cardioselective beta-blocker betaxolol versus nonselective beta-receptor antagonist timolol in a cohort of geriatric patients.

Material & method In a longitudinal, randomized, retrospective and comparative survey, conducted in a primary care center, located in the city of Timisoara, Romania, were enrolled 46 patients, aged 65 to 78 years. 24 (52.17%) were treated with timolol and 22 (47.83%) - with betaxolol. Inclusion criteria: patients with open-angle glaucoma and intraocular pressure higher than 21 mm Hg. Exclusion criteria: patients with asthma, diabetes mellitus, lung disease and severe cardiovascular diseases. Beta-blockers drops were administered in the affected eye[s] once daily in the morning as monotherapy, during a 1-year follow-up period. The intraocular pressure was examined at baseline and at the end of the treatment. The side-effect profile was carefully monitored. Data were processed using Oneway Analysis of Variance

**Results** Timolol lowered the intraocular pressure to less than 18 mmHg in 19 cases (79.16%), and betaxolol only in 11 cases (50%). 7 patients (29.16%) from the timolol group experienced severe side-effects: bronchospasm with wheezing, decreased heart rate and worsened lipid profile. Compliance with betaxolol was better (p < 0.005) because only 3 patients (13.63%) presented conjunctival hyperaemia, as a common drug-induced side-effect.

(ANOVA) and significance was established at p < 0.005.

**Conclusions** The cardioselective beta blocker betaxolol has a more favorable cardiopulmonary side effect profile, but timolol has a superior intraocular pressure-lowering effect, and is frequently recommended when cardiopulmonary compromise is not of concern

#### P05.263

### The use of antidepressants in Primary Health Care in Brazil

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This is a qualitative study of the profile of users of antidepressants whose function is to provide an overview of the current population served by a team from the Family Health Strategy in the city in Brazil. Our main objectives were a better analysis of the population consumer of this class of psychoactive drugs and know the reasons for the excessive use of this drug. We randomly selected 25% of the registration forms from the population served by the Family Health team in Minas Gerais, Brazil. There were analyzed the following variables: gender, age, occupation, literacy, associated comorbidities. Also we made a qualitative approach through semi-structured interviews with users and questionnaires. After that analysis we found that 3.12% of the surveyed population is user ofantidepressant. Of these users 85% are illiterate and 55% are retired or pensioners. All of respondents reported add associated diseases. Most users started to use the medication due indication of a medical professional (95%). We observed an association between being male, middle aged, retired / pensioner and comorbidity added to make extensive use of antidepressant

medication. Our findings allow us to propose an adequate supply of education services and continuing education for health professionals inserted in the Primary Health Care and the population assisted by them.

#### P05.264

Impact of eggplant preparations in the treatment of hypercholesterolemia - The fall of a myth

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Aims and Purpose

One of the main barriers for the treatment of hypercholesterolemia, one of the major and most prevalent cardiovascular risk factors, is the high cost of drug treatment and its side effects, giving place to herbal medicine as an alternative treatment. Nowadays, eggplant has been popularized as a treatment for hypercholesterolemia, although patients often doubt its efficacy.

The aim of this study is to determine the efficacy of eggplant preparations in the treatment of hypercholesterolemia, compared with no treatment or treatment with statins.

Design and Methods

A search for clinical practice guidelines, meta-analyses, systematic reviews, evidence-based reviews and clinical trials published from January 1991 until July 2011, in Portuguese, English, French and Spanish was performed using the MeSH terms: eggplant, Solanum melongena and cholesterol, in the databases National Guideline Clearinghouse, Guidelines Finder, Canadian Medical Association Infobase, The Cochrane Library, DARE, Bandolier e MEDLINE. The Strength of Recommendation Taxonomy scale of the American Family Physician was used to assess the quality of the studies and the strength of the recommendation.

Results

We found 17 articles, 4 of them meeting the inclusion criteria:4 randomized clinical trials.

We found that eggplant preparations, compared with placebo, did not have significantly higher results in lowering LDL-cholesterol and increasing HDL-cholesterol (level of evidence 3). When compared with statins, it was found that they can achieve these objectives more effectively and permanently than the eggplant preparations (level of evidence 3).

. . . Conclusions

It appears that when a lipid-lowering effect is achieved with preparations of eggplant, this is not statistically significant and is well below that achieved with the pharmacological treatment of hypercholesterolemia (SORT C). More high quality studies comparing effects of alternative treatments with pharmacological treatments available are needed.

# P05.265

The prevalence of obesity and comorbidity among middleaged population of lower social class

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Aim.To estimate the prevalence of obesity among middle-aged population of lower social classes and correlation between body mass index (BMI) and some pathological conditions.

Method. For the period of 3 months in 2011, we analyzed 96 patients (pts) of both sexes,(m:f=40:56), average age 51 years, in our out patient department. In our study we used medical charts, lab analyses (lipid status,glycemia), measurements of blood pressure and BMI, physical examination, anamnestic data considering socioepidemiological status and also X-ray of spinal, hip joint and knee. All the patients were from the lower social classes.

Results. From the total number of observed patients,11 pts (11.46%) had normal weight and normal BMI (<24.9) (m:f=4.7%:6.76%) and 85 (88.54%) had abnormal weight and abnormal BMI: 31pts (32.29%) (m:f=12.2%:20.09%) were overweight (BMI=25-29.9); 46 (47.91%) (m:f=18.7:29.4) had obesity with BMI=30-39.9; 8 pts (8.33%)(m:f=2.1:6.33) had severe

obesity (BMI>40). From the total number of patients with abnormal BMI, 75 had hypertension; 27 pts(87%) were from the overweighted group, 39 (84.78%) were from the obesity group and all 8 pts (100%) from the group of severe obesity had hypertension. We found that 69 pts (74.12%) had increased total cholesterol plasma level, increased triglycerides level had 53 patients (62.35%), 51 pts (60%) had elevated blood glycose level, 44 (51.76%) had gonarthrosis, 28 (32.94%) had coxarthrosis, 7 pts (8.23%) spondylosis, coronary heart disease had 32 (37.64%), cerebrovascular disease had 11 pts (12.94%), varicose veins 39 pts (45.88%).

Conclusion. Our study showed that the prevalence of obesity is very high among middle-aged population, and higher among women than among men. There is also a correlation between abnormal BMI and lower social status. So, obesity is not only, one of the most serious public health problems of the 21st century in developed countries, but also in undeveloped country such as ours. We also showed that overweight and obesity cause serious health problems, which can lead to various complications and shorter life expectancy, but as the obesity is one of the leading preventable cause of death, there is so much we can do with regular and continuous education of our patients and also with systematic and periodical examinations.

#### P05 266

GPs' knowledge and awareness about early stage of Alzheimer Dementia: a study on Apulian sample.

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#### Introduction:

In order to receive a diagnosis of Alzheimer disease (AD) as early as possible, the role of General Practitioners (GPs) is essential. GP, by recognising the signs of cognitive impairment, represents the first step in patient referral pathway and in the follow-up of disease evolution.

# Objective:

The study was designed to determine what is the level of knowledge of GPs about the early stage of Alzheimer Disease. It also investigates the possible influence, on GP's awareness of signs and symptoms of early stage of AD, demographic characteristics of the sample, year and type of specialization achieved, presence of other qualifications.

#### Methods:

The study was based on two anonymous questionnaires (GP Knowledge and GP-QUAD) administered to GPs during three meetings organized in different areas of Apulia and Basilicata.

These questionnaires are made from the expansion and the adaptation to the Italian context of the questionnaires structured for the English study written by Ahmad et al..

The GP-Knowledge is a multiple-choice questionnaire requiring a GPs self-evaluation of their knowledge about AD incidence, prevalence, risk factors, differential diagnosis and available treatments.

The GP-QUAD is an 18-items questionnaire aimed to evaluate the GPs' attitude, awareness and practice regarding early diagnosis of dementia. Each question has three possible answers: Yes; No; I don't know

# Results:

The total analyzed sample consists of 131 GPs (73 men, 39 women, 19 unreported) of which 19 are from North Apulia area, 58 are from Central area of Apulia and Basilicata, 54 are from South Apulia area. To the question "Have you received a sufficient basic training and specialization to help you to diagnose and manage dementia?", 38% of the sample answered yes, 55% no and 7% I don't know. To the question "Do you administer screening cognitive tests when the presence of a memory deficit or other cognitive disorders is suspected?", 44% of the sample answered yes, 53% no and 3% I don't know.

#### Conclusion:

A preliminary analysis of data shows the lack of training of General Practitioners on the identification and management of early stages of Alzheimer's disease.

# P05.267

# Hypertension screening with community participation in a rural area in Greece

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Background: Hypertension is one of the major risk factors of cardiovascular mortality and morbidity. Since up to 50 per cent of cases go undetected, an acceptable approach is to screen once a year all adults over the age of 30. Community participation can be a supportive tool for rural primary health care services in such screening programmes.

AIMS: The current study records the prevalence of hypertension among all the inhabitants in a rural area in Greece, risk factors associated with it, and the level of knowledge of study population regarding blood pressure.

MATERIAL AND METHOD: Ten community volunteers were trained by a General Practitioner to measure blood pressure, complete data sheets, gain admittance to houses, and make appropriate recommendations for medical consultation. A door-to-door screening programme for hypertension was conducted in a period of three weeks.

RESULTS: Two hundred and fifty five people out of 313 of the total population were questioned (response rate 81.4%), 54.7% were women. Mean age was 50.94 years (SD 24.29). Twenty nine persons were under 30 years old and excluded from the data analysis. Hypertension prevalence was found at 63%. A statistically significant correlation between mean blood pressure and age (r=0.320, p<0.01), BMI (r=0.316, p<0.001) and daily salt intake (p<0.05) was observed. A considerable amount of the hypertensive patients (49.6%) was not able to achieve target blood pressure despite their receiving antihypertensive treatment. The study population was found adequately informed on what is considered to be "normal" values of systolic and diastolic blood pressure.

CONCLUSIONS: This door-to-door study would not be possible to achieve without the participation of the community. Additionally to possible better management of hypertension this study has contributed to community involvement in health needs assessment.

# P05.268

# The specifics of the chronic care for the patient with diabetes in Romania

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The chronic care model, promoted by WHO, has been implemented in various forms in the USA and Europe. Each time the model was adapted to the situation in each country, in order to include various models of public health system and different models of implementation of the medical services.

The particular implementations of the chronic care model framework are different but they share certain essential features such as continuous relation between the patient and his doctor, adequacy of the therapy to the uniqueness of the patient.

This paper aims to determine to what extent the chronic care in Romania (in the particular case of the patients with diabetes) overlaps the WHO chronic care model.

The study consisted in 5 focus groups and 25 interviews with the main participants in the diabetes care: patients. diabetes specialists, family medicine, church and National Health Care System representatives.

We used the opinions from lasi County, and findings are adequate for eastern region of Romania, and representative for the rest of the country.

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#### What do adolescents think about photoprotection?

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**OBJECTIVE:** To determine the knowledge, attitude and behaviour concerning the photoprotection of adolescents in our healthcare area.

**MATERIAL AND METHODS** Study type: transversal descriptive through an auto-questionnaire, designed and validated in the scholar population of the municipality.

Study population: sample of students (n=268) of the second year of Bachiller (16-21 years old), from a total of 603 secondary school students of the municipality.

Method: randomized cluster (classes) sampling, based on a confidence level of S=95% and P=5%, during the months of September-October of the academic year 2010-2011.

Independent variables: age, sex and type of auto-evaluated skin.

Dependent variables: knowledge, attitudes and behaviours

towards the sun. Both univariate and bivariate (using  $\chi 2$ ) statistical descriptive analysis were executed.

**RESULTS:** The average age was 17.16 (CI95%=17.06-17.26), 54.1% women, phototype III was the most frequent (45%). A 78% suffered from some solar burn during last summer. A 92,5% did not receive any information about photoprotection, and when provided, it came mainly from parents and to a lesser extent, teachers and physicians.

The risky behaviour towards the sun was a sun exposure of more than an hour (>50%), especially between 12am and 4pm (75%). Although 90% agreed that it is worth applying sunblock, only 41% affirmed to use it, especially the girls (p<0.0001). They use normally sunglasses (41%) or a hat/cup (<8%). Half of them believe that being tanned is a good thing, and particularly the girls wish to be tanned (p<0.0001). They are knowledgeable when it comes to skin cancer and skin ageing. They understand that it is necessary to protect themselves from the sun to avoid its harmful effects (>90%) but a 68,5% disagree on using sunscreen during PE classes and a 65,2% do not believe that the healthy photoprotection behaviour should be tackled in their educational establishments with priority.

**CONCLUSIONS** Education on photoprotection in educational establishments should try to change the attitudes and behaviours rather than increase their knowledge.

Physical education teachers are the key component to promote the use of sunscreen while engaging in outdoor sports.

It should be required to construct specific programs about adolescent photoprotection in their educational establishments.

#### P05.270

Attention to travellers with a chronic disease. Do we apply preventive medicine in primary care?

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The number of chronic patients who travel grows day by day. Due to the important role of preventive medicine in primary care we think it is in this area, where the risks should be evaluated and where advice and necessary preventive guidelines for their trip should be given.

Objective:

To evaluate if primary care physicians ask chronic patients if they travel and what kind of preventive care measures and advice they give.

Material and methods:

A multi-center transversal descriptive study was performed. An autocompleted survey was carried out on 26 primary care physicians of 3 different health centers in December 2011. Results:

76,92% of those polled, don't ask their patients if they travel 57,69% don't ask about their travel destination

73,07% don't ask about the duration of the trip

69,23% don't advise on medication and the time difference

19,23% don't give basic advice on preventive health measures . From those who do give general advice: 69,23% do it on water and food hygiene , 11,53% on sun protection and prevention of insect bites and 7,69% on diabetic patients to adjust their diet while travelling.

 $38,\,46\%$  don't advise about first aid kits . From those who do it ,  $61,\!53\%$  advise on carrying acetominophen tablets,  $30,\!76\%$  on including Non-steroidal Anti-inflammatory Drugs (NAIDs) and Loperamide ,  $26,\!92\%$  on antibiotics as Amoxicillin - Cavulanate and Ciprofloxacin ,  $19,\!23\%$  on wound dressing material and  $15,\!38\%$  on insect repellents, anti-histamine drugs , topic corticosteroids and the patients usual medication.

Conclusions:

34,61% of physicians refused to take part in the study.

80,77% give general advice to travellers , mainly on water and food hygiene , but only (11,53%) on sun protection and prevention from insect bites.

61,54% advise on first aid kit but only 15,38% pay special attention to the usual medication of chronic patients.

As a final conclusion, we believe that the importance of preventive health measures is underestimated and that more preventive measures could be taken by primary care physicians on chronic patients who want to travel.

# P05.271

#### When breasts weigh in Spine

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Introduction: The osteoarticular pathology is a major reason for consultation in the Primary Health Care.

Of varied etiology, the cervical and low-back pain is presented as a challenge for the GP.

Breast hypertrophy, by altering the center of gravity of the spine, it appears, in some cases as a cause of osteoarticular complaints (pain and

postural changes). When physical and pharmacological treatments don't results, breast reduction surgery can be a solution.

Objectives: The objective of this study is to evaluate the impact of reduction mammoplasty in osteoarticular signs or symptoms, and see if this varies with the age group (above or below 40 years-old) or mass removed (above or below 1500g).

Methodology: Retrospective analysis of patients' symptoms before and after surgery, by applying a questionnaire. Literature search in the Pubmed database.

Results: Of the 70 women invited, 20 (28.6%) responded. The main preoperative complaint was cervical-brachial pain (95%).

There was a statistically significant improvement of the cervicobrachial (p = 0.000), thoracic (p = 0.012), lumbar (p = 0.002) and breast pain (p = 0.011). No statistically significant differences was present in the two age groups. Improvement of cervico-brachial pain was statistically significant for those that have removed more than 1500g (p = 0.048) of breast mass.

The majority of questioned reported improvement of posture changes, the grooves in the shoulders and the submammary dermatitis.

Discussion: These results are consistent with recent studies showing that the signs and symptoms osteoarticular related to breast hypertrophy after reduction mammoplasty are reduced or eliminated in most women.

## **Benign Paroxysmal Torticollis**

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Introduction: Promoting the healthy development of children is one of the objectives of the Primary Health Care. In the consultation of Child Health, as well as screening for more common diseases, we must pay attention to complaints and concerns of parents who often alert us to something less frequente as the Benign Paroxysmal Torticollis (BPT). BPT is a self limited and benign entity characterized by recurrent episodes of head tilt sometimes accompanied by vomiting, pallor, agitation, and ataxia which subside spontaneously within a few hours or days and entirely disappear within a matter of months or years. It's may be confused with seizures. Description of the case: Female Infant starts at 15 days old cyclic episodes of sudden onset of muscle hypertonicity associated with eye retroversion and projectile vomiting, followed by apathy and drowsiness at 6 hours and separated by symptom free periods. On physical examination, attention is drawn to a dysmorphic craniofacial, ocular and postural deviation to the right. She has personal history of congenital hip dysplasia and family history of migraine (mother). The child was referred for consultation of Pediatrics and was diagnosed with BPT. Treatment with sodium valproate and metoclopramide decreases the frequency and duration of episodes. Discussion: Vomiting and headache are a common concern and a frequent reason for seeking care. The migraine is the second more common headache in children and the second chronic disease after obesity in this age group, reaching 7.4% of affected children. Diagnosis in early ages is often hampered by atypical symptoms. BPT treated timely and properly allows the normal development of children and parental reassurance. Is a diagnosis by exclusion of alternatives conditions.

#### P05.273

# Immunosuppressed rheumatologic patients - which vaccines?

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# Introduction:

There is lack of scientific evidence when prescribing specific vaccines for immunosuppressed rheumatologic patients, and a lot of doubts concerning which degree of immunosuppression should be considered as cut-off - which drugs should be considered? In what dosage? Being the family doctor sometimes confronted with this problem, and rheumatologic centers not always able to deliver an appropriate evidence based, time suitable response, we found it useful to revise the literature on this topic.

Objective:

To determine which vaccines should be administrated in immunosuppressed rheumatologic patients (≥18 years old) Methods:

Literature searched in Medline, Scielo, Cochrane Library, Dare, Bandolier, Trip Database, BMJ Best Practice, Up To Date.

Search restrained to articles published between 2007 and 2012 in English, German, Spanish, French, Portuguese, Romanian and Norwegian

MeSH Terms: vaccination, immunosuppressed Results:

33 articles were identified on Medline, 3 of which were selected - 1 review, 1 randomized controlled trial and 1 guideline. We found reviews on each vaccine in the Evidence Based Medicine websites. Most studies show that the administration of vaccines in immunosuppressed adults lacks further study.

Discussion / Conclusion:

Clearly it is hard to define evidence for the administration of each vaccine in immunosuppressed rheumatologic patients, not many studies having been done on this topic. There are approaches that should be considered, as the use of heat-inactivated or replication-defected instead of live vaccines, as well as sequential regimen of inactivated or subunit vaccine followed by a live vaccine. Also different assessment between moderately and severely

immunosuppressed patients should be considered. Further studies are lacking to bring better scientific evidence to our practice.

### P05.274

#### Falls Prevention in the Elderly

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Introduction: Falls are a major cause of injury affecting health, autonomy and independence. The elderly are more vulnerable because of their fragility and falls can reduce the duration and quality of life. The proportion of elderly is increasing, which will have an immediate effect on the impact of injuries in this age group and represent important expenses on health. Evidence-based medicine shows that it is possible to reduce injuries in the Elderly through cost-effective preventive measures. The purpose of this paper is to present strategies for the prevention of injuries resulting from falls in the elderly and alert to the role of primary health care (PHC).

Methodology: Review based on classical literature in textbooks, review articles and guidelines published in scientific databases, in English and Portuguese, using the MeSH terms "Falls Prevention" and "Elderly".

Results: Risk factors for falls can be divided into individual and environmental and should be periodically evaluated by health professionals through the use of validated scales such as the Modified Falls Efficacy Scale. The prevention of falls in the elderly involves a multidisciplinary and multifactorial intervention involving the elderly, caregivers, health professionals, community and politicians. The PHC has a key role in the prevention of falls by several measures: promotion of exercise programs and strengthening of balance, prevention and treatment of osteoporosis, evaluation of environmental risks at home, Health Education Sessions, information delivery about risks and preventive measures, preparation of Protocols for Falls Prevention, among others.

Discussion: The aging population, and consequently the increase in falls and their complications, has amplified the socio-economic implications and the need for intervention. The PHC has a key role in identifying risk factors and risk assessment and on the implementation of falls prevention strategies.

# P05.275

Active collection system for the 1 and 2 dose of measles mumps rubella vaccine in the Valecian Community

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# Background

Nominal records of vaccines as Vaccine Information System (SIV) of Valencian Community (VC) are useful to perform actions at certain stages of vaccine uptake.

The existence of automated tools that allow health centers to generate letters or phone calls from children who should be vaccinated and there are no evidence of this, improved vaccination coverage and minimize the presence of pockets of susceptibles to a preventable disease that re-emerging as measles.

**Aim:** To determine the use and performance of the tool "letters reuptake" of SIV in VC for the 1 st and 2 nd dose of MMR vaccine (15 months and 5-6 years).

**Methods:** A descriptive analysis from the use of the active collection system by the primary care centers in the last year in VC by letters and / or phone calls has been done.

The number of warnings issued for 1 st dose and dose 2, and the origin of children to recapture (Spanish / not Spanish parents) has also been analyzed.

**Results:** 58.6% have been advised for the 1 st dose and 41.4% for the 2 nd dose. Of notices issued for the 1 st dose, 76.1% was advised by letter (74.2% for the 2 nd dose) 41.8% of the children

advised for the 1 st dose are children of Spanish parents (38.9%. for the 2 nd dose). 28.1% of the people notified by letter of the 1 st dose were vaccinated against 40.5% of the people notified by telephone. The yield of 1 notice to the 1 st dose (15 months) was 49.9% (46.9 and 60.8 in the letters on the phone) while the 6 years was 52.1% (46.1 in and 77.8 letters in the phone).

**Conclusions:** We must use more the reuptake tool. The phone call method is more efficient tan letters for the vaccine uptake. The vaccination rate after 1 notice is greater than the second notice. The system also improves the quality of the vaccine acts recorded at the SIV.

#### P05.276

# The effects of different feeding patterns on growth velocity in infancy

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Aim: In this study, we aimed to compare growth velocities of exclusively breast-fed infants with those of partially breast-fed and formula fed infants. We also intended to compare the results of our study with those of WHO Multinational Study of Breast-feeding and Lactational Amenorrhea that was conducted at 7 sites from April 1989 to December 1992.

Material and Methods: We recruited 180 consecutive healthy term newborns that were born within a month at Sisli Etfal Education and Research Hospital, Istanbul, Turkey. The initial examination of these newborns was done within the first 24 hours of the birth. The control exams were carried out at 3rd and 6th months after birth. Information about their feeding patterns and the sociodemographic features of their families was obtained from their parents by means of a questionnaire. The statistical analyses were done by ANOVA test

Results: From birth to 3rd months, infants of mothers from high socioeconomic status grew 171.07 grams more in weight than infants of mothers from lower socioeconomic status. Infants of highly educated mothers grew 320 grams more in weight and 1.17 cm more in height than infants of uneducated mothers. These differences seemed to be less prominent from 3rd to 6th months. From birth to 3rd months, formula fed babies grew only 100.01 grams more in weight and only 0.41cm more in height compared to exclusively breastfed infants. These differences dropped more after 3rd months and infants of exclusively breastfed infants almost had the same weight and height velocities compared to formula fed infants. Infants of partially breastfed infants that were started complementary foods earlier showed a deficit of 270.85 grams in weight velocity compared to exclusively breastfed infants for the first 6 months of life. None of these findings were statistically significant.

Conclusions: Our results contradicted with the results of WHO report which states that breastfed infants grow more rapidly than formula fed infants in the first 2-3 months of life and less rapidly from 3 to 12 months. This may be the result of the more advanced technology used to produce milk formulas in twenty-first century.

#### P05.277

# Dyspepsia and its effects on quality of life in young adults

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This study was performed for measuring Quality of Life (QoL) in young adults with dyspeptic complaints, who referred to the Students Healthcare Center of the Baskent University in Ankara/Turkey. Therefore a total of 104 young dyspeptic students and employees (≥18 years) were enrolled between December

2010 and May 2011 to this cross-sectional study. Young adults with dyspeptic symptoms, referring to the Students Healthcare Center were examined by a physician. QoL was measured using SODA (Severity of Dyspepsia Assessment, a disease specific outcome measure) and SF-36 (Short Form-36, a general and widely used Quality of Life assessment). An empirical Proton Pump Inhibitor (PPI) therapy was given to the young patients and after 4- 6 weeks the SODA and SF-36 scales were applied again for the measurement of QoL. Of the 104 patients involved to our study, 58.7% were women, the mean age was 22.17 ±3.3 and the dominant complaints were epigastric pain (47.1%) and heartburn (28.8%). An average decrease of -7.72±11.25 in the SODA Pain Intensity score and of -2.34±5.53 in the SODA Non-Pain symptom score was determined; whereas an increase of mean +4.25±4.40 was seen in the SODA Satisfaction scale score. At the SF- 36 scales; the Physical Composite Score (PCS) increased from 41.51  $\pm$  7.10 up to 45.30  $\pm$  5.30 and the Mental Composite Score (MCS) increased from 43.01  $\pm$  5.15 up to 46.63  $\pm$  7.71 in average. An increase of the scores in all domains of SF- 36, in the SODA Satisfaction scale and a decrease of the scores in SODA Pain and Non Pain Symptom scales were confirmed for all patients. According to the results of our trial, we found that dyspepsia causes an impairment of QoL in young patients. Furthermore young patients benefit from an empirical therapy with PPI's leading to an improvement of their QoL.

#### P05.278

# The experience of the care center in manlleu after its first year of autonomous management

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#### GOALS

In our center, this project begins in January 2010 with a new concept of managing in primary assistance within the public health system. The goal is to create a healthcare project which is closer to the team, and allows an empowering of the managing team, which combines management and healthcare.

# METHOD

At the beginning, a team meeting is called to decide on the inclusion in the project. Later, the managers attend training sessions to improve in work, compensation, human resources and control specific applications.

An updated strategic plan of the team is developed with a revision of the Functional Plan and the analysis of weaknesses, threats, strengths and opportunities.

The 3 teams of the area meet periodically, in meetings called Ágora, with the purpose of analyzing the evolution of the update; internal meetings are also periodically called.

#### RESULTS

All these changes demand a deeper involvement of all the professionals in the tasks of managing the centers, being self-sufficient, achieving a balance between familiar and personal time by organizing and checking all the working shifts. The opportunity was also taken to check the professional roles:

Nurses: total involvement in the administration of extensive demands, chronicity, home assistance and community assistance. Administrative: involvement in the administration of the demand, invoicing to third parties.

At the patient's level: greater involvement in one's own health.

Greater financial efficiency and greater restraint of pharmaceutical expenses

Being able to establish the goals to be pursued within the variable compensation.

Establishment of a work group to achieve the quality accreditation. Greater commitment of the leaders.

## CONCLUSIONS

A change of mentality is needed to transform management into leadership.

The unity of the team and the common goals are the foundation of the system.

We need to have in mind that the present crisis, which has also affected this project, has decreased its potential. That's why we will need to find different motivation mechanisms.

Challenges for the future: we need to be able to establish the composition of the teams, to achieve a wider autonomy in managing the human resources, and to limit the territorial job vacancies.

#### P05.279

#### Establishment of the quality plan in primary care center

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#### INTRODUCTION

Quality is a set of features or attributes in the services which, when positive, show superiority in their kind. That is why, in our care center, we have decided to establish effectively and efficiently our quality plan. We understand quality as the excellence in the organizations' life style, and we believe the excellence is achieved by working for the results and the clients, having clear and constant goals, managing by processes, developing and involvement of the staff, learning, innovating and improving constantly, developing alliances and social responsibility. We work as a team with these principles in mind to achieve our goal: establish the quality plan.

#### **GOALS**

- -To establish the quality plan by means of constant improvement in the identification and selection of the aspects to be improved.
- -To deeply understand the quality concept in the health and managing spheres.
- -To apply the quality plan in all the previously established standards.
- -To inform all the primary care staff about the quality plan. METHODOLOGY

In our primary care center, we have created a multidisciplinary work team in which all the various professionals are present and share a common goal: to create and to establish the quality plan. We have called monthly meetings to share with the team the parts developed individually as well as to set work objectives. RESULTS

During the evaluation of the results of our activities, we localized specific areas which need improvement, either because they are clearly difficult or because we saw an opportunity to improve them. We have also perceived an enhancement in the human relations between established leaders and the rest of the members of the

quality team. CONCLUSIONS:

We have to keep working to achieve excellence, which means that the aim of the improvement projects has to be to optimize the results.

The involvement of the managers is essential to establish a quality plan; it is vital that the managers really commit to be able to boost the changes needed to improve.

#### P05 280

# Knowing the family - first step to preventing misdiagnosis

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Background: One of the family physician's main tools is the indepth knowledge of his patients and their familial surroundings. This is essential when diagnosing and establishing an action plan, and helps minimize misjudgment and misdiagnosis, especially when rare pathology is the case.

Case Description: 22-day old male child, Caucasian, gipsy ethnicity, born by eutocic delivery after an uneventful full term pregnancy followed in a Health Care Centre (HCC). Born with 2670g and Apgar score of 9/10/10.

He was brought to the HCC for his first medical appointment and presented with a height ≤5th percentile, weight and head circumference between the 10th and 25th percentiles. Physical examination showed mild jaundice, diaper rash and a circular

lesion, ulcerated, with clean edges and no inflammatory signs, located on the scalp, over the sagittal suture. The mother reported it was present at birth. The child's health report book contained little information from the maternity, not mentioning the lesion.

Family assessment revealed a nuclear family (parents and three children), in the stage IV of the Duvall family life cycle, low class according to the adapted Graffar Scale, with moderate dysfunction, with no risk and no predisposition to diseases according to the Holmes and Rahe scale.

The possibility of child abuse was considered due to the resemblance with a burning lesion, the apparent discrepancy in information when asked for details and the delay in seeking care. However, considering the family's background and the fact that the development of the couple's older children never presented anything suspicious, a conservative approach was taken with weekly monitoring. The presence of the father at the next appointment was requested.

The child complied with the follow-up visit plan, presented with normal development and adequate healing of the lesion. The diagnosis of "aplasia cutis congenita" was made and a pediatric consultation was requested to rule out other malformations.

Discussion: The in-depth knowledge of patients was crucial in this case, avoiding the signaling of child abuse that, not being confirmed would have undermined the doctor-patient relationship. Communication between primary and secondary care must be made a priority to avoid confusion, improving care.

#### P05.281

# Psychiatric medications as a risk factor for Obesity

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Background: In general practice there is a large number of patients treated with psychiatric drugs. Considering that some of these therapies contribute to weight gain and obesity, it is important to understand the mechanisms that mediate weight gain in these patients, to distinguish which drugs cause weight changes, and to establish strategies for the treatment of obesity in this context.

Methods: Survey of published literature up to December 2010, through databases of evidence-based medicine (UpToDate, National Guideline Clearinghouse, NHS Evidence, National Library of Guidelines, Cochrane, DARE, Bandolier, PubMed and Index RMP), using the keywords "mental disorder, schizophrenia, bipolar disorder, depression, antipsychotic agents, antidepressive agents, Mood Stabilizers, obesity, abdominal; overweight".

Results: 43 articles were selected. The mechanisms responsible for weight changes (monoamines, histamine, cholinergic) were described; the main psychiatric drugs responsible for weight changes and those who had no influence in it, were identified. We concluded that the antidepressants fluoxetine and bupropion were associated with weight loss while paroxetine, tricyclic antidepressants (TADs), monoamine oxidase inhibitors (MAOIs) and mirtazapine did the opposite; venlafaxine and duloxetine do not interfere with weight. Considering mood stabilizers, topiramate associated with weight loss, lithium, valproate and carbamazepine increase weight and lamotrigine is not associated with weight changes. Regarding antipsychotics we saw that the classics (chlorpromazine, clozapine) are associated with a more pronounced weight gain. Atypical antipsychotics didn't interfere as much (aripiprazole and ziprasidone showed the least weight change).

Measures to address obesity in psychiatric patients focus on lifestyle interventions (dietary counseling and promotion of physical activity), as well as psychiatric drugs adjustment. Prescription of weight loss drugs in these patients is controversial.

Discussion: Patient weight should be considered when prescribing psychiatric drugs. The initial evaluation and follow-up of these patients (determination of body mass index and waist circumference) should be emphasized, since weight gain is a major factor regarding the onset of metabolic alterations of glucose, lipids and blood pressure.

# Prevalence and Impact of Dysmenorrhea among Omani High School Students

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Objectives: The objectives of this study were to determine the prevalence of dysmenorrhea, its impact, and the treatment used in Omani high schoolgirls.

Methods: A multi-centric cross sectional survey carried out in May 2010 on girls in high school from two public schools in Muscat Region. Data was collected from 404 students through a self-administered questionnaire. Information was obtained on demographics, prevalence of dysmenorrhea, severity, its impact, and the treatment used.

Results: Overall, 94% (n=380) of the participants had dysmenorrhea. It was mild in 27% (n=104), moderate in 41% (n=155), and severe in 32% (n=121). Dysmenorrhea was the cause of limited sports activities in 81%, decreased class concentration in 75%, restricted homework in 59%, school absenteeism in 45%, limited social activities in 25%, and decreased academic performance in 8% of the affected students. Only 3% (n= 10) had consulted a physician, 21% (n=80) selfmedicated and 55% (n=210) did nothing about their pain. The most common drugs used were paracetamol (n= 60, 16%), ibuprofen (n=29, 8%) and mefenemic acid (n=12, 3%). There was no significant statistically correlation between dysmenorrhea, demographics and menstrual characteristics Conclusion:

Dysmenorrhea is a prevalent and yet undertreated menstrual disorder among Omani adolescent schoolgirls. The pain that these girls suffer can be severe and disabling. Doctors should recognise this and be prepared to talk more freely with schoolgirls about it. In addition, there is a need for education regarding dysmenorrhea and treatment options available to minimize the impact of dysmenorrhea on school, sports, social and daily activities.

### P05.283

# Impact of nursing home visit to immobilized patients in primary care

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<u>Background:</u> The elderly population constitutes the segment of population who more grows as consequence of increase of life expectancy and decrease of birthrate in developed countries. This segment of population presents chronic and disabling diseases that confine this type of patients at home demanding attention to the Primary Care Team. So "home care" turns into one of the basic functions of the equipment.

<u>Objetive:</u> To analyze the role that the nurse plays in the care to immobilized patients in primary care.

Methods: Design: Cross-sectional descriptive study. Setting:Urban Primary Health Care Center. Sample: Patients enclosed in a home care program, attended by the same medical team (physician and nurse) during one year. Variables assessed: age, sex, number of programmed visits made by nursing and doctor, number of demand domiciliary visits and number of chronic disease. Information was obtained from the computerized clinical records and registry

Results: 31 patients were studied. Mean age= 84.7 years (range 76-95). Sex = 64.5% women. Conditions that provoke immobilization were: cardiovascular diseases (32,3%); followed closely by musculoskeletal (29 %); and neurological(29 %). Other reasons: neoplasias (6,5 %) and sensorial alterations (3,2 %). It is necessary to emphasize that between the patients with cardiovascular pathology 15,6 % needs anticoagulative control and between the neurological patients 21,9 % has dementia. All of them suffered an average of 3,2 chronic diseases.

The nurse made an average of 1,2 home visits monthly for every patient. In case of the doctor the average was 0,5 monthly visits for patient. The average of request for home medical care on demand was low= 0,4 per patient in a year.

# Conclusions:

The profile of the patient who is immobilized at home is that of a woman of advanced age who suffers multiple pathologies

Diseases that provoke the immobility are diverse but it is necessary to emphasize for his importance the dementia.

The periodicity with that the nurse realizes the domiciliary attention is the double that the doctor (the nurse of monthly form and the doctor every 2 months).

The paper of the nurse in the programmed attention to the immobilized patient is key in primary care.

#### P05.284

Effects of angionensin-converting enzyme in treatment of hypertension in patients with chronic renal failure

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Ajm and purpose: Hypertension is one of the most freq vent causes of chronic renal failure. Many clinical studies has shown that blockade of angiotensin can pospone the end stage of renal failure and also prevent chronic renal disease in risk group. The ame was to assess the frequency of the occurrence of renal failure markers in two groups of patients involved in risearch study.

Design and methods: Prospetcive research anticipated 158 patients with hypertension and chronic renal failure (CRF), 60 male and 98 female, age 61,6  $\pm$  9,9 years over a 12 month period. The research focused on hypertensive patients not treated with angiotensin - converting enzyme (ACE) - first group, and second group-hypertensive patients treated with ACE. As only 16 patients involved in research study, was not treated with ACE, the second group of 16 patients was randomly selected from the remaining patients in volved in study. There was no difference in age, sex, arterial pressures values and duration of hypertension and chronic renal insuff iciency between twogroups. The laboratory parameters were: serum and urin creatinine concentration, glomerular filtration rate (GFR-MDRD), body mass index (BMI) and blood pressure, measured at check ups.

Results: Mean systolic and diastolic blood pressure in both groups were 130±15 mm Hg and 75±12 mm Hg, BMI 27,9 ±4,2. Mean value of serum creatinine level in the group of patients not treated with ACE Was 81±2 mmol/l and that was significantly higher than in patients treated with ACE whose serum creatitinine level was 74±6 mmol/l. In patients not reated with ACE FFR calsulated with MDRD formula was 73±16 ml/min/1,73 m². In group of patients treated with ACE, GFR was 84±10 ml/min/1,73 m² (p<0.05) (mean values are ezpressed as mean ±SD). We compared two groups od 16 patients: The group not treated with ACE had significantly higher serum creatinine level and lower GFR in comparison with group treated with ACE.

Conslusion: Use of ACE in patients with hypertension and CRF had better control GFR than patients treated with other antihypertensive drugs.

#### P05.285

#### Chronic renal failure in patients with hypertension

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Ajms and purpse: Hypertension is one of the most comnon disease in sebian population. Chronic renal failure (CRF) is characterised by metabolic acidosis and other abnormalities in plasma composition, and also microalbuminuria. Theaim was distribution of patients with hypertension according to values of ceatinine clearance (Ccr) and division into groups according to renal insufficiency.

Design and methods: Epidemilogical research included 158 patients, aged 61,6±9,9, 60 males and 98 females over a 12 months period. Duration of hypertension was established in all patients, laboratory parameters were: serum and urine creatinine concentration, qualitative urine test, and ceratinine clearance was calculated. Blood pressure measured at checkups, paients body

mass index (BMI) was measured and previous use of angiotensinconverting enzyme (ACE) was recorded.

Results: In total of 158 patients average BMI was 27,9±4,2. In all patients glomerular filtration rate (GFR) was calculate with MDRD formula. According to GFR all patients were divided into 3 stages. Ccr above 90 ml/min (stage I) had only 10% of patients; systolic and diastolic blood pressure (BP) were 136±14 and 87±9. Ccr between 60-89 ml/min had 67% of patients (stage II), systolic BP 141±14 and diastolic BP 86±7. 23% of patients had Ccr between 30-59 ml/min (stage III), systolic BP 142±11 and diastolic BP 87±6. Duration of hypertension was sygnifficantly longer in stage II and III as compared to stage I (p<0.005). Patients without CRF (stage I) had better regulation of hypertension.

Conclusion: Reduction of BP is crucial in prevention CRF. The researsh has shown that a large number of hypertensive patients are at risk of CRF.

#### P05.286

#### Workshop on breast feeding in primary health care

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#### Aims:--

- to promote maternal nursing in out health center
- .-to know if the number of nursing mothers and time of lactation grows up after talks ,advices and groups organization
- --to improve the quality of breast feeding

Description: there was an educational talk to a group of pregnant women between 30-32 weeks of pregnancy that attended the course on childbirth preparation given by the midwife of our health center.

They were informed on the importance of breast feeding , advantages , benefits, physiology and techniques along with the problems that could come up at the beginning of lactation and while keeping it, through a workshop with videos and practical examples . At the same meeting groups of lactating mothers were organized so they could share experiences and problems with other ones that already were nursing their babies

Conclusions: Community activities exert a favouring effect on breast feeding mothers, increasing the lactation time and delaying the introduction of supplemental food.

- ---Practical activities at the health center are well accepted by pregnant women
- ---They improve the communication between health workers and pregnant women

## P05.287 COPD Screening in Primary Health Care

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Introduction: Chronic Obstructive Pulmonary Disease (COPD) is a major cause of chronic morbidity, decrease in quality of life and increased mortality. It is responsible for an increased demand for medical care and health costs. Therefore, it is essencial that primary prevention, screening and early detection and diagnosis, are carried out in primary health care (PHC).

During the commemorations of the World COPD day, pulmonary functions test using a spirometer were performed in a Health Care Centre (HCC), in order to identify changes in respiratory function as well their relation to gender, age, body mass index (BMI) and tobacco consumption.

Methods: Patients of both sexes who fulfilled the criteria defined in the Global Initiative for Chronic Obstructive Lung Disease (GOLD) Report were encouraged to participate in the screening. An FDA approved spirometer was used, operated by a technician with adequate training. Appropriate statistical tests were applied.

Results: 56 respiratory function tests were performed; 6 exams were null (patients were unable to complete de test), 15 tests presented altered results (6 of them revealed an obstructive pattern; 5 a restrictive pattern, a mixed pattern present in 2 of the exams and the other 2 were nonspecific). We found a statistically significant relationship between changes in spirometry and increasing age (p = 0.002). 83.3% of patients with an obstructive respiratory pattern are smokers or former smokers, this value being significantly higher both when compared to all other users that were examined (p = 0.01) and with the group of users with changes on spirometry (p = 0.011).

Discussion: The screening of respiratory diseases in PHC using spirometry is fast, noninvasive, low cost and allows screening of large numbers of patients in a cost-effective way. The timely diagnosis of chronic respiratory disease significantly influences the course of the disease and the patient's quality of life, thus proving that promotion of these initiatives is of the utmost importance.

The findings in this study prove there is an objective relation between obstructive changes in respiratory function and tobacco consumption, thus reinforcing the importance of carrying out activities to promote smoking cessation.

#### P05.288

# Does web based counselling help patients in precontemlation stage?

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Smoking cigarette is a common but preventable risk factor for many mortal diseases.

WONCA has designated core competiencies that a family physician should be expert in. Smoking cigarette is quite common in our region. A family Physician "has a specific responsibility for the health of the community. The discipline recognises that it has a responsibility both to the individual patient and to the wider community in dealing with health care issues."We aimed to provide web based counselling in smoking cigarette. We have designed a web site in turkish language in order to provoke awereness in smoking individuals as well as providing information on detrimental effects of cigarette on social life and human body.

Web site consisted of an interactive forum including patterns smoking behavior and personel information. Individuals Although there are many outdoor patent clinics providing varenicline and bupropion free of charge all accross the Turkey, web based counselling is not commonly used for the awareness of those in precontemplation stage. We aimed to provoke awareness via establishing website in the era of internet.

# P05.289

Variability in the management of subclinical hypothyroidism in primary care.

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In daily clinical practice is common in primary care patients with subclinical hypothyroidism. That is, patients with concentrations of thyrotropin (TSH) outside the reference values but concentrations of free thyroxine and triiodothyronine normal.

Patients with serum thyroid-stimulation hormone (TSH) outside the reference range and free thyroxine Levels of free triiodothyronine and Within the reference range are common in clinical Practise on Primary Care.

We performed a retrospective observational study with 177 patients Guava Health Centre (Madrid) which describes the epidemiology and clinical subclinical hipotirodismo, we review the most appropriate approach (beginning replacement therapy, TSH levels, presence of circulating autoantibodies , imaging tests and consultations) and evaluate the risks and benefits of treatment according to clinical practice guidelines available.

In short, there is a clear variability in the treatment of subclinical hypothyroidism in primary care as they are limited available evidence to make a diagnosis and follow-up

#### P05.290

# Audit of Benzodiazepine Prescribing in South Lee Mental Health Unit , Cork University Hospital

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In Ireland, health care professionals have come under increasingly heavy scrutiny for use of benzodiazepines in practice. In 2002 it was estimated that 11.6% of medical card users received a regular monthly prescription for benzodiazepine. Their use was implicated in the death of 649 patients by poisoning from 1998 to 2007.

The aim of our study was to audit the practice concerning benzodiazepine prescribing in an acute psychiatric hospital setting and determine whether prescribing rates on discharge were similar to prescribing rates preadmission from the community. We retrospectively reviewed the data from 60 consecutively admitted patients to SLMHU. The information was extracted from both medical notes and prescription charts.

The study sample consisted of 60 patients, 58% (n=35) male and 42 % (n=25) female with 63 % (n=38) voluntary admissions and 37 % (n=22) involuntary.

We found that preadmission, there was a baseline prevalence of benzodiazepine use of 33% (n= 20) of our patient cohort. On admission to SLMHU, the Benzodiazepine prescribing rate of admitting doctors was 70 %( n=42). A clinical indication for their use was given on admission in 21 % (n=9) of cases. An instruction on discontinuation, at any point over the duration of admission, was given in 28 %( n=12) of patients. At discharge 56 %( n=34) of patients were prescribed a regular benzodiazepine. With regards to PRN prescribing, 55 %( n=33) of the patient cohort was prescribed a Benzodiazepine. An indication for its use was given in 55% (n=17).

The results of the study indicate a high level of benzodiazepine prescribing amongst admissions to an acute Psychiatric Unit by NCHD's. There was limited instruction on discontinuation of Benzodiazepines from said institution. Therefore, there was an increase in the number of patients re-entering the community with prescriptions of Benzodiazepines. It is clear that the on going problem of Benzodiazepine prescribing is spread throughout other disciplines, and this audit highlights a source of over prescribing outside of General Practice, which makes the adherence to guidelines much more complex.

### P05.291

# A study of depression in the postpartum six-month period

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**OBJECTIVE:** To evaluate the risk factors affecting PPD and analyze to evaluate the PPD's effects on infant nutrition and growth.

**DESIGN:** A 6-month repeated measure longitudinal evaluation mother-infant pairs.

**SETTING:** A Maternity and Children Hospital in Karaman, Turkey. **PARTICIPANTS:** 157 mother-infant pairs.

**METHODS:** Maternal introduction form, EPDS, Baby Assessment and LATCH Charting System were used on 157 mother-infant in postpartum first 48 hours, 1st, 3rd and 6th months.

RESULTS: According to this study, from 1st month to 6th month after delivery %35.0 women were found to have PPD symptomatology. 21.7% of women in the first 48 hours after delivery, 17.2%, 15.3% and 22.3% of women had PPD symptomatology at the end of the first, third and sixth month, pespectively. Considering the onset of PPD, 34 (50.0%), 15

(22,0%), 9 (13.2%), and 10 (14.7%) new cases of the total 68 cases of depression were observed in the interviews on the first two days and in the first-, third-, and sixth-month, respectively. The mean scores of the EPDS were higher in the first two days measurement and in the sixth-month measurement mesaurements in the first and third months. There were significant differences in the EPDS scores over the 6 months of observation (Friedman=42.639, p=.0001). PPD symptomatology risk had increased for the mother who have negative relationship to their spouse approximately 3.2 times higher than those who have positive relationships to their spouse [OR, %95 CI; 3.255 (1.039, 10.196)]. LATCH score was 10 were found to have more frequency PPD symptomatology at first month after delivery than whose LATCH score was ≤9 (p=0,049). It was determined that baby's nutrition features weren't significant effect on PPD symptomatology

**CONCLUSION:** According to the research's results, it should't be forgotten that patients expressing depression story or diagnosed depression in the previous and who have PPD symptomatology at first 48 hours, have major risk for PPD symtomatology and it was estimated to be given that women who have PPD symtomatology immediately should be perform necessary support, treatment and necessary guidance by cooperation of family physicians and

#### P05.292

### What Do Turkish People Do To Cope With Headache?

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Background: Headache is an important health problem which is usually difficult to cope with not only for patients but also for physicians. Patients can find relief in medications, alternative treatments, some traditional methods and by learning ways to relax. In this study we aimed to investigate how Turkish people cope with headache including all these methods.

Methods: A questionnaire consisting of questions about sociodemographic features and a main open-ended question "What do they do if they have headache?" was conducted to the study group of 152 subjects.

Results: It was reported that 104 (68.4%) subjects prefered to take medicine, preferably NSAI drugs, for their headaches primarily. To rest (n=84, 55.3%) and stay in a silent place (n=40, 26.3%) were the most popular methods. On the other hand the most common traditional methods were to massage head and shoulders (n=57, 37.5%), eating sweet things (18, 11.8%), and apply cold water to the head (15, 9.9%). Age, gender, educational level and marrital status were significant factors in CAM and traditional method use, to deal with headache.

Conclusion: As a result, we found that Turkish people prefer to take NSAI drugs primarily when they have headache. In general, they also prefer to use CAM and traditional methods.

## P05.293

Evaluation of risk factors for Chronic Kidney Disease in adults ascribed to a UABSF of a Goiânia's microregion.

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University Federal of Goias, GOIANIA, Brazil.

Introduction and objective: Chronic Kidney Disease (CKD) and other chronic degenerative diseases are important public health challenges. Thus, studies seeking to determine risk groups in which interventions can be performed are very important. Methodology: A cross-sectional population-based study with adults aged over 18 years served by the Family Health Strategy in the Eastern Region of Goiânia, Central Brazil. Through the evaluation of primary data and physical/laboratory assessment, it was obtained the following data: personal or family history of obesity,

diabetes mellitus and hypertension; weight (kg), height (cm), waist circumference (cm), blood pressure (mmHg), laboratory tests (creatinine, microalbuminuria) and determination of creatinine clearance. Results: 177 individuals were evaluated, 120 of which belonged to the study group. Among them, it was detected 31 individuals with hypertension (25,8%), 5 with diabetes mellitus (4,1%), 21 with CKD familiar history (17,5%) and 71 with overweight or obesity (59,2%). Conclusion: Overweight is the most prevalent risk factor, however detecting the problems is the baseline. The intervention by the family health teams in all the risk factors detected in this population aiming to prevent this pathology decreasing its economic and social implications.

#### P05.294

Family File Management And Utilization By Family Physicians In Alexandria, Egypt

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Keywords: Family File, Holistic Accurate, and accessible health care data are vital in efficient family practice. The family file is composed of a family's primary health care data in two major categories: @administrative and @clinical data specific to each family member's present and continuing care, including records of doctor-patient encounters and referrals. When records are incomplete, inaccurate or untruthful and lack important information, poor quality consultations will be performed and follow-up will be improper. This study aimed to assess family file management and utilization by family physicians in the East District of Alexandria, Egypt. It was conducted in four randomly selected family medicine facilities. All family physicians were subjected to a questionnaire designed to assess: 1- Relevant features of family physicians, plus their knowledge of the role and use of family files in family practice. 2-Attitude of family physicians towards the family file and required changes or modifications 3- family file utilization in appropriate holistic, integrated PHC basic benefit package delivery, and followup. An observation checklist assessed physician performance regarding family file utilization in patient consultations plus data recording. Results revealed: a) all studied physicians had postgraduate degrees; and most had 5-10 years experience in FM/PHC (68.4%); b) most had good knowledge (87.5%), positive attitudes (81.2%) and good performance (100%) regarding importance and utilization of family files. However the total observational performance was fair for the majority of physicians (70.9%). Result details will be discussed and recommendations made

### P05.295

Using electronic medical records analysis to investigate the effectiveness of lifestyle programmes in real-world primary care is challenging: a case study in diabetes mellitus.

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Aims: The increasing prevalence of diabetes suggests a gap between real-world and controlled trial effectiveness of lifestyle interventions, but real-world investigations are rare. Electronic medical registration facilitates research on real-world effectiveness, although such investigations may require specific methodology and statistics. We investigated the effects of real-world primary care for patients with type 2 diabetes mellitus (T2DM).

Material and methods: We used medical records of patients (n=2549) with T2DM from 10 primary healthcare centres. A mixed-effects regression model for repeated measurements was used to evaluate the changes in weight and HbA1c over time.

**Results**: There was no statistically significant change in weight (+0.07kg, p=0.832) and HbA1c (+0.03%, p=0.657) during the observation period of 972 days. Most patients maintained their

physical activity level (70%) and 54 % had an insufficient activity level. The variability in the course of weight and HbA1c was due to differences between patients and not between health care providers.

**Conclusions**: Despite effective lifestyle interventions in controlled trial settings, we found that real-world primary care is only able to stabilize weight and HbA1c in patients with T2DM over time. In addition, most patients remain physically inactive. Medical registration can be used to monitor the actual effectiveness of interventions in primary care.

#### P05.296

Relationship between economical crisis and pneumococcal vaccination uptakes in Catalonian children.

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BACKGROUND: In Catalonia, the pneumococcal conjugate vaccine (PCV) is not included into rotine universal vaccinations publicly funded for infants, although many pediatricians and family phisicians recommend it. Main objective of this study was to assess the evolution of PCV uptakes among infants in the region of Tarragona, Spain, throughout 2002-2011.

METHODS: Multicenter cross-sectional study that included all children aged 6 months to 10 years-old who were attended during 1-2 December 2011, in any of the nine Primary Care Centers participating in the study (N=521). Medical records were reviewed to determine vaccination status (number of doses of PCV and date administration).

RESULTS: Of the total 521 children included in the study, 286 (54.9%) have not received PCV, 24 (4.6%) had received one dose, 53 (10.2%) had received two doses and 158 (30.3%) had received three or more doses. The proportion of children who had received at least one dose of PCV was 29.8% (95% CI: 22.0-38.7) for children borning between 2002-2005, 62.5% (95% CI: 51.0-73.0) in 2006-2007, 50.8% (95% CI: 41.7-59.8) in 2008-2009 and 44.6% (95% CI: 36.8-51.3) in 2010-2011, (p<0.001).

CONCLUSIONS: Given that PCV is not funded, vaccination uptakes were acceptable. A decrease in vaccine uptakes is observed since 2007, probably related to the beginning of the current economical crisis.

### P05.297

Comparison of two simpler predictive rules (CRB-65 vs CRB-75) for assessing severity of community-acquired pneumonia among patients over 65 years.

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**BACKGROUND:** This study compares the ability of two simpler severity rules (CRB-65 *vs* CRB-75) for the prediction of short-term mortality among patients 65 years or older with community acquired pneumonia (CAP).

# METHODS:

## **Design and Study Population:**

Population-based study including 350 patients ≥65 years with a radiographically confirmed CAP in the region of Tarragona (Spain). **Main outcome measures:** 

The CRB-65 score (confusion; respiratory rate ≥30; systolic blood pressure < 90 mmHg or diastolic ≤ 60 mmHg; age ≥65 years) and the modified CRB-75 (similar criteria but age ≥75 years) were calculated at the moment of diagnosis, and 30-day mortality was considered as main dependent variable.

# **RESULTS:**

A total of 46 deaths were observed among 350 CAP patients, which means that overall 30-day mortality rate was 13.1%. According to CRB-65, mortality was 7.7% in score 1, 22.5% in

score 2 and 50% in score 3 (none cases in score 4). Mortality also directly increased according to CRB-75, being 3.2% in score 0, 9.7% in score 1, 30.0% in score 2 and 45.5% in score 3.

The discriminative value of both CRB-65 and CRB-75 rules to classify risk of short-term mortality among our study population was acceptable, with better area under receive operating characteristic curve (ROC) for CRB-75 (ROC: 0.735; 95% CI: 0.657-0.812) than CRB-65 (ROC: 0.681; 95% CI: 0.591-0.771). CONCLUSION: Both simpler severity rules CRB-65 and CRB-75 are an acceptable tool to classify mortality risk among elderly patients with CAP. However, CRB-75 can be more useful evaluating elderly patients with CAP.

### P05.298

# Chronic respiratory disease day: general practioner's contribution in the city of Martina Franca

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<sup>1</sup>ASL TA, Martina Franca, Italy, <sup>2</sup>ASL TA, Taranto, Italy.

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Background:chronic respiratory d sease (COPD) in Puglia has a prevalence than national one reaching 5.3%. Objective:value COPD's impact on general health status relating clinical symptomatology to instrumental diagnosis and staging patients using Global Initiative for Chronic Obstructive Lung Disease line guide (GOLD). Methods: seven general practitioner (GP) have promoted a screening day for COPD in a population afferent to stands. Screening consisted in: physical examination, pressure (BP) evaluation, noninvasive respiratory examinations (spirometry, transcutaneous-oximetry), multiple answer questionnaire with (personal data, probable respiratory symptoms, possible nicotinism). Results:116 subjects were enrolled (M 53.4%; mean age 56.34 years) with a higher percentage in eighth decade of life (26.7%). Mean systolic BP=123.8, mean diastolic BP=77, mean BP=92.5. No abnormalities were found in oxyhemoglobin saturation. COPD was diagnosed in 12.1% of subjects by Tiffenau index obtained with spirometry (64.3% M, mean age 57.6 years). No relationship was found between symptoms reported in the questionnaire (whistles, breath shortness, chest pain tightness, cough, phlegm, confusion, weight loss, pretibial edema, headache, dizziness) and spirometric values. 50.9% of the population are smokers / ex, percentage rising 64.3% among COPD subjects. There was no relation between tabagism, sex, age and COPD. COPD patients had a FEV1 less than 50% of predicted one in 64.3% of cases, showing stages (III-IV) according to GOLD guideline. Conclusion:clinical symptoms are not a guide for GPs to start a instrumental diagnostic procedure, problem which assumes greater importance in patients in early-stages (I-II GOLD) who escape from correct diagnosis and therapy.

#### P05 299

# Assessment of cardiovascular risk in young adults of different ethnic groups

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### Background:

The prevention of cardiovascular disease is one of the main objectives of primary care. Various studies have found an increased incidence of cardiovascular disease in certain ethnic groups at younger ages. The classical methods to estimate cardiovascular risk are not applicable in young adults and do not include ethnic differences.

Aim:

The study aimed to estimate the prevalence of metabolic syndrome (MS) to assess the cardiovascular risk in young adults and compared according to ethnicity.

Dessign and methods:

Cross-sectional study of a random sample of population aged 19-44 years treated at a health center with a high rate of immigration. We collected demographic data, anthropometric measures, lipid profile, fasting blood glucose, blood pressure, physical activity and smoking. The MS was estimated using three criteria: Adult Treatment Panel III (ATP-III) updated in 2005, International Diabetes Federation (IDF) and the concept agreed by the major organizations that unify previous (common definition). We calculated the probability adjusted for age and sex of having SM according to ethnicity using logistic regression models.

Results:

153 people participated, 43.1% were European, Asian31.4%, Latin American20.3% and African5.2%.

According to the common definition, 25.5% (confidence interval (CI) 95%:18.3-32.7) had MS and among Asians the probability to present it was superior to Europeans (Odds Ratio:6.816; 95% CI:2.481-18.724).

Conclusions:

The prevalence of MS affects a quarter of the population studied and among Asians the probability is much higher.

The concept of metabolic syndrome may be the only appropriate measure of cardiovascular risk among young immigrant Latin or Asian

#### P05.300

# Effect of educational program 'School of hypertension' on the quality of life of patients with essential hypertension

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Aims: To study the effect of educational program of 'School of hypertension" on the quality of life in patients with essential hypertension.

Methods: Investigation included 56 patients with essential arterial hypertension (EAH) stage I-II (age - 55±2,5 years). All the patients received Enap (KRKA, Slovenia) in mean daily dose 5-10 mg. The patients were divided into 2 groups: group I included 27 patients who received Enap, group II consisted of 29 patients who attended the educational program "School of hypertonic" and took Enap. The quality of life (QL) of the patients was studied with use of questionnaire that consisted of 17 questions on physical activity (PA), emotional state (ES), energy state (E), social adaptation (SA).

Results: The results of investigation showed that during 6 months of therapy with Enap the quality of life reliably increase in parameters of PA by 30%, ES by 29,6%, ES by 27,6%, SA by 29,7%. Summary index (SI) of QL increased by 29,3% in compared to baseline indices. In the group II the parameters of QL were reliably higher compared to baseline: PA increased by 38%, ES by 34,9%, ES by 35,2%, SA by 34,7%. The improvement of these parameters was accompanied by QL SI by 36,3% (p<0,05). Difference between groups were statistically significant.

Conclusion: Thus, providing patients with EAH according to educational program "school of hypertension" additionally to use of hypotensive medications leads to improved of the QL.

#### P05.301

# The Value of Counseling in Decreasing Treatment Default Among TB Patients

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The Value of Motivational Counseling in Decreasing Treatment Default among TB Patients

In a country where tuberculosis remains to be a major health problem, education and enablers are not a guarantee that TB patients will adhere to the treatment regimen, even with the directly observed treatment short course (DOTS) advocated by the WHO. A student thesis with an interventional research design tested the impact of motivational counseling vis-a-viz TB 101 sessions and behavioral incentives . The counseling module was taught by the presentor to all clinic health workers of the experimental group, which largely dealt with processing patients' fears regarding side effects, dissecting the stigma problem, and improving their motivation to be cured as a social goal. Results showed significant statistical difference in the default rate of patients before and after the intervention. The study concluded that it is more cost-effective to include motivational counseling with both education and enablers to effect desired health behavior change.

#### P05 302

The care of chronic patients at the end of life.

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Background: Each day increases the number of people with chronic disease (cancer, advanced chronic organ failure, neurodegenerative diseases, etc.) that cause a situation of end of life. For this reason, we wanted to know what percentage of deaths in our health area are due to chronic diseases and, in turn, know where has monitored the end of life and the professionals who have attended them. Methods: We conducted a population-based retrospective study. We reviewed all the clinical records of patients who died during 2011 in our Health Area. The variables studied were the subject of deceased, place of death, place of professional care and who attended him at the end of life. Results: A total of 89 cases were studied. The mean age of exitus was 74.5 years (SD 14.9), 42.7% were women. The most frequent cause of death was cancer (30.3%). Overall, the hospital was the most frequent place of death (43.8%) and the most frequent place of care at the end of life too (31.5%). By pathologies, in regard to patients with cancer only 40.7% were seen at home at the end of life, but most died in hospital (59.2%). For advanced chronic organ failure at the end of life were treated at home 23% (attended only by professional team of Primary Care) and 7.7% died at home. Conclusions: Although a significant percentage of patients with cancer and advanced chronic organ failure die in the hospital, there is a non-negligible percentage that dies at home and is cared for Primary Care teams. Note that a quarter of patients with advanced chronic organ failure being treated at the end of life at home by Primary Care teams. It is therefore necessary that Primary Health Services are prepared to offer adequate care at the end of life.

# P05.303

Nonalcoholic steatohepatitis (NASH): How to prevent?

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Background: Nonalcoholic steatohepatitis (NASH) is currently one of the most common causes of liver disease due to increased prevalence of obesity and metabolic syndrome in developed countries. The aim of this study was to know the clinical characteristics of patients with NASH. Methods: Cross-sectional study conducted in a urban Health Area. We reviewed the clinical records of all patients with hepatic steatosis (HS) (n = 145). 28UBE/semana y mujeres >17 UBE/semana).">We selected patients with HS and elevation of transaminases, excluding subjects with liver infectious, autoimmune or deposits and / or risk alcohol consumption (men > 28 SDU/week and women > 17 SDU / week). Sex, age, body mass index (BMI), waist circumference and

the presence of hypertension (HT), diabetes mellitus, dyslipidemia and hypertriglyceridemia were registered. Results: Of the 43 subjects with NASH, 60.5% were men. The mean age was 51.4 years (SD 12.1). A total of 41.9% (95% CI 28.4 to 56.7) had hypertension; 14% (95% CI 6.2 to 27.6) had Diabetes; 41.9% (95% CI 28.4 to 56.7) had dyslipidemia and 20.9% (95% CI 11.2 to 35.4) had hypertriglyceridemia. A total of 60.5% (95% CI 45.5 to 73.6) were obese and 34.9% (95% CI 22.4 to 49.9) were overweight. The mean BMI was 31.9 (SD 6.3) and the mean of waist circumference (recorded in 27 subjects) was 108.9 cm (SD 11.3). Women have a higher BMI compared to men (35.1 vs. 29.9, p = 0.007) and a higher waist circumference (114.1 vs. 104.7, p = 0.028). Conclusions: In our study a high percentage of patients had cardiovascular risk factors (CVRF), the most prevalent being overweight (95% with BMI ≥ 25). Primary Care should have a more control of cardiovascular risk factors, especially obesity, in order to decrease the incidence of NASH and prevent progression to fibrosis / cirrhosis of the liver that occurs in 3-5% of patients with NASH.

### P05.304

Physicians with access to point-of-care tests significantly reduce the antibiotic prescription for common cold

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Objective. This study was aimed at evaluating the effect of two levels of intervention on the antibiotic prescribing in patients with common cold.Methods. Before and after audit-based study carried out in primary healthcare centres in Spain. General practitioners registered all the episodes of common cold during 15 working days in January and February in 2008 (preintervention). Two types of intervention were considered: full intervention, consisting in individual feedback based on results from the first registry, courses in rational antibiotic prescribing, guidelines, patient information leaflets, workshops on rapid tests - rapid antigen detection and Creactive protein tests - and provision of these tests in the surgeries; and partial intervention, consisting of all the above intervention except for the workshop and they did not have access to rapid tests. The same registry was repeated in 2009 (postintervention). In addition, new physicians filled out only the registry in 2009 (control group). Results. 210 physicians underwent the full intervention, 71 the partial intervention and 59 were assigned to the control group. The 340 doctors prescribed antibiotics in 274 episodes of a total of 12,373 cases registered (2.2%). The greatest percentage of antibiotic prescription was found in the control group (4.6%). The partial intervention was not associated with a change of the antibiotic prescription rate while only doctors who underwent the complete intervention lead to a significant reduction of antibiotics prescribed, from 2.9% before to 0.7% after the intervention. Conclusion. Only physicians with access to rapid tests significantly reduced antibiotic prescription in patients with common cold.

# P05.305 medical readiness

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Purpose: Public information about readiness of physicians in an austrian districtMaterial and methods: poster presentationDesign: typical situations of patients needs represented in short stories and graphic pictures, which intend to affect the readers emotiotional perception Location: published in local newpapers on noticeboards in townshallsSubjects: how to call a GP after practice hours of the

family doctorMethods: the group of physicians in our district organised as <a href="https://www.styriamed.net">www.styriamed.net</a> developed a presentation object, how to inform the population about medical readiness all over 24 hours a day. People should feel save by beeing informed, how to get medical help easily oin their homeplace to avoid running the hospital and overload hospital ambulances.Conclusions: Physicians believe, that patients will know how to call for help. Reality shows the opposite. Physicians have to promote in active way the public information. This is a tribute to lead patients pathways in our healthsystem.

#### P05.306

#### Delayed discharge on surgical wards: room for improvement

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Introduction: With the recent government budget targeting a £2.3 billion cut in the National Health Service (NHS) spending, improving clinical productivity and efficiency in our hospitals is more important than ever. A reduction in length of hospital stay and timely discharge of patients can significantly reduce the risk of medical complications, including hospital acquired infection, with an improvement in patient care and satisfaction.

The aims of this study are twofold:

1) Identify how many surgical patients had a delayed discharge in a four-week period and;

2) Explore the causes for delayed surgical discharge

Method: This retrospective audit examines all discharges from the General Surgical Department in a four-week period (patients admitted between 16<sup>th</sup> August 2010 to 17<sup>th</sup> September 2010). For each patient, the length of stay and procedure codes were compared to the Hospital Episode Statistics (HES) data 2008-2009. A prolonged hospital stay was defined as those patients that had a length of stay greater than the expected median length of stay for the same procedural code by one day or more. The causes for delay were split into the following categories: Medical; Surgical; Social / multi-disciplinary team; awaiting an investigation; awaiting a review from another speciality and Administrative.

Results: 412 patients were discharged from the General Surgical Department. Of these, 96 patients had a prolonged hospital stay. 51.1% were classified as Surgical causes for prolonged hospital stay, 13.8% Medical causes, 21.3% awaiting investigations, 7.4% awaiting review, 5.3% Social causes and 1.1% Administrative causes.

Conclusions: Surgical reasons were the most common cause of prolonged stay in the study. This was often related to post-operative pain control. The most common Medical cause for delay was related to warfarin dosing. Other important patient characteristics identified in those patients with a delayed discharge were emergency admissions as well as elderly and female patients. Improved pain management teaching and multi-disciplinary team planning could help to reduce length of stay.

#### P05.307

Preliminary results of the STREX Project: incidence of metabolic syndrome in a cohort in an one-year follow-up

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#### **OBJECTIVE:**

Determining Metabolic Syndrome's incidence ( MetS ) in patients' follow-up cohort with one or two diagnostic MetS's factors relating to the stress, during a year.

MATERIAL AND METHODS:

Cohort of 318 patients with one or two MetS criteria and measurement of their stress degree (anxiety, depression, vital stressful events, quality of life)

in an urban Basic Health Area ( 24,000 users ).

Variables: Sex, age, personal family records, MetS criteria (abdominal waist, blood pressure, HDL-cholesterol, triglycerides, fasting glucose), questionnaires: HDA anxiety depression, Vital Stressful events, SF-12 (quality of life). RESULTS:

Of the 318 patients recluted, 24 % were excluded per three factors or more upon inclusion. Correct complementation of tests were 76.98 %. Women 56,1 %, smokers 17.5 %, High blood pressure 40.5 %, Diabetes mellitus 7.9 %, Pre-diabetes 9.5 %, Dyslipidaemia 26.2 %, Obesity 34.9 %. Regarding MetS: 1 criterion 46 %, 2 criteria 54 %. Profile of patients was: Age 56,57±9,3 y., abdominal waist 99±14 cm, HDL-cholesterol 52,1±12,2 mg/dL, triglycerides 137,7±72,4 mg/dL, glucose 97,9±16,1 mg/dL, blood pressure 130±12 and 77,8±8,9 mmHg, BMI 30,1±4,8. Factors of stress: HAD anxiety 8,2±5, HAD depression 6,4±4,8, vital stressful events 124,6±104,8, SF-12

mental 58±49,7, SF-12 physical 61±49 points. MetS's incidence in a year: 26 %, without statistically significant relation with the evaluated stress. The itemized evolution (n= 50): Subjects with 1 risk factor for MetS (46 %), 48 % do not vary, 35 % evolve to 2 factors, 13 % developed MetS and 4 % get better. In relation to the patients with two risk factors to the start (54 %), 52 % do not vary, 37 % developed MetS and 11 % get better. CONCLUSIONS:

One of every four individuals that enter the study, developed MetS in a year.

The evolution to MetS of the subjects with two factors is superior. With this preliminary results, we highlight the paper of the primary prevention in this group.

#### P05.308

Cooperation of family medicine team and mamography unit in the prevention of breast cancer in rural areas

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Introduction:

In the Republic of Croatia, the National Breast Cancer Prevention Program is being implemented. Women aged 45-65 are invited to preventive mammography screening. In 2011, in Osječkobaranjska County, the response of women in rural areas was 58.96%. Mobile mammography units enable the screening to be conducted in every village, thus eliminating the problem of travelling as the reason for not participating in the screening. Objective:

To increase the response rate to mammography screening among women living in rural areas through interventions of family medicine teams.

Methods:

A mobile mammography unit was purchased. Such unit can easily be installed anywhere and provide an opportunity for screening without the need of travelling. 18 family medicine teams were included in the activities of inviting and motivating women, such activities lasting for a month prior to the screening itself. Results:

In the National Screening Program the average response rate is about 60% and for the rural areas it is 52-55%. After the use of a mobile mammography unit the response increased to 72%, and after the interventions of family medicine teams (personal interviews, distribution of promotional material, group lectures, interviews with family members) the response increased to 85.6%. Conclusion:

Women in rural areas do not participate in preventive mammography screening largely because of the problems related to the travelling required. By using the mobile mammography unit and by including the family medicine teams in the screening program, the response is significantly increased.

Key words: breast cancer, mammography unit, family medicine

## Possibilities of family medicine teams in prevention of colorectal cancer

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As part of the National Colorectal Cancer Prevention Program, all persons aged 50 - 74 are sent Hemoccult tests to their home address. The return rate of the tests in the Republic of Croatia in 2010 was 19.7%. The National Program does not include family medicine in the phase of inviting, registration and data processing. Objective:

To include the family medicine teams in screening tests for occult bleeding and to increase the return of the tests in order for them to be processed further.

For the group of 600 examinees of both genders, who have been sent the Hemoccult test by mail, a control group was selected by system of corresponding pairs (age, gender, place of residence). Family medicine teams (physician, nurse and visiting nurse) organized a series of activities for the control group, with the aim of motivating the patients to undergo the screening test and return their tests for analysis. Interventions of family medicine teams included invitations, distribution of promotional material, group lectures and interviews with the families of the examinees. Results:

The return rate of the Hemoccult tests was 19.1% in the examinee group and 42.2% in the control group. Women had better response (48.6%) than men (37.1%). Furthermore, people living in rural areas had better response (44.8%) than those living in urban areas (39.1%).

## Conclusion:

By including family medicine teams into the programs of early detection of colorectal cancer we can achieve a significantly higher response rate and a higher return rate of the Hemoccult tests. The first-contact-physicians have the possibility of motivating their patients. Activities of the family medicine teams are best accepted among women and people residing in rural areas.

# P05.310

Effects of beer polyphenols and alcohol on the lipid profile: a randomized clinical trial

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Introduction

Epidemiological data suggest that moderate consumption of polyphenol-rich alcoholic drinks, such as red wine or beer, improves the lipid profile reducing cardiovascular mortality. However, whether these effects are due to ethanol or to nonalcoholic components of beer still remains unknown.

Objective

The objective is to compare the effect of moderate consumption of beer, non- alcoholic beer and gin on the lipid profile in men with high cardiovascular risk.

We present an open randomized crossover feeding trial. Inclusion criteria were: men, between 50- 75 ages, without documented cardiovascular disease, with Diabetes mellitus or two or more of following factors: active smoking, hypertension, hypercholesterolemia or low level of HDL, overweight or obesity and/or premature ischemic heart disease family history. Excluded those patients with severe chronic diseases, alcoholism and other addictions, liver biology alteration and active neoplasia.

After a washout period, all subjects received either beer (30 g alcohol/day), the equivalent amount of non- alcoholic beer, or gin (30 g alcohol/day) for 4 weeks. Demographic data, clinical variables, blood pressure and plasma lipoproteins, apolipoproteins, adipokines and inflammatory molecules were determined at baseline and after each intervention.

Results

Thirty-six male volunteers were included in the study, finishing it only thirty-two. HDL cholesterol significantly increased (p=0.031) while LDL/HDL ratio decreased (p=0.036) from baseline after beer and gin intake. Apolipoprotein A-I and Apolipoprotein A-II, tended to decrease after beer and gin intake (p= 0.06 and p=0.078, respectively). No interaction was observed between treatment and sequence of treatment (p>0.05). The use of statins does not effect the values of these variables controlling for treatment. Conclusions

The results support a beneficial effect of beer on lipid profile, contributing to the greater protective effects of beer (ethanol and polyphenols) than non-alcoholic beer (only polyphenols). This clinical trial was registered at Intenational Standard

Randomized Controlled Trials with number ISRCTN95345245.

#### P05.311

The Evaluation of Iodine Levels in Urine, Nutrition and **Depression Symptomatology in Pregnant Women According** 

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OBJECTIVE: In this descriptive and cross-sectional study, the purpose is to evaluate the iodine levels in urine as well as nutrition and depression symptomatology according to trimesters in pregnant women living in Konya city.

METHODS: This study involves 404 voluntary pregnant women between the ages of 15 and 49 with pregnancy periods ranging between 1 and 40 weeks. A questionnaire consisting of 54 questions which was prepared by the researcher and Beck Depression Inventory were applied on women through face-to-face interview technique. The cut-off point for Beck Depression Inventory was considered as 17. Urinary iodine levels of the participants were measured with a spectrophotometric method.

**RESULTS:** Mean urinary iodine levels were measured as 104,41±71,26 µg/L (median=92,00 µg/L). Mean urinary iodine levels of pregnant women in the first (n=135), second (n=135) and third (n=134) trimesters were 117,72±75,91 µg/L (median=106,00  $\mu g/L$ ), 108,09±63,29  $\mu g/L$  (median=95,00  $\mu g/L$ ) and 87,28±71,11 μg/L (median=68,50 μg/L), respectively. When urinary iodine levels of the pregnant women were compared according to trimesters, these were significantly lower in the third trimester (p<0,05). It was determined that 78,70% (n=318) of 404 pregnant women was iodine deficient (<150 µg/L) however urinary iodine levels were sufficient (>150  $\mu$ g/L) in 21,30% (n=86). The proportions of participants with iodine deficiency were significantly different among trimesters (p<0,05). This difference was resulted from the pregnant women in the third trimester. Of all the pregnant women, 52,20% (n=211) had scores equal and over 17 Beck Depression Inventory, and although these women had lower urinary iodine levels, there was no significant difference (p>0,05).

CONCLUSION: In conclusion, it was determined that urinary iodine levels of the pregnant women involved in our study was deficient and this deficiency becomes prominent as the trimesters continue. In order to prevent this deficiency, especially in the primary health care centers and in all institutions with health services, the doctors and nurses must give information about nutrition with sufficient iodine-content both before pregnancy and during pregnancy. Also, the pregnant women with iodine deficiency should be supplied with vitamins with sufficient iodine content.

# swapINN - analytic study on prescription swaps at pharmacies

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#### Introduction

In order to cut spending, it has been suggested that INN prescriptions should be made compulsory in Portugal during 2012. This has instigated discussion among stakeholders in drug prescription and dispensing.

The authors studied prescription-dispensing dynamics on a real population.

#### Objectives

To determine the percentage of swapped prescriptions; to assess the factors associated with the swap; to analyse the justifications for doing so; to quantify the cost difference for patients and NHS. Methods

Analytic and observational study with prospective data collection. Convenience sample consisting of all prescriptions issued in the course of visits to a Primary Health Care unit, from the 19th to the 23rd December 2011. Third day follow-up, using phone call interviews. Software: Excel 2003 and SPSS v.17.0. Statistical tests: Chi-square and Mann-Whitney, SL = 0.05. Results

Total of 255 prescriptions. Majority of them prescribed to women (62%), mean age of 52Y, 4 years of school education and for acute situations. 31% of the prescribed drugs were swapped at the pharmacy. The swaps had no statistical relation with age, sex or literacy of the patient, nor with the prescriber or pharmacy. Swapping of prescribed drugs for chronic situations was lower than those for acute conditions (p<0,001). Original brand prescriptions were swapped less frequently (p<0,001). Anti-infectious and anti-allergic were the most swapped therapeutic groups (p=0,009). 72% of users were not aware of the swap. Regarding the swapped drugs, users paid on average 82% more than what was originally prescribed, and the NHS 5% more.

#### Discussion

The authors found changes in 31% of the prescriptions, with higher costs for both users and NHS. Type I and type II errors and selection, information and registration bias were considered. The study will be further developed, broadening the geographical range and analysing differences in bioavailability between prescribed and dispensed drugs.

#### P05.313

# A comparison between modern methods of blood pressure measurement against the classical method

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Background: Hypertension, also known as high blood pressure, affects hundreds of millions of persons worldwide.Blood pressure is measured in millimeters of mercury (mmHg). Normal blood pressure is defined as a systolic pressure of less than 120 and a diastolic pressure of less than 80. People with a systolic blood pressure between 120 and 139 or a diastolic blood pressure between 80 and 89 are said to have prehypertension. Many different methods have been employed to measure blood pressure in patients.

Objective: To evaluate the efficacy of blood pressure measurements using three different methods of measuring blood pressure in hypertensives and compare these with 24 – hour average recordings of ambulatory blood pressure.

Methods: Fifty-three hypertensive patients admitted to the ward had their blood pressure measured using the mercury sphygmomanometer and wrist blood pressure device. A subgroup of 34 patients had their pressure measured using the ambulatory blood pressure monitor for a one-time on recording at the same time, while another subgroup 15 patients had their 24-hour ambulatory blood pressure measured.

Main outcome measures the similarities of electronic measurements of blood pressure to that of mercury sphygmomanometer.

Results: The blood pressure recorded in the 53 patients showed strong correlation between all three methods of on-the-spot blood

pressure measurements (n=53, p<0.0001). However, the average blood pressure over 24 hour was significantly lower than a one-time reading using the mercury sphygmomanometer (n=15, p>0.05).

Conclusion: Electronic blood pressure readings are accurate and are comparable to the classical sphygmomanometer in measuring blood pressure. The average 24-hour ambulatory blood pressure measurement is significantly lower than the single recording and has specific uses, especially as a prognostic marker for hypertension.

Key words: Hypertension, Sphygmomanometer, Electronic measurement

#### P05.314

# Quality of antibiotic prescription in uncomplicated cystitis in women

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Introduction: Urinary tract infections are frequent in primary healthcare. About half of premenopausal women have an episode of cystitis during their life.

Recent publication of therapeutic rules for urinary tract infections by the Health General Directory define as the first-line antibiotics for the treatment of uncomplicated cystitis in women fosfomycin and nitrofurantoin.

Objective: Evaluate the quality of the prescription of antibiotics for cystitis and if the presentation of therapeutic rules at clinical meetings changes the prescription of antibiotics for the disease.

Methods: Type of study:observational, cross-sectional.

Population:women who had an appointment from 01.07.2011 to 31.09.2011 and from the period of 01.10.2011 to 31.01.2012 with symptoms of cystitis.

Inclusion Criteria:women aged 18-50 years.

Exclusion Criteria:pregnant women with recurrent urinary tract infection.

Quality criteria:

- 1-Register of the strip test for urinalysis result.
- 2-Coding during the evaluation of cystitis.
- 3-Prescription of first-line antibiotics.
- 4-Prescription of guinolones.
- 5-Non performance of a urine culture before antibiotic therapy.
- 6-Non performance of a urine culture after antibiotic therapy.
- Source of data: information recorded in the clinical history.

Results: Due to the exclusion criteria, we obtained a final sample of 35 appointments in the first study and 41 in the second.

The strip test for urinalysis was performed in all appointments. The second criterion was verified in 34.29% of the cases in the first group and 53.66% in the second group. For the third and fourth criteria fosfomycin and nitrofurantoin were prescribed in 40.62% of the cases and quinolones in 28.13% of the cases during the first period. During the second period fosfomycin and nitrofurantoin were prescribed in 60.53% of the cases and quinolones in 21.86%. In both cases urine culture was not requested before antibiotic therapy. Relative to the urine cultures ordered after antibiotic therapy 48.57% were ordered in the first period and 21.95% during the second

# Conclusions:

We verified an improvement of all the quality criteria in both groups. Only criteria 1 and 5 had very good quality, the other tests show a significant improvement.

This study demonstrates the importance of the presentation of the therapeutic rules in clinical meetings in order to improve medical performance.

### Quality of life of 85 years olds not institutionalized. Association with the functionality and cognition

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OBJECTIVES: To determine the quality of life in patients 85 years olds and associated factors

METHODOLOGY: A cross. 328 subjects were evaluated in five municipalities of 85 years and living in the community with comprehensive geriatric assessment.

Was used visual analogue scale (VAS) covering from 0 (worst imaginable health state) to 100 (best imaginable health state), which reflects the subjective perception of quality of life of patients., Other variables were Barthel Index Functionality and Lawton and cognition test with MEC, as well as the Charlson comorbidity index and the test of Gijon

for social and family assessment. Significant variables in the bivariate analysis with p values <0.05 were explored using logistic regression.

RESULTS: The median VAS score was 60 [50, 75] and the result was grouped according to VAS score less than 60 (n = 132) or less than 60 (n = 196). Men (126) 65.9% scored> 60 and women (202) 55.94% the. In multivariate analysis stand out as independent factors associated with worse quality of life, low functionality, as Lawton index (OR 1.11, 95% CI: 1.00 to 1.24, P = 0.05), MEC (OR 1.06., 95% CI: 1.02 to 1.11 p = 0.005), and nutritional risk (OR: 1.13. 95% CI 1.04 to 1.22, P = 0.003).

CONCLUSIONS: The perceived quality of half-life is good. Function, cognitive status and nutritional risk are independent factors associated with their perception of quality of life in octogenarians people.

Table 1. Unadjusted and adjusted regression to estimate the quality of life

	univariate analysis				Multivariate analysis (final model)				
	OR	95%	C.I.	P- value	OR	95%	C.I.	P- value	
Gender (female)	0,66	0,41	1,04	0,075					
studies									
Primary (<5 years)	1,51	0,92	2,47	0,100					
Media (6 to 12 years)	2,24	1,08	4,62	0,030					
Higher (> 12 years)	2,61	0,78	8,68	0,118					
Cuidador									
Couple	0,48	0,26	0,90	0,022					
Children	0,50	0,29	0,85	0,011					
Professional	0,78	0,18	3,39	0,738					
Other	0,58	0,22	1,57	0,286					
Barriers to housing (No)	1,59	0,99	2,53	0,053	1,75	1,04	2,95	0,035	
Feeding problems (No)	2,38	1,46	3,88	0,001	1,77	1,04	3,02	0,035	
Charlson Index	0,86	0,75	0,99	0,039					
Braden Index	1,12	1,03	1,21	0,006					
Gijon test	0,87	0,80	0,95	0,001					
Tinetti Scale	1,22	1,12	1,32	<0,001					
Mini Nutritional Assessment	1,22	1,14	1,30	<0,001	1,13	1,04	1,22	0,003	
Barthel Index	1,04	1,02	1,05	<0,001					

#### P05.316

# Community intervention in diabetic type 2 patients: monitoring a cohort

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AIM: To Know the results of an evaluation about a cohort of diabetic type 2 patients which received a two-sided intervention (educational group/physical exercise) during 6 months(2008) , after one and three years later.

DESING AND METHODS:

Desing: Descriptive, cross-sectional and retrospective study. Location: Urban Health Care Area.

Participants: 120 non-insulin diabetic type 2 patients (95% confidence interval and 80%power),40-70 aged, glycated hemoglobin (HBA1c)≤8,5%,blood pressure(BP)≤160/90 and body mass index (BMI)≤45, excluding those with chronic complications and/or acute decompensation. Were included in a randomized controlled clinical trail, single blind 2x2 intervention (4 groups: group 1 received diabetes education(DE); group 2 diabetes education and supervised physical exercise(DE and PE); group 3 only physical exercise(PE); group 4 "control group" individual education following diabetes program.)during 6 months in 2008. Interventions: Patients has been called to programmed consult for analytical controls and measuring cardiovascular risk factors, and monitoring study variables.One year later intervention(2009) and 3 years later(2011).

Main measurements: primary variable was reduction in HBA1c, the other variables were BMI, BP, total-Cholesterol, LDL-C, HDL-C, TG, therapeutic compliance(pills, diet and exercise), waist circumference, self-control (glucemy) and self care(feet).

Statistical analysis will be carried out according to the intention-to-treat principle,  $X^2$  for qualitative measures, and Anova and Student'st tets for quantitative.

RESULTS: No differences between groups were found in baseline characteristics of trial participants. After intervention the value of the main variable showed lower HBA1c following a full intervention (DE and PE)(RR:1,93) and improvement in the most part of too:BMI (RR:1,61); LDL-C(RR:1,82); self-controls compliance(RR1.29): and exercise(RR1,93); (RR:3,86).Group 3(PE) had improvement in HBA1c(RR:1,56) and systolic/diastolic blood pressure(RR:1,35/1,87). One year postintervention: improvement in HBA1c in groups 1(RR:2,26),2 (RR:1,93) and 3 (RR:2,17). In group 2 better SBP (RR:1,93) total-Chol (RR:1,39) and Ldl-chol (RR:1,28). Group 3(PE) lower SBP (RR:2,98). Group 1(DE) lower TG(RR:1,47). Three years postintervention: no improvement was found in groups.

CONCLUSIONS: After full intervention(DE and PE) we found improvement in primary variable (reduction in HBA1c) and in the most part of them. This effect still remainds one year latter respect to HBA1c mainly. But 3 years later after clinical trial we don't find differences between groups.

#### P05.317

The OCHOA score: a new simpler predictive rule for assessing severity among older adults with community-acquired pneumonia.

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OBJECTIVE: To evaluate the ability of a new simpler predictive rule (OCHOA score) in predicting short-term mortality among older adults with community-acquired pneumonia (CAP).

METHODS: Population-based study including all people over 65 years old with a radiographically confirmed CAP in Tarragona (Spain) during 2008-2011. Treatment setting and clinical variables were considered for each patient. The OCHOA score (one point per each one of the following: **O**xygen saturation <90%, **C**onfussion, **H**ypotension systolic <90 mmHg or diastolic <60 mmHg, **O**ver 30 respirations per minut, **A**ge ≥ 75 years) was calculated at the moment of diagnosis and 30-day mortality was

considered as a main dependent variable. We calculated the area under the receiver operating characteristic curve (ROC) and sensitivity/specificity for different cut off points.

RESULTS: Global 30-day mortality rate was 13.1% (46/350), being 15.2% (43/282) among hospitalised cases and 4.4% (3/68) among cases managed as outpatient (p<0.001). Mortality increased with increasing OCHOA score, being 1.3% (1/79) in score 0, 6.9% (9/130) in score 1, 17.5% (18/103) in score 2, 40.6% (13/32) in score 3 and 83.3% (5/6) in score 4 (p<0.001). The OCHOA rule performed well to predict 30-day mortality, with a ROC area of 0.784 (95% confidence interval: 0.715-0.854). For a cut off point ≥2 sensitivity was 78.3% and specificity was 65.5%.

CONCLUSION: The new simpler OCHOA rule performs adequately among elderly people with CAP. Our data supports the recommendation for using this simplified severity score among elderly patients in primary care or emergency visits.

#### P05.318

Urinary incontinence: Effects of large baby births in type 2 diabetic older women

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Aim: Urinary incontinence (UI) and diabetes mellitus are prevalent chronic conditions and large baby birth is a risk factor for UI also. The aim of this study was to assess the effects of large baby births on UI and quality of life in type 2 diabetic older women with UI Materials and methods: Diagnosis of diabetes mellitus was established according to the WHO criteria. Self reported UI was ascertained using questionnaire included delivery, demographic and medical data. The impact of UI on quality of life was determined by using International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF) .Results: A total of 106 consequent type 2 diabetic older women with UI were eligible to participated in the study. Of the 106 women, 45 (42.5%) had given birth to large baby (group 1) and 61 (57.5%) had given birth to normal birth weight baby (group2). The frequencies of stress, urge and mixed types of UI were 13.3%, 20%, 66.7% in group1 and 21.3%, 31.1%, 47.5% in group2, respectively, but there weren't any difference in the frequency of types of UI between the groups (p>0.05). The frequency of urinary leakage was also similar in both group (p>0.05). However, the severity of urinary leakage were slight in 28.9.%, moderate in 24.4% and severe in 46.7% of group1 and slight in 44.3%, moderate in 36.1%, and severe in 19.7% of group2. So, more women had slight, moderate and severe urinary leakage in group1 than those in group2 (p<0.05, p<0.05, p<0.01, respectively). It wasn't indicated any difference in age, education level, diabetes duration and other risk factors of UI (lower urinary tract symptoms, vaginal delivery, episiotomy, constipation, parity, menopause, history of gynecologic surgery) between the groups. The body weight (p<0.05) and body mass index (p<0.01) were greater in group1 than those in group2. ICIQ-SF score in group1 was worse than those in group2 (p<0.05). Conclusion: The results show that large baby birth increases the severity of urinary leakage rather than frequency of urinary leakage and has substantial negative effect on quality of life in type 2 diabetic older women with UI.

#### P05.319

Acute severe asthma cases in Emergency room (ER) of the Health Center Bijeljina dating from 01.01.2011. to 31.12.2011.

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Asthma poses as one of the leading causes of morbidity. Acute severe asthma is defined as life-threatening condition that does

not respond to regular treatment and reqires urgent treatment. The forced expiratory volume in 1 second FEV1 and peak expiratory flow rate PEF directly show the level of airflow obstruction and in wards are standard when Emergency assessing brochoopstruction severity and monitoring therapy response. The objective of this study is to present the patients suffering from acute severe asthma that sought medical help at Emergency room of the Health Centre Bijeljina between 1st January 2011. and 31st December 2011. A retrospective analysis of the ambulance protocols was conducted in the above mentioned time period. The number of patients suffering from the acute severe asthma is given within the months the cases were reported: the analysis included age and sex structure of the patients, applied treatment and regularity of taking therapy. In the time period, 835 patients diagnosed with the acute severe asthma were reported to the ER of the Health Center Bijeljina, most of which, 111 (13,29%) in total, were reported during September 2011,, and the least number of patients were reported during January 2011., 40 (4,79%) in total. According to the sex structure the number of male patients, 461 (55,20%), was higher than the number of female patiens, 374 (44, 80%). As for the age structure the largest group were patients aged 60 - 70, 254 (30,42%) in total. Of all the cases of acute severe asthma that were analysed, 585 (72%) patients received theraphy regularly. During the treatment 552 patients received brochodilator inhalers ( short-acting beta-2 agonists), while 283 were given parenteral bronchodilator therapy (aminofylline). Low Oxygen Saturation Level, under 90% was observed in 42 (5,03%) patients, therefore oxygen therapy was applied . Systemic corticosteroid (methyl- prednisolone) was given to 513 (61,44%) patients.

Key words: asthma, attack, treatment

## P05.320

Preservation of a normal glucaemic profile in diabetic patients after corticosteroid infusions for acute inflammatory musculoskeletal disorders.

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**Background:** Preserving a normal glucaemic profile in diabetic patients after glucocorticosteroid infusions is a challenging task for physicians and they usually avoid them in diabetic patients.

**Objective:** The objective of this prospective study is to maintain a normal glucaemic profile in diabetic patients after glucocorticosteroid infusions for acute inflammatory musculoskeletal disorders.

**Methods:** A random sample of 67 patients was included in the study from January 2010 to February 2012. The sample was divided into two groups and the patients were matched based on age, sex, medication, duration of diabetes, body mass index, number of infusions and other comorbidities using Database Access. In the first group the medication for diabetes was changed based on an original designed mathematic algorithm after the glucocorticosteroid infusion (algorithm group, AG). In the second group there was no change in the medication (control group, CG). Capillary blood glucose level was measured in all patients before the infusion and at 3, 6, 12 and 24 hours after the infusion. Glucosylated hemoglobin (HbA1c) was also measured before and 3.5 months after the infusion.

**Results:** The AG was consisted of 31 patients with a mean age of  $52\pm12.3$  years and the CG was consisted of 36 patients with a mean age of  $51\pm11.7$  years. The mean blood glucose level was measured in CG after 3 hours:  $212\pm57$ mg/dl, 6 hours:  $268\pm61$ mg/dl, 12 hours:  $271\pm53$ mg/dl and 24 hours:  $196\pm44$ 4mg/dl. In AG the mean glucose level was after 3 hours:  $146\pm14$ mg/dl (p=0.004), 6 hours:  $161\pm17$ mg/dl (p<0.002), 12 hours:  $154\pm16$ mg/dl (p<0.001), and 24 hours:  $134\pm12$ mg/dl (p<0.003) respectively. Comparable were the results in mean HbA1c level;  $8.5\pm16\%$  in the CG and  $7.1\pm0.8\%$  in the AG (p<0.0001).

**Conclusions:** The use of the mathematic algorithm was associated with significant control of blood glucose and HbA1c levels in diabetic patients that were infused with glucocorticosteroids for acute inflammatory musculoskeletal disorders.

Use of information and communication of technologies (ICTs) among smokers in Spain. Is it possible to help smokers to quit by using these technologies?

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**Aim** To analyze the availability and the use of the Information and Communication Technologies (ICTs) among smokers attended in Primary Care in Spain

#### Methods

Descriptive observational study among smokers (≥1 cigarette/day) aged between 18-85 attended in Primary Care in Spain from November 15th 2011 until February 15th 2012 selected by simple random sampling. Measurements: 1) Related to ICTs: availability and use of E-mail, SMS or cell phone messages and websites, 2) Self-opinion of the use of ICTs to quit smoking (Likert scale from 0 -no use- to 10 -very useful) and 3) Related to tobacco consumption: number of cigarettes, initiation age, dependency (Fagerström Test), smoking environment and attempts to quit, and 4) Sociodemographic variables.

#### Results

We analyzed 1725 patients, mean age: of 45.54 ( $\pm$ 13.65); 49.9% were women. Self-reported use of SMS, E-mail and websites were 50.8%, 49.8% and 56.0% respectively. 29,5% did not use any ICT's, 18.2% only used one, 19.1% two of them, and 33.2% used all three. According to the usefulness of these ICT on smoking cessation, in smokers, differences were observed among men and women; men declared less utility of E-mail (42.2% vs 32.8% p<0.001), SMS (43.5% vs 31.2% p<0.001) and web pages (38.3% vs 29.8% p=0.001); this last ICT was declared as the most useful for men and women (34.7% and 37.9%).

Participants under 35 years believed that E-mail (40.4%) and SMS (39.2%) were fairly useful, however websites (45.0%) were better considered. Conversely, individuals 65 and older found all ICTs (E-mail 66.9%, SMS 64.0% and Web 62.6%) to be slightly useful in smoking cessation. People who do not use ICTs found them useless as smoking intervention (Email: 51.2% vs 23.7%, SMS: 51.4% vs. 23.7%, Web: 50.7% vs 20.9%, all p<0.001), and the ones who use it habitually declared them to be very useful (46.0% vs 24.0%, p>001).

#### Discussion

Young people usually use ICTs and find them motivating as a smoking cessation intervention. These tools can help certain groups of people that do not usually look for medical attention in Primary Care and can avoid face to face visits when quitting smoking.

# P05.322

#### Breaking the language barrier in primary care

#### C. S. Aduna

Choa Chu Kang Polyclinic, Singapore, Singapore.

**Mission Statement:** To eliminate translator-mediated consultations between patients and doctors in Choa Chu Kang Polyclinic within three months.

# Methodology:

Small surveys were initially conducted to ascertain if the external and internal customers perceive translator-mediated consultations as a problem in the polyclinic. Three different sets of questionnaire were prepared for the patients, healthcare assistants who are the main translators, and the doctors. To construct a concrete picture of the situation in Choa Chu Kang Polyclinic, the patient service associates at the registration counter tallied the number of non-English speaking patients while the doctors recorded the number of translator-mediated consultations they had for four consecutive weeks

The team, consisting of a patient volunteer, patient service associate, healthcare assistant, NTS medical officer, and the operations executive, assessed the causes of the problem by

analysing the current process and making a cause and effect diagram. The Pareto chart was then used as a tool to identify which causes must be addressed.

Each proposed intervention underwent the PDSA (plan-do-study-act) cycle. The interventions were implemented one by one with two weeks interval, each time focusing on only one or two areas in the overall workflow. The doctors continued to record the number of translator-mediated consultations for the next five weeks.

#### Results:

From a mean of 240 translator-mediated consultations per week, the numbers decreased to less than fifty per week. This project relies on the premise that the lower the number of translator-mediated consultations, the lower the risk for doctors to commit an error in the management of their patients.

#### Conclusion:

This project decreased the risk of preventable errors in Choa Chu Kang Polyclinic by significantly bringing down the occurrence of translator-mediated consultations over a period of nine weeks. However, elimination has not been achieved yet and sustainability still remains to be demonstrated.

NHG Diagnostics, NHG Pharmacy, and the nurses are highly encouraged to undertake similar projects to sustain and spread what has been initiated. Moreover, NHG Polyclinics being in a state of dynamic change, may consider language compatibilities of patients and staff in future improvement plans.

#### P05.323

# The role of General practitioners in the diagnosis of nephrolithiasis

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**Objectives:** The goal of this study is to record the patients diagnosed with nephrolithiasis in the ER of the General Hospital of Athens "Laiko" during a time period of one year.

**Materials and Methods:** General Practitioners can diagnose nephrolithiasis based on the patient s clinical examination and their medical history, as it is a pretty painful condition with intense symptoms and reoccurrences. 1245 patients were examined. 61% were men aged from 16 to 83 years old and 29% were women aged from 16 to 85 years old; history of nephrolithiasis was noted in 28% of the petients.

Results: The main symptom of the patients who were examined in the ER with a clinical presentation of acute renal colic was a back pain in 98% of cases. The pain was accompanied by haematuria (41%), microscopic or macroscopic, nausea (10%), vomiting (14%), dysuric symptoms (52%) and a compelling urge to urinate (72%). Full medical history was taken in all patients while the physical examination showed positive Giordano sign in 87%, and tenderness at the lower part of the abdomen in 26%. The laboratory tests and imaging techniques included urinalysis (91% of the cases), urinary cultivation (71%), which was positive at the percentage of 13% of the patients, kidney, ureter, and bladder (KUB) X-ray, (52%) and kidney ultrasound (99%). Hospital admission was noted in 8% of the patients.

**Conclusion:** The medical history is very important in the diagnosis of both acute and chronic nephrolithiasis. General Practitioners can cope with patients with nephrolithiasis by taking a full medical history, by performing clinical examination and by applying laboratory tests and imaging techniques.

# Urine Infection in patients with urinary catheter; the role of General Practitioners

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**Objectives:** Goal of this study is to record and evaluate the treatment of urine infections in patients with urine catheter, in the ER of the General Hospital of Athens "LAIKO" and the role of General Practitioners in urology.

**Materials and Methods:** More than 25% of patients who are admitted in hospitals are submitted in urinary catheterization. We studied the risk factors which lead to the development of bacteriuria and the ways for preventing urine infections.

Results: We recorded 305 patients with urinary catheter who suffered from urine infection in the ER of "Laiko" Hospital during the years 2010-2011. The 71% were men aged from 33 to 81 years old and 29% were women aged from 36 to 84 years old. Duration of urinary catheterization is directly associated with the development of bacteriuria in 84% of them; it was also observed that the majority (75%) of hospital infections are urine infections. Risk factors which lead to the development of bacteriuria are: I) the female sex (45%), II) serious underlying disease (36%), III) age greater than 50 years old (52%), IV) the non-administration of antibiotics (18%). The methods for the prevention of urine infections are the adherence to the protocol of sterilization during the placement of the urinary catheter and the reduction of the time period of the catheterization. These are the keys for prevention of the urine infection at the percentage of 80% when catheter is removed within 4 days after its placement. If the catheterization is expected to last less than 5 days the use of latex urinary catheter reduces the chance of urine infection by 54%. The administration of antibiotics is still a field of conflict. In our patients 14% received antibiotics and 58% of them responded to treatment.

**Conclusion:** The best way in which a General Practitioner can prevent urine infections from a urinary catheter is the avoidance of futile placement of the catheter, the adherence to sterilization rules, the removal of the catheter as soon as possible, and the administration of antibiotics, which, however, still remains a matter of conflict.

#### P05.325

Are we fully aware of vestibular vertigo? Conclusions from a primary healthcare routine information system

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# **Background**

Vertigo, defined as an illusion of rotatory motion, is a common symptom that is generally disabling and usually requires medical assistance. Yet, few epidemiological studies have been conducted to analyse the epidemiology of vertigo in the general population. This sort of studies are best carried out in primary healthcare centres, since patients usually seek attention from their family doctor at some point.

The objective is to analyse the annual incidence of patients with vertigo in the Autonomic Region of Valencia through the primary healthcare routine information system.

# Methods

This is an observational retrospective analysis of the annual incidence of vertigo in the Autonomic Region of Valencia during the period January 2004 to September 2009. The catchment population comprises 6 728 630 adults.

Data were obtained through the primary healthcare routine information system Abucasis. Annual incidence was computed as cases of patients per 1 000 inhabitants per year, based on two ICD-9-CM codes: Dizziness and giddiness (ICD 780.4) and Vestibular vertigo (ICD 386).

# Results

A total of 14 207 patients were attended annually due to vestibular vertigo (2.1 per 1 000 inhabitants per year) and 89 543 patients due to dizziness and giddiness (13.3 per 1 000 inhabitants per year).

Annual incidence is two times higher among women than among men for both codes. There is a progressive increase of annual incidence with age, and it is highest for the interval "76-85 years". Differences between Primary Health Departments are relatively important.

#### Conclusions

A prospective study was conducted in the same region and it found an annual incidence of vestibular vertigo of 17.8 patients per 1 000 inhabitants per year, a figure that is higher than the results obtained in this study. Other studies suggest that vestibular vertigo accounts for a considerable percentage of the burden of dizziness and giddiness. This discrepancy might be due to deficiencies in the anamnesis and conduct of diagnostic and therapeutic manoeuvers by primary care physicians, with a subsequent underdiagnose and inadequate management of vestibular vertigo. Thus, we recommend boosting training on this pathology as well as an adequate communication with otoneurology services.

#### P05.326

### Are calcium supplements prescribed correctly?

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## Objective:

To know if the prescription of calcium supplements in patients with osteopenia or osteoporosis is correctly done.

#### Methods

We have designed a descriptive transversal study in a primary care center on a random sample of patients taking calcium supplements. Different variables are collected: demographic variables, if a dietary calcium survey was made before the start of the treatment, daily calcium intake through diet, presence of ischemic heart disease, duration of the treatment with calcium and the therapeutic compliance.

#### Results

We have collected 219 patients treated with calcium supplements. 93.6% were female, with a mean age of 69.33 years (SD 11.39). The average time in treatment with calcium was 4.25 years. Dietary survey was not done before the start of treatment in 89.5% of patients. The average calcium intake was 742.70 mg / day: 59.8% taking less than 800mg/day, 28.8% between 800-1000mg/day and 11.4% higher than 1000mg/day. 71.2% collected the medication from the pharmacy. Three patients were diagnosed with ischemic heart disease but the event was prior to the initiation of the calcium treatment . We have not reported any ischemic heart disease after starting calcium supplements

# Conclusions

Few surveys are conducted before the start of dietary calcium supplement. A high percentage of patients are being treated with calcium supplements even though their diet is correct. We will make a statement on indications of calcium supplements and nutrition education for patients in our center. We will analyze the same variables in one year.

# Comparison of resting metabolic rate (RMR) in people with type 1 diabetes with control group

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This study aims to compare the Resting Metabolic Rate (RMR) levels of the patients with Type 1 diabetes and people with no diabetes and to study the relationship of RMR of patients with Type 1 diabetes with metabolic parameters and to determine the risk factors affecting RMR.

Patients with Type 1 DM and without DM, who did not have any other condition affecting RMR level, were included in the study (age between 18 and 65, BMI<40). The patients underwent weight, height, BMI and waist circumference measurements in the morning following fasting of 8 to 12 hours. Preprandial blood glucose, A1c, blood, albumin, HDL, HGB, ALT, GGT, uric acid, fibrinogen blood tests were performed. RMR measurements took place using indirect calorimeter method with Cosmed's FitMate Metabolic System (Rome, Italy) (measurement the oxygen use) while resting in the morning (08:00-10:00) following fasting of 12-14 hours.

The study included 74 patients with type 1 DM (average age 32±10 years, 66.2% female) and 86 people as the control group (average age 35±10 years, 75.6% female). Significant differences were found between the groups in terms of levels of RMR, RMR (Weight, RMR /BMI and RMR (p< 0.001). The proportion of people with high RMR level was higher in type 1 DM group as compared to the control group. The multivariate logistic regression analysis performed by the model created using gender, patient groups, age, weight, height, BMI, waist circumference, preprandial blood glucose, A1c, blood albumin, HDL, HGB, ALT, GGT, uric acid, fibrinogen in order to determine the factors affecting high RMR yielded Type 1 DM risk factor as statistically significant (OR: 0.109; 95% CI: 0.020-0.615; p=0.012).

Patients with Type 1 DM were found to have higher RMR as compared to the people without diabetes. Considering the fact that people with Type 1 diabetes have a complicated series of metabolic changes in question, better nutritional treatment can be arranged by assessing the factors affecting consumption of energy and RMR for the diet practices in addition to treatment by medication.

#### P05.328

Assessing the diabetes diagnosis in people with high risk, who have undergone oral glucose tolerance test (OGTT) and glycosylated hemoglobin (A1c) measurements

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This study examines the impairing fasting glucose (IFG), impairing glucose tolerance (IGT) and diabetes mellitus (DM) values in patients under high risk according to the criteria of American Diabetes Association (ADA) and the relation thereof with metabolic parameters. The results of OGTT and A1c found by two different methods were compared in terms of agreement and the agreement between the results of Hour 1 and Hour 2 for OGTT were compared for diagnosis of DM.

Adults (age >18) with no prior DM diagnosis, who were found to be under high risk for DM according to the ADA criteria, were included in the study. People taking medication or with health conditions to disturb metabolic control were excluded. For OGTT, it was made conditional that the patients had sufficient carbohydrate intake for 3 days prior to the test did not take any medication that can affect this test, and did not smoke, move during the test and also a 10-hour fasting. A1c levels were measured using ion-exchange (IE)

high performance liquid chromatography (HPLC) or boronate affinity (BA) HPLC.

Total 600 people in high risk group for DM were included in the study (average age 49.7±11.5 years, and 72.2% female and 27.8% male). There was moderate agreement between the OGTT results of hour 1 and hour 2 (Kappa = 0.323). 50.7% of the 600 patients included in the study (n=304) were diagnosed with DM according to the measurements of hour 1. In 32.6% of these patients, DM diagnosis continued in measurements of hour 2 as well. A1c level was measured using IE-HPLC method for 78.9% of the patients and using BA-HPLC method for 21.1% of the patients. A1c measured using IE-HPLC and BA-HPLC displayed negligible agreement with OGTT results of hour 1 (Kappa=0.204, Kappa=0.037 ), and moderate agreement with OGTT results of hour 2 (Kappa=0.332, Kappa=0.260). When OGTT results of hour 1 are not taken into consideration, approximately 1/3 of the patients with diabetes are cannot be diagnosed with diabetes. A1c measurements found similar level of agreement between glucose of hour 1 and hour 2 using both method.

#### P05.329

Routine HIV screening in General Practice, a study in Wandsworth.

#### A. Anenden:

Wandsworth Primary Care Trust, London, United Kingdom.

This will be a poster showing the on-going results of the trial study of opportunistic HIV testing in general practice in the London borough of Wandsworth

Aims: The prevalence of HIV in the UK is 1.7 per 1000 capita, in Wandsworth that figure is 4.9 per 1000. In the whole of the UK it is estimated that 24% of people with HIV are not aware of their diagnosis (credible interval 19-30%). This pilot aims is to show that routine HIV testing is acceptable in the community and that it shighly feasible. It also aims to look at the number of new diagnosis of HIV achieved that way. But it is believed that the number will be comparable to those shown in the US which state that 0.1% rate of new HIV detection through this way is cost effective.

Methodology: A rapid HIV antigen test kit has been issued to all the general practices in Wandsworth. The test take 2 minutes from opening the kit to obtaining a result. It is being offered to all new registration in the Wandsworth area for people between the age of 18 and 69. The numbers of new registrations, test done and positive tests are sent on a monthly basis to a central database in Wandsworth.

This poster will show the numbers in Wandsworth and show the benefits of such a programme. And raise awareness of the need for opportunistic HIV testing in the community.

# P05.330

Results after studying the Ankle Brachial Index in a Primary Health Care Center

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Introduction and objectives: Peripheral arterial disease (PAD) is associated with high cardiovascular morbidity and mortality by atherosclerosis. The detection of the PAD using ankle-brachial index (ABI) can identify patients with an established injury, symptomatic or not. The objective of our study is to evaluate the results after measuring the ABI by Doppler technique in cardiovascular risk patients.Methods: Descriptive, observational study in patients referred to the ABI over a 2 years period (01/2010- 01/2012) in an urban Primary Health Care Center. Variables: age, sex, body mass index, tobacco, hypertension, type 2 diabetes, value of ABI, lipid profile, blood glucose, glycated hemoglobin, glomerular filtration and antiplatelet agents, anticoagulants, statins treatment. Results: Doppler was performed in 183 patients, mean age 67 years, 107 (59.5%) males, 25 (13.6%) current smokers, 140 (76.5%) hypertensive, 130 (71%)

diabetics,100 (54.7%) obese, 106 (58%) dyslipidemia, 25 (13.6%) previous coronary heart disease, 16 (8.7%) stroke, 79 (43%) altered glycated hemoglobin, 25 (13.6%) altered glomerular filtration; 64 (35.5%) patients were taking antiplatelet agents, 11 (6.5%) anticoagulants and 103 (56.3%) statins. ABI was measured only in 130 patients (6.89%) of the diabetic population center (1886 patients with type 2). We found an abnormal ABI (<0.9 y >1.4) in 64 patients (35%) and in 47 (36%) of diabetics; 43 (23.5%) with mild alteration (ABI 0.7-0.9), 12 (6.6%) moderate (ITB 0.5-0.69) and 5 (2.7%) severe one (ABI <0.5). Only 13 (7.1%) were symptomatic. Conclusions

1. The abnormal ABI is frequent in the population with cardiovascular risk factors of our center.2. In a significant percentage the alteration is still mild and the patients are asymptomatic, so ABI is a useful tool for detecting patients with high cardiovascular risk and early intervention in Primary Care.3. We detected that ABI was performed in a very low percentage in the diabetic population despite of the American Diabetes Association indications.

#### P05.331

# Polipharmacy in older adults in a Primary Healthcare Centre.Preliminary Results.

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The importance of polipharmacy derives from the unadecuated use of drugs the increase of adverse effects and the interaction between medecines, that can increase the risk of mortality in the older patients.

Polipharmacy is defined as the use of four or more daily drugs. Estimated prevalence is more than a third of older adults.

**OBJECTIVES:** 

To determine the prevalence of polipharmacy in patients older than 80

years old. To analyze the most prescribed therapeutic groups, the use of recently comercializated drugs and pharmacological interactions. To know the hability of patients to manage their medication

METHODS: Observational descriptive study in Primary Care. A Healthcare Center covering 26000 habitants. The medical records of patients older than 80 that were consuming at least four drugs per day in december 2011 were analyzed.

Measurements: Age, gender, prescribed drugs, therapeutic group, pharmacological interactions (database Stockley interactions alerts) and the assessment of functional status according to the Lawton and Brody scale.

RESULTS: A sample of 143 patients were consuming 4 or more drugs per day (18,9%(143/756) of those older than 80). 62.2%(89/143) were women. Were consuming more than 8 drugs per day, 54.8%(77/143) and 22.1%(20/143) more than 13. The most prescribed therapeutic group was antihypertensives 90.2%(129/143), followed by proton pump inhibitors 72%(103/143) and antiagregant/anticoagulants 64.3%(92/143). Were using benzodiazepines 41.9%(60/143) and at least one antidepressant 34.9%(50/143). 12% (16/143) were consuming new drugs (less than five years commercialization) We observed that 75.7%(108/143) of the patients were taking drugs with at least one potential pharmacological interaction, and 27.75%(30/108) more than four.

### CONCLUSIONS:

We observed a prevalence of polipharmacy in older adults over 80 lower than expected. Almost all patients were consuming an antihypertensive drug and there is a high prevalence of psychoactive drugs use. Most patients can manage their pharmacological treatments.

#### P05.332

Self-reported health among drivers attended in Primary Care in the metropolitan area of Barcelona, Spain. LESIONAT Study.

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**Aim:** To assess the relationship between sociodemographic and driving related variables and self reported health among drivers attended in Primary Care.

#### Methods:

Primary-care based multi-centre, prospective cohort study. The study population included 1938 subjects possessing a driving license from metropolitan area of Barcelona, who attended a participating practice from March to November/2009. Data collection (sociodemographic variables, driving related variables, illnesses, medication intake, alcohol and psychoactive consumption, and self reported health) was performed using a survey carried out by health professionals. Medical records were also cheked. During 2011 and the beginning of 2012 participants were followed up at 2 years using a structured phone survey, performed by a trained interviewers. Measurements: a) driving related variables: traffic collisions (TC) and injuries (TI) year before, use of safety devices, b) main exposure: self reported health-related quality of life, and c) covariates: age, gender, seatbelt use, adherence to speed limits, long-term conditions (LTC) and drugs which increase risk for TC (LTD), psychoactive substance (PS).

#### Results

Mean age of the 1938 participants was 43.82 (±18.66) and 47.3% were men. Those who reported an excellent or very good health were individuals aged 16 to 24 (61,3% vs. 19,5%, p<0,001) as well as subjects from non-manual occupational social class (45,2% vs. 30,5%,p<00,1). A higher percentage of individuals with less educational level reported a regular or bad health (54.6% vs. 28,6% secondary studies vs. 16,8% universitary studies, p<00,1), as well as professional drivers (24,0% vs 11,6%, p<0,001) and those subjects that have at least a chronic pathology (79.9% vs. 20.1%, p<0.001). No difference in self-reported health were observed according to sex, safety measures, history of traffic collision, HTC, HTI nor driving hours per week.

#### Discussion

Younger individuals and those from more favorable social class reported a better health, conversely, professional drivers, individuals with less educational level and those who have at least a chronic pathology reported a worst health. Preventive interventions directed to these specific groups are necessary.

#### P05.333

Therapy quality parameters of autoimmune diseases in an Austrian cohort

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#### Background

Autoimmune diseases can be difficult to diagnose, particularly early in the course of the disease, however early diagnosis and treatment are critical success factors to effectively stop the progression of the disease. In Austria, awareness campaigns aim to improve the chances for early diagnosis and timely treatment by all means. Another quality parameter for treatment is the supply of a Biological after treatment failure of 1-2 DMARDs.

### Objectives

According to the guidelines for drug supply of autoimmune diseases, a timely treatment with DMARDs, and after possible therapy failure costs of supply with Biologicals for patients can be covered by the social health insurance. The goal of this retrospective study on insurance-based patient cohorts from Austria was to describe at which age patients with autoimmune disorders initiate therapy, either with a DMARD or a Biological, as well as the frequency of patients under therapy with a Biological.

#### Methods

The data analysis refers to the accounting data of the Sickness Fund Burgenland and Austrian Social Insurance Authority for Business, and to data of the "Arzneimittelbewilligungsservice-Datenbank (ABS)", an Austrian central database containing information on drug prescription approval. Patients treated with a Biological in the first six months of 2010 were included in the analysis, and data on treatment initiation with a DMARD was assessed in the period 2008 or later.

#### Results

A total of 689.000 insured adults were included in the analysis. 351 patients with autoimmune diseases were identified, where the age at treatment initiation was available. The average age at the start of the therapy with a DMARD or a Biological that ranged from 36,2 years for Crohn's disease (n=65) to 51,5 years for rheumatoid arthritis (n=96).

Out of 100.000 adult persons in the analyzed insurance registries, 50 patients with rheumatoid arthritis, 23 with psoriatic arthritis, 20 with ankylosing spondylitis, 19 with Crohn's disease, 5 with psoriasis, and 4 with ulcerative colitis were treated with a Biological in the first six months of 2010.

#### Conclusion

Our data can be utilized for rational decision-making for eventual adaptation of management of early stages of disease and drug prescription of the mentioned autoimmune diseases.

## P05.334

Mediterranean diet and obesity: a strong inverse relationship. Baseline data from the EVIDENT study

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To evaluate the relationship among compliance of the Mediterranean Diet and parameters associated to atherogenic metabolic profile (obesity, waist circumference and body fat percentage) in patients attended in Primary Care.

Multicentric cross-sectional study. At the end of January 2012, 974 were included at 6 Primary Care Centers of Spain by simple randomization. Subjects were selected from the PEPFAF cohort and those aged 20 to 80 who accepted to participate were included on the study. The study included a structured personal interview, physical examination and laboratory tests. Information regarding compliance of Mediterranean diet and physical activity were gathered by validated questionnaires. Non atherogenic factors influencing compliance of Mediterranean diet were analyzed by logistic regression.

#### Results

We analyzed data from the first 974 patients included in the study. Statistical significant differences were observed at baseline among patients who did compliance Mediterranean diet and those who did not (36.52% and 63.5%, respectively) regarding age, body mass index (BMI), body fat percentage and alcohol consumption. After controlling for confounders, the compliance of Mediterranean diet among obese and type II overweight patients was lower (adjusted ORs: 0.65 [CI 95%: 0.45-0.94], p=0.020 and 0.44 [CI 95%: 0.27-0.69], p<0.001 respectively), as well as those patients with a body fat percentage at limit or obese (adjusted OR: 0,95 [CI 95%: 0.92-0.85], p=0.003) and in subjects with a waist circumference of elevated risk (adjusted OR:0.68 [CI 95%: 0.48-0.94], p=0.021).

### Conclusions

Patients who follow a Mediterranean diet have an approximately 35% lower risk to be a type II overweight and almost 60% less to be overweight as well as to have a less percentage of body fat and waist circumference. Therefore, is pertinent to adopt preventive procedures related to nutrition and to emphasize the compliance of Mediterranean diet in Primary Care.

#### P05.335

Trial for tobacco cessation with intensive advice in diabetic patients: the ITADI project

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#### Aim:

To evaluate the effectiveness of an intensive intervention to obtain continued smoking abstinence in diabetic patients attended in Primary Care (PC).

#### Methods:

Multi-centre cluster randomized trial. 722 type 1 and 2 diabetic smokers >14 years that receive routine diabetes care in participating PC centres of the province of Barcelona, Spain, were included. Participating PC centres were assigned to intervention group (IG) or control group (CG) by simple randomization (1:1 ratio). An intensive, individualized intervention using the motivational interview, conduct therapies and medications, adapted to the stage of change -acoording to Prochaska and DiClemente's model- of the patient, was used in the IG. The number of visits depended on the stage that the patient was in (five for pre-contemplation, seven for contemplation and eight for preparation-action). Patients were able to move forward/backward in their stage. CG received normal care and a brief advice to stop Sociodemographic, anthropometric, smokina. associated pathologies, diabetes related (type, year of diagnosis, treatment, associated complications) and tobacco related variables (age at initiation, cigarettes/day, nicotine dependence (Fagerström test), motivation to quit (Richmond test), attempts to quit, smoking cessation treatment with medications, maximum time of abstinence, phase of stage, tobacco in usual environment, perceived harmfulness of tobacco on diabetes, point prevalence abstinence (smoking abstinence at the time of the visit with a CO <6 ppm), length of abstinence) were collected with a survey undertaken by health professionals and recorded in an electronic data collection system.

# Results

Of the 1077 participants, at the end of the intervention we had information on smoking status of 722 (377 CG and 345 IG). Mean age: 59.7 (±11.3), 74.1% were male. At the end of the Intervention 90 patients from IG (26.1%) and 67 from CG(17.8%) had quitted smoking (p=0,007). The patients who continued smoking from IG reduced more the mean of cigarettes/day (-2 (-10-0) vs. 0(-6-0), p=0,020).

#### Conclusions

This Intensive Intervention in diabetic and smoker patients has been useful to obtain more abstinence. Also, patients who continued smoking have benefit of the Intervention because of the reduction of the number of cigarettes smoked/day.

# P05.336

Ultrasound findings in the liver of patients with chronic alcohol abuse: the contribution of the general practitioner

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Introduction: The ultrasound control (U/S) is essential in diagnosing and monitoring patients after years of alcohol abuse at Primary Health Care . Aim: Correlation of imaging findings of U / S liver control after chronic alcohol abuse. Materials and Methods: We studied 74 Greek individuals of whom 32 (Group I) were chronic alcohol users and 42 (Group II) occasional alcohol users. All patients were monitored with liver ultrasound during one year (2009-2010). Results: In group I, liver cirrhosis was found in 8 out

of 32 patients; in 2 patients with cirrhosis ascites was also evident. In another group of 8 individuals, hepatomegaly and splenomegaly were detected with apparent fatty change of the liver. Also, in 14 persons an increase in size of the liver and liver lipidosis was detected. In group II of 42 individuals, 16 showed a slight increase in liver size and a mild fatty change, while in the rest 26 subjects the results of the ultrasound examination revealed no abnormalities. **Conclusion**: Liver cirrhosis is a common complication in patients with chronic alcohol abuse. In Primary Health Care, general practitioners can monitor the progress of patients with chronic alcohol abuse by clinical examination or laboratory testing and particularly by ultrasound scanning.

### P05.337

Differential diagnosis of primary headache at the emergency department of Laiko General Hospital

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Aim of the study: To address the causes of primary headache in patients that came to the emergence department and the differential approach from the General Practitioner. Material and methods: During the time period 2010-2011 there were totally 276 cases, from which 38% were men aged 16-84 and 62% women aged 16-86 years old. Results: We have recorded all cases of primary headache that were presented at the emergency department. The precise causes of the primary headache are not very clear, but can however cause significant problems at the everyday lives of patients. The main types of primary headache that were identified through clinical or laboratory check were: Migraine at 33%, tension-type headaches at 61% and cluster headache at 6%. During the medical history taking several potential causing factors were detected such as: alcohol consumption (red wine) 31%, sleep deprivation 17%, omitted meal 22%, intense visual stimuli 34%, intense smells 6%, menstruation 29% and frequent use of analgesics 21%. Headache crisis begin in 28% with the so called aura. In 52% of the cases there was a history of other primary headache episode and in 31% there was family history of primary headaches. 4% of the cases were admitted to the hospital. 63% of the cases had taken a pain-killer before coming to the hospital. Conclusions: The correct acquisition of medical history and physical examination of the patient can lad to the proper categorization of headaches from the General Practitioner, who can in the frame of primary health care deal with and give the right treatment to a common medical problem in the population.

# P05.338

Analysis of the upper limbs pain and its correlations with occupational risk factors in nurses

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Aim: The musculoskeletal disorders are highly prevalent among nurses. The purpose of the study was to investigate the prevalence, anatomical distribution of the upper limbs pain (ULP) and the associations of pain with demographic and occupational risk factors in nurses.

Method and materials: A questionnaire included questions related to demografic, psychosocial status at work (PSSW), job characteristics, handling tasks, anatomical distribution of ULP and the perceived general health domain of the SF-36 questionnaire was administered to 150 nurses. The pain lasting for at least 1 day during the last 7 days was evaluated with Visual Analogue Scala. Results: The nurses (mean age 30.25±0.47 years) had been working mean 11.24±0.14 hours per day or night shift. The prevalence rates of shoulder, elbow and wrist pain were 34,7%, 16,7% and 10,7% in nurses, respectively. The pain intensity

decreased from proximal to distal. Pain was frequently bilateral for shoulder, elbow, wrist/hand (86,5%, 88%, 66,6%, respectively). Right and left shoulder pain were correlated PSSW (p<0.05, p<0.01), perceived general health (p<0.05), working hours per week (p<0.05, p<0.01) and the number of patients (p<0.05). The odds ratios (OR) of right shoulder pain and handling tasks were OR=1.48 for turning and repositioning patients in bed and chair, OR=1.34 for lifting devices, OR=1.15 for holding limbs for dressing changes, OR=0.97 for bed making. The odds ratios (OR) of left shoulder pain score and handling tasks were OR=1.55 for turning and repositioning patients in bed and chair, OR=1,24 for lifting devices, OR=0.78 for holding limbs for dressing changes, OR=1.58 for bed making.

Conclusion: The findings reveal that ULP is prevalent in the population of nurses. The job characteristics, handling tasks, psychosocial status at work and perceived general health of nurses contribute the increment of ULP. Biomechanical training of nurses, using lifting devices, adjusted working hours, additional nurse are proposed to decrease the ULP ratio in nurses. Any ULP reduction interventions that aim to improve ergonomic and psychosocial work environments should take this information into consideration.

#### P05.339

Victims of domestic violence are more frequent users of healthcare services: myth or reality?

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Background: Several authors have proved that victims of family violence do not volunteer information on their family relationships. It has also been shown that most victims would disclose their situation if asked by their family/general practitioner (GP). Supposedly, the victims are more frequent users of helthcare services compared to general population.

Methods: A prospective study has been started Feb.1. 2012. Every third visitor of a general practice has been asked to participate in research. A consensual and confidential interview is carried out by the GP, with the purpose of case finding of the possible victims of physical, psychological and sexual violence. Their health records are checked for the number of visits, number of episodes and days of sick leave, number nad days of hospitalisation, nummber of referrals for the period of the past 12 months. The data for the victims of violence will be compared to other patients.

Results: Should the hypothesis be confirmed and the non-recognized victims of family violence are more frequent users of healthcare systems, further efforts should be implemented to actively recognize and help the victims.

#### P05.340

Evaluation of the Patients' perspective using The Patient Assessment of Chronic Illness Care (PACIC) in a University Hospital Family Medicine Outpatient Clinic in İstanbul

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Objectives:Chronic diseases are the major challenge for primary health care. Evaluation of the patients with a patient-centred approachment is fundamental in family medicine. There are a few instruments for measuring chronic care of the patients from their perspective. The Patient Assessment of Chronic Illness Care (PACIC) is used for evaluating the patients' perspective.

Aim:The aim of this study was evaluation of the perspectives of the patients who admitted to Marmara University Hospital Family Medicine Outpatient Clinic (MUFMC) for recieving chronic care. Method:A descriptive study was conducted in 2012 with 184 patients aged 20-80 years. The patients who admitted to MUFMC and have chronic illness for at least one year were included the

study. Sociodemographic features, last physical examination time, reasons for the last visit, frequency of doctor visits, number of the different health care centers visited in the last year were questioned during a face to face interview. We also assessed medication adherence with Morisky self-report scale and evaluated perspectives of the patients with a PACIC instrument. Statistical analyses were performed by an independent samples t test or a Mann Whitney U and chi-square test. A p value smaller than 0.05 was considered statistically significant.

Results:The mean age of the participants was 51±13.74 (22.3%M, 77.7%F). 59.4% of the patients reported that they were examined by a physician last month. %43.8 of them were visited their doctors more than 4 last year. The median PACIC score was 3. There were no differences between age, sexes, frequency of doctor visits, number of the different health care centers visited in the last year and examinatian time for the PACIC score. There was a significant relation between high PACIC scores and high education level of the patients (p=0.008). 38.8% of the patients were motivated for the medication adherence. There were no relationship between Morisky scores and the independent variables mentioned above.

Conclusion:According to our study the patients who have chronic disease had moderate perception. Their medication adherence was low. We suggest that perceptions of the patients about their care and adherence to medications should be investigated for improving chronic care illness approach.

# P.06 - Research

#### P06.01

Mean platelet volume in type-2 diabetic patients from northern Greece

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Objective: Mean platelet volume (MPV), which is widely available in clinical practice, is a newly emerging risk factor for atherothrombosis. The aim of this study was to evaluate mean platelet count (MPLT) and levels of MPV in diabetic patients compared to nondiabetics and to determine the correlation between MPLT/MPV and glycosylated haemoglobin (HbA<sub>1C</sub>), patient age and duration of diabetes, respectively.

Methods: The study was conducted in Health Centre (HC) of Soxos. We measured MPV in 80 type-2 diabetic patients and 150 non-diabetic individuals matched for age and sex. Venus blood samples from diabetics and controls were drawn in EDTA tubes. PLT and MPV were estimated in automatic blood counter (SYSMEX K-4500). For all diabetic subjects the HbA<sub>1C</sub> was measured from the same blood sample. The HbA<sub>1C</sub> determination was based on the turbidimetric inhibition immunoassay (Tina-quant HemoglobinA<sub>1c</sub>, Roche HITACHI 902). Diabetic patients were grouped into three groups according the HbA<sub>1C</sub> levels [group A (HbA<sub>1C</sub> < or 7%) n=19, group B (HbA<sub>1C</sub> 7.1-8.0%) n=34, group C (HbA<sub>1C</sub> > 8%) n=27].

Results: The mean age of the diabetics and controls was 68.6 and 62,3, respectively. Median duration of diabetes was 19,7 years. MPV was significantly higher [10.64+/-1.69 fl vs. 9.18 +/- 0.91 fl (p<0,05)] and MPLT was significantly lower [255.45 +/- 70.55 x 10(9)/l vs. 299.63 +/- 86.55 x 10(9)/l (p<0,01)] in diabetic patients compared to age and sex matched healthy controls, respectively. Among diabetic groups, A and B, there was no significant positive correlation between MPLT/MPV and HbA<sub>1C</sub>. In patients with bad glycemic control (group C) MPV was significantly decreased compared to baseline MPV [10.69+/- 0,97 fl vs. 9.0 +/- 0.6 fl (p<0,01)].

Conlusions: We have found that diabetic patients have lower platelet cound and higher MPV values than the nondiabetic controls. One can suppose that platelet activity could depend on metabolic disorders of the diabetic subjects and contribute to increasing the risk of atherothrombotic complications.

#### P06.02

PreTab: Maternal smoking and premature birth, a case-control study

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INTRODUCTION Premature birth (PB) is defined as childbirth before 37 weeks of pregnancy. Despite notable advances, preventing PB is still a great challenge for modern Medicine. The prevalence of PB has increased in the last decades, reaching 6.9% in 2010 in Portugal. PB often results in high morbidity/mortality and the inability to reduce it has to do with the remaining uncertainty about its causes. Maternal smoking has been implicated as a possible avoidable cause of PB.

OBJECTIVES To determine the prevalence of premature births in a Portuguese Maternity Ward, during 2010; to characterize its causes; to verify if maternal smoking constitutes a risk factor for PR

METHODS We performed a hospital-based, case-control study, with retrospective data collection. We analysed the clinical files of parturients in 2010 and defined the cases as every childbirth before 37 weeks of pregnancy. The controls, childbirths with at least 37 weeks of pregnancy, were selected by sistematic sampling (2.1:1). Multivariate logistic-regression models were used for case-control comparisons (SL = 0.05; 95% CI). Software: PASW v.18.

RESULTS From a total of 2279 childbirths in 2010, 154 were cases of PB, accounting for a prevalence of 6.3%. We selected 318 controls. There was a higher percentage of smokers amongst the cases of PB (11.7% vs 6.9%), with an odds ratio (OR) of about 2 (Cl=0.96-4.14), without statistical significance (p=0.063). In the selected logistic regression model, the determinants of PB with statistical significance were: previous PB (OR 5.7; Cl=2.09-15.84), maternal infection (OR 3.4; Cl=1.05-10.76), twins (OR 24.1; Cl=5.31-110.10), placental disorders (OR 33.3; Cl 4.14-268.49), arterial hypertension (OR 5.1; Cl=2.12-12.43) and parturient's age (OR 1.1; Cl=1.01-1.10).

DISCUSSION The prevalence of PB found in our study is similar to other studies as well as the statistically significant determinants. We did not reject the null hypothesis but we cannot exclude a type II random error. Information and control selection bias must also be considered. The Family Physician has a crucial role in reducing PB, namely with preventive interventions to avoid risk factors such as smoking and in the early detection and hospital referral of highrisk cases.

#### P06.03

Antenatally detected ventriculomegaly in South Wales: Incidence and outcome for a seven year cohort

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Aim: Ventriculomegaly is a common antenatally detected abnormality, yet UK data is sparse. We aim to define the incidence, associated anomalies and outcome for a UK cohort. Methods: All cases of antenatally detected ventriculomegaly (VM) attending a single regional fetal medicine unit from May 2001 to October 2008 were evaluated. Ventriculomegaly was defined as: mild (10-12mm), moderate (12-15mm), severe (> 15mm) by coronal slice at level of atria on ultrasound (U/S); progressive ventriculomegaly: diameter increased >2mm, regressed: reduced >2mm, and stable: a change of < 2mm. Co-existent anomalies, investigations and outcome were analysed, and, where available, infant records at age 6/12 were examined.

Results: A total of 210 cases were identified, giving an incidence of 1.5 cases per 1000 live-births in South Wales. Among these, 36.0% were isolated and 64.0% non-isolated. Ventricular dilatation was mild in 95/197 (48.0%), moderate in 38 (19.4%) and severe in 64 (32.7%), where 70% of the mild cases were isolated. Severity was significantly associated with associated anomalies (p<0.0001). Of the mild VM cases 27% underwent termination of pregnancy. Of 108 cases with consecutive data, mild VM was more likely to regress or remain stable than moderate/ severe VM (p<0.0001). There were 89 live births, of whom 48% had mild, 24% moderate and 15% severe VM. Neither infant gender nor maternal smoking were significantly associated with degree of ventriculomegaly.

Postnatal details were available on 48 children, 15 (31%) of whom were normal.

Conclusion: With an incidence of 1.5/1000 live births in this UK cohort, ventriculomegaly is confirmed as one of the commonest antenatal abnormalities. Regressive cases are more likely to be mild, isolated and have a normal outcome than progressive cases. The positive outcome for mild (10-12mm) cases in this series raises the question as to the appropriateness of a 10mm cut off. A large scale prospective study with detailed paediatric follow up is urgently required to define optimal cut-off values.

#### P06.04

Pain assessment in the daily routine of general practitioners which tool for which patient?

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#### Introduction

The prevention of pain and effective pain management is considered essential for optimal medical care. Specific measures to detect pain and evaluate interventions is the key to adequate analgesia. Reactions to pain may be behavioral changes or physiological indicators. A number of self reporting tools, behavioral pain assessment tools and measurement of physiological pain indicators have been developed to assess and quantify pain.

Nevertheless, assessing pain remains difficult since pain is an individual's subjective and complex experience. To communicate pain, cognitive skills are required, which are not yet developed in children under 3 years, have been lost in demented patients and are not available or only partially in people with mental retardation

#### Material and Methods

A systematic literature search was performed to identify valid and reliable pain assessment tools to self-assessment for people without cognitive deficits and external assessment tools for people with cognitive deficits, which prove to be practicable in the daily routine of general practitioners. The search terms were used as a combination of: pain assessment, measurement tools, scoring, infant neonates, children, demented people, mentally retarded, cognitive impaired.

#### Results

A systematic database query based on defined inclusion and exclusion criteria identified a total of 48 pain assessment tools. NRS,VAS [2] and Face Pain Scale - Revised [3] are suitable selfreport tools. For people with moderate to severe cognitive impairment the r-FLACC tool [4], for people with dementia the BESD tool [5], the BISAD tool [6, 7] and for children up to 4 years the KUS Scale [8] a appropriate measures to assess pain.

#### Conclusion

Effective pain measurement has to focus on the uniqueness of every person, its individual needs and cognitive capacity. Appropriate pain assessment tools are the baseline for effective pain management, monitoring and finally the evaluation of interventions. The consistent use of pain assessment tools lead to further optimization and improvements in pain management.

# P06.05

Methodology of meeting of patients' expectations in primary health care: MISS-21 experiment in Lithuania

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Research objective: To test suitability of the MISS-21 questionnaire for research on meeting patients' expectations in primary health care in Lithuania.

Research method: Richard Meakin's and John Weinman's Medical Interview Satisfaction Scale 21 (MISS - 21) was used. The questionnaire has been translated into the Lithuanian language. Pilot testing of the MISS-21 was carried out, the overall Cronbach alpha coefficient for the questionnaire and one pertaining to each subscale was calculated. A random sample of every third patient visiting a general practitioner at the Centre of Family Medicine at Vilnius University Hospital Santariskiu Clinics between April 2010 and September 2010 was asked to fill in the MISS-21. An average score of satisfaction with consultations, average score of each subscale and their influence on the general patient satisfaction, as well as inter-correlation of the subscales were calculated.

Results: Assessment did not distort the accuracy and essence of the statements. Having carried out pilot testing it has been established that the questionnaire is convenient for the patients due to the small number of statements and evaluation using a Likert scale. The overall Cronbach alpha coefficient is 0.86. Each subscale's alpha ranges between 0.5664 and 0.8698.

251 guestionnaires were distributed. Response rate was 85 percent. Answers to the questionnaire statements were evaluated on a scale of 1 to 7 points. General satisfaction with consultations was evaluated at 5.84 points. Out of the four subscales (Distress Relief, Communication Comfort, Rapport, Compliance Intent) the Communication Comfort subscale was given the lowest assessment (5.29 points) according to statistical significance. The greatest influence on the general satisfaction with the doctor's consultation was friendliness and understanding (Rapport subscale). The statistically strongest reliable correlation was established between the Distress Relief subscale and the Rapport subscale.

Conclusions: Internal validity of MISS-21 in the Lithuanian language is sufficiently high and suitable to be used to research how patient expectations are met in Lithuania. Research on the general practitioners' consultations shows that the components of friendliness and understanding received the highest evaluation, and the communication suitability component - the lowest. General patient satisfaction is largely influenced by the friendliness and understanding component.

# P06.06

# Blood Brotherhood Ritual: a Disregarded Way of Transmission of Blood-Borne Infectious Diseases

M. Isik, U. Avsar, Z. Cansever, T. Set, H. Acemoglu, A. Khan; Ataturk University Medical Faculty, Erzurum, Turkey.

# Introduction:

Blood Brotherhood (BB) ritual is one of the several kinds of alliances or ties that bind people together in a way analogous to, but distinct from, kinship ties. This BB is to be considered as nonsexual risky cultural behaviors in the spread of blood borne diseases however neglected by health professionals and very little literature available. Therefore this study is aimed to show the prevalence of blood brotherhood (BB) and to discuss the role BB for transmission of blood borne diseases with a very high-risk voung population.

# Materials and Methods:

This cross sectional study was conducted in 9th to 11th grade at 29 high schools in Erzurum city center in Turkey. Data collection was completed between February and May 2007; the sample of 2950 students was selected randomly by using the school registries. However a total of 2311(78.33%) students have completed the survey. It was a part of a project of peer lead health education blood borne diseases.

#### Results:

The proportion of the high school students who had BB was 24.1%. The proportion of BB was higher in technical high school than other schools (range 34.1% to 43.3%). There was a statistically significant difference between boy (27.0%) and girls (21.0%) (P=0.001). Almost all participants were not aware about the role of BB in transmission of blood borne diseases.

# Conclusion:

The results depict that high school students have blood brotherhood ritual however they are not aware of the risk of transmission of diseases by this behavior. Hence there is a need of a campaign for education of peoples; and family physicians can play a vital role by counseling their patients regarding this disregarded behavior.

#### P06.07

Knowledge of Primary Care Health Workers regarding complementary and alternative medicine (CAM) in Erzurum, Turkey

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#### Δim

The purpose of this study was to assess whether family physicians and allied health workers are aware with and have adequate knowledge about complementary and alternative medicine (CAM). Material and method:

It is a cross-sectional study conducted during April to June 2011 at family medicine health care clinics in Erzurum, Turkey. There were 231 family physicians in 72 family medicine health care clinics were working together with an allied health professional (nurse, midwife or health technician). Out of 462 participants invited, 333 (72.0%) accepted to join. The researchers have developed a questionnaire for assessing the knowledge of the respondents regarding CAM. It contains total 7 questions. The first three questions is comprised of pictures of different plants (linden, thyme, and daisy) while other questions have some answers to be ticked by respondents.

#### Results:

Results for 333 participants were analyzed. Mean age was  $32.3\pm6.2$  years. 193 participants (58.3%) were females while 138 participants (41.7%) were males. A total of 158 family physicians (47.7%) and 173 allied health professionals (52.3%) have participated in the study. Participants' mean working experience was  $8.7\pm5.1$  years. The majority (n=53; 36.6%) had knowledge about herbal treatment followed by 47 participants (32.4%) who were aware about acupuncture. The most recognized herb was daisy (n=83; 24.9%) 89.8% knew the method for applying acupuncture. When compared the knowledge level with different demographic features, significant difference (p=0.001) was found only in between physicians and other health workers. The other variables like gender, age or working experience did not show any significant difference.

### Conclusion:

Both health workers have limited knowledge with significant difference however ready to enhance their knowledge. Therefore it is recommended to provide training opportunities for health workers to learn more about CAM or perhaps including in curriculum will enhance the standardization of the training and provide chance to learn and practice it more and more for effective use for patients.

### P06.08

Compare of electro-acupuncture and auricular acupuncture in the treatment of non-diabetic obese women

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**OBJECTIVES:**We aimed to study the efficacy of electro-acupuncture (EA) and auricular acupuncture (AA) on the non-diabetic obese women.

RESEARCH DESIGN AND METHODS: 60 non-diabetic obese women participated in the study. They were divided into the EA+AA group (n=30, BW=76.8±5.7kg) and AA group (n=30, BW=73.6±3.6kg). The subjects in EA+AA group received a twelve body acupoints on the Stomach, Spleen meridians and Conception Vessel at an interval of once every other day with AA for 3 months. The subjects in AA group received the local treatment on the Auricular points including 'Hunger' and 'Stomach' points (for satiety and fullness) and 'Shenmen' (for sedation and analgesia) for 3 months. Their body weight (BW), body fat (BF), and waist circumference (WC) were measured and compared before and after the intervention.

**RESULTS**:Subjects among the EA+AA group had a greater reduction (P<0.05) of WC (7.4cm, 8.8%) than those among the AA group (2.5cm, 2.9%). Furthermore, BF and BW also decreased more in the EA+AA group (15.1%, 6.3kg, respectively) than the AA group (6.06%, 3.2kg, respectively).

CONCLUSIONS: Stimulation over the Stomach, Spleen meridians and Conception Vessel may increases metabolism and relieves edema. The external ear (auricle) is innervated by several nerves, including vagus, glossopharyngeus, trigeminus, facialis, and branches (the second and third) of the cervical spinal nerves. The vagus nerve is thought to interact with cranial nerves and those of the digestive tract. It is hypothesized that stimulation of the auricular nerve causes interference to appetite signals from the gastrointestinal tract. Application of the EA over several acupoints on the Stomach, Spleen Meridians and Conception Vessel with AA had a better therapeutic effect in reducing WC, BF and BW than using AA alone in non-diabetic obese women. The electro-acupuncture may be considered to integrate into a multidisciplinary approach for the obese subjects in the further future.

#### P06.09

The Role of Endotoxins on Pathogenesis of Colon Polyp: Case-Control Study

#### L. Kang-Kon

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**Background:** Endotoxins have been known to be associated with the occurrence of various chronic diseases. This study was conducted to investigate the correlation of endotoxins with colon polyps via a comparative analysis of the experiment group with colon polyps or precancerous lesions of colon cancer and the control group.

**Methods:** A total of 145 patients (74 patients in the experiment group and 71 patients in the control group) who had undergone colonoscopy participated in this study. The endotoxin levels in both groups were measured and analyzed.

**Results:** The age, BMI, and endotoxin level were significantly higher in the experiment group than in the control group. The endotoxin level was still significantly higher in the experiment group than in the control group after the age and BMI were adjusted. The endotoxin level significantly increased in proportion to the number of colon polyps. It also significantly increased in the group with tubular adenoma with high-grade dysplasia.

**Conclusion:** The endotoxin level showed a significant correlation with colon polyp occurrence.

#### P06.10

Using Twitter in health events: World Aids Day pilot study to think over public health applications for social media

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# Introduction and justification

Twitter is an Internet micro-blogging service that allows users to post short messages (140 characters) about thoughts, feelings and opinions. Twitter has been proposed by several studies as a means to track public health trends such as influenza outbreaks and swine flu, but more information is needed about its usefulness and potential health applications.

# Objectives

To analyse the impact of health events on Twitter messages and to suggest its usefulness in public health activities.

#### Methods

Observational study based on monitoring Twitter messages posted between November 18 and December 4, including the World Aids Day (December 1). These messages were obtained using keywords such as "AIDS" and "SIDA" via Application Programming Interfaces (APIs) search engine. Variables included: total and daily number of tweets, language, tweets content, re-tweets, posting device, user's id and location. SPSS statistics software was used to analyze the content of the messages database created.

### Results

During the days of the study, there were more than 1.1 million tweets related to AIDS in English, Spanish and other languages, (over 50% were posted on December 1 and the day before and after it). Information about location was not usual. Mobile and smart phones were the devices more used to post messages (tweets). General information links about AIDS, World Aids Day and jokes represent the most numerous re-tweets. There were over 0.7 million unique users.

### **Conclusions**

Health events generate an important interest and have a big impact amongst Twitter users. For that reason, Twitter and Social Media in general, could be used as a means to spread news and health information of general interest via web, above all, using mobile phones (m-Health) with diverse potential educational and public health purposes. More analysis and qualitative studies are necessary, to better know user's profile and the semantic of these messages for Twitter to become effective as healthcare and public health tools.

### P06.11

Anti-aggregation in Diabetes Mellitus Type 2 - Do we submit to clinic guides?

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Purpose: The purpose of this research is to know the number of diabetic patients type 2 that exist in our area and the degree of a attainment of criteria A. D. A. 2.010-2.011.

Design & Methods: Whe study an adult population of 6.239 people, both males and females, from 15 to 96 years old. Their habitat is semi-urban. We find 442 patients with mellitus diabetes type 2 using criteria A. D. A. 2.010-2.011.

Results: Within the total of diabetic patients type 2, under highly cardiovascular risk, only 36 of them are anti-aggregated with A. A. S., with a dose of 100 mg./ a day.

Conslusions: In our area the population of anti-aggreged patients is small in spite of the persistence of different Clinic Guides considering the adult diabetic person as a highly risked patient for developing cardiovascular events. There are clear indications:

- It is recommended A. A. S. to all diabetic patients with evidence of cardiovascular illness.
- But the effects of anti-aggregates in low risk diabetes patients without vascular affectation are not well established. "CONTROVERSY".
- Outline that diabetic patients get higher punctuation in SCORE than no diabetic patients. Points got x 2 (women), points got x 4
- It is recommended A. A. S. in diabetic patients that also have, one or more risk factors.-

Significance of fecal occult blood testing for colorectal carcinoma

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Colorectal cancer is the third most commonly diagnosed cancer in the world. The statistics is no different in Serbia. This cancer can take many years to develop, so that's why early detection greatly

improves the chances of a cure. Recognizing the problem, and in order to prevent it, our Primary Care Center is insisting on colorectal cancer screening. Our goal is to evaluate significance of fecal occult blood test ( FOBT ) in screening for colorectal cancer. This is a pilot study of our national screening. It is based on fecal occult blood test using Hexagon OBTI. This immunochemical test

provides sensitivity of 90%, only one stool sample is enough, and no food restriction is needed.

We tested 6050 people who were between 50 and 70 years old, during the period of 20 months starting on April 2010. 287 patients (4,74%) had positive results and were sent to colonoscopy, but because of a very few colonoscopy departments in Belgrade, 64 patients are still waiting to be examined. So, 223 colonoscopies have been done. 25 patients were diagnosed with colorectal carcinoma which was 11,2% from all the positive results. 94 ( 42,15%) polypectomias have been done, 2 patients had Morbus Crohn, 5 patients had Colitis Ulcerosa. The rest of the patients with positive results were diagnosed with: diverticulosis( 25 ); haemmorhoides (40); colon irritabile (5); dolihocolon (1); spastic colon (1); both haemorrhoides and diverticulosis (5). Only 21 patients had normal negative colonoscopy report after positive FOBT.

We find our study very important, because it led us to the significant result of 42,15% patients with polyps (considering their ability to develop into carcinoma, they were all removed during colonoscopy), as well as 11,2% patients diagnosed with colorectal carcinoma among all the positive patients. All 25 patients with carcinoma were diagnosed early stage, and were immediately sent to the surgeon to be operated.

#### P06.13

Barriers and facilitators to the use of the nursing process in primary care

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Gerencia Atencion Primaria (Sacyl) Salamanca. Spain, Salamanca, Spain.

Objectives: Identify barriers and facilitators to the use of the nursisng process for primary care nurses.

Method: We performed two focus groups and six open interviews with leader nurses in the primary care of Salamanca. They were considered the following variables for the formation of groups: area (urban and rural), gender and age (20-40, 41-60 years). The sessions were taped and they lasted 1.30 hours. The groups had a moderator who followed a dash directed to the objective of the study and 2 observers. It was performed the view and the literal transcription of the recorded material to do the data analysis.

Results: The most significant identified barriers are: Not having a computer tool to work the plans of care, the poor training, the lack of time, the excessive care burdens and the demotivation of the professionals.

They were recognized the following facilitators: standardization of care plans, incorporation of taxonomies NANDA, NIC, and NOC into electronic medical records, specific training in working hours, recognition of the work of nurses by the organization, including nursing objectives in the annual planning and having a responsible for nursing care.

Conclusions: Nurses value in a very positively way the use of the nursing process for their profession development; although there are difficulties in its implementation in daily practice. The weak development of computer applications care plans and the lack of computers in a large part of consultations hinder the use of the nursing process.

The lack of recognition of nursing work by the organization is a source of dissatisfaction and demotivation of the professional. The curriculum should include training on care plans with a common language that allows a better professional development.

Support: Junta de Castilla y León. Spain. GRS 504/B/10

#### P06.14

# Questionnaire to measure the attitude, knowledge and barriers perceived about Nursing process

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Objectives: To design a questionnaire to measure the attitude and barriers perceived of Primary Care Nursing Professionals about nursing process and to assess metric properties.

Methods: In order to determine the dimensions of the questionnaire and the questions that integrate it, two discussion groups were formed and 6 interviews were realized to nursing leaders in the primary care setting of the Salamanca Area. A pilot questionnaire was designed and applied to a sample of 36 nurses. We evaluated the reliability, by means of Cronbach's alpha and questions reponses patterns. The structure of the scale was analyzed by means of a factor analysis.

Results: The pilot questionnaire is integrated by a scale of attitudes with 36 items, 8 questions about formation, 14 questions about barriers for the practice of nursing process and 7 questions about understanding and ease of administration.

The answer to the pilot questionnaire was 88.9%. Cronbach's alpha of attitudes' scale was 0,81. Seven factors were identificated after a factor analysis that explains 75.7% of the total variance.

After analyzing the reliability and the response pattern of each question of the pilot questionnaire and the factor structure, 12 questions of the attitude scale were eliminated. Cronbach's alpha of this reduced scale is 0,89. The factor analysis extracts a total of 6 factors that explain 75.6% of the total variance. The identified dimensions are: Benefits of the practice of nursing process. Prestige and recognition professional. Institutional elements. Qualification. Development of the nurse profession and repercussion on the cares.

Discussion: The resultant questionnaire is simple and of easy application. Adapted to be applied self-administered, reliable and it presents a structure which includes the areas identified by the Primary Care Nursing Professionals. It reunites the suitable metric characteristics in order to determine the attitude of the professionals with respect to nursing process.

Support: Junta de Castilla y León. Spain. GRS 504/B/10

### P06.15

# Conducting A Successful Vaccine Trial In A Primary Care Clinic

### F. S. Lim;

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### AIM

Vaccine clinical trials are not usually done in primary care. The aim here is to conduct a vaccine study in a busy primary care clinic, as part of a multi-center phase 3 clinical trial, assessing the immunogenic consistency and safety of 4 compositions of a H5N1 vaccine.

# Materials and methods

Healthy patients which meet inclusion criteria were recruited from

The patients were randomly assigned to 6 groups to receive 2 doses of different compositions of the augmented vaccine (4 groups) or non-augmented group (2 groups), separated 21 days apart.

Blood was taken from each patient for immunogenicity analysis, before immunization and 21 days after each vaccine dose. Reactogenicity (any reactions to vaccine) and safety data including serious adverse events were also obtained from the patient.

# Results and findings

30 subjects were recruited in the primary care clinic.

Good immunogenicity, reactogenicity and safety data were able to be obtained from the patients. Data pooled from the local centers revealed the 4 vaccine compositions were consistent where immunogenicity is concerned. The vaccine also had acceptable safety and reactogenicity data.

The 3 key success factors for doing a successful the trial in the clinic were:-

- 1) having the support of the leadership, especially the local clinic leadership as the clinic was busy.
- 2) having a dedicated assistant to support the trial
- 3) providing good training for all those involved.

### Conclusion

It is possible to do a successful vaccine trial in a busy primary care clinic, if given the necessary support and resources.

### P06.16

# Electronic cigarette and tobacco cigarette smoking:Do they affect lung function?

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Background: The electronic cigarette (e-cig) has become widely popular worldwide despite the lack of evidence on its safety. The purpose of this study was to assess and compare the acute and short term effects of e-cig and tobacco cigarette smoking on lung function.

Methods: Fifteen smokers (≥15 cigarettes/day, 8 males, 7 females, 36.83±9.85 years) volunteered. Participants attended 3 trials administered in a random order with a 5-7 days interval each. In the control trial they were asked to "smoke" an unlit-cigarette of their own brand for 30 minutes. In the tobacco cigarette trial they were asked to smoke two tobacco cigarettes of their favorite brand within 30 minutes. In the e-cig trial they were asked within 30 minutes to puff an e-cigarette in order to absorb enough nicotine to match two of their favorite tobacco cigarettes. Measurements were performed before, immediately after and one hour after smoking. We assessed lung function by spirometry (FVC, FEV₁, FEV₁/FVC ratio, PEF, FEF₂5-75), the fraction of exhaled nitrous oxide (FeNO), exhaled carbon monoxide (CO) and serum cotinine levels.

Results: Lung function was significantly affected immediately tobacco cigarette smoking, although one hour later most of the lung function parameters had returned to normal levels. In particular tobacco cigarette smoking decreased significantly FEV1 (z = -1.9, P = 0.05), FEV1/FVC (z = -2.48, P = 0.013), FEF25.75 (z = -2.33, P = 0.02), and FeNO (z = -1.97, P = 0.049), and increased significantly CO (z = -3.42, P = 0.001) and cotinine (z = -3.24, P = 0.001). No significant changes in lung function were observed in ecig smoking, but cotinine was significantly increased immediately after (z = -3.29; P = 0.001) as well as one hour following (z = -3.32; P = 0.001) smoking.

Conclusions: Acute tobacco cigarette smoking causes a mild lung obstruction and a small increase in lung inflammation that last <1 hour. Smoking the tested e-cig augments serum cotinine levels yet it does not seem to affect lung function acutely. More research is needed to evaluate the safety of e-cig use.

### P06.17

# Necessity for smoking cessation:How are junior doctors engaged depending on their smoking status?

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Background: Despite the antismoking policies and laws, the Greek smoking population is still among the highest in the world. We

studied junior doctors practicing in a rural area in central Greece, their relationship with smoking and their attitudes and practice towards smoking cessation.

Methods: We addressed to the junior doctors working in the Karditsa prefecture as rural doctors or residents in the primary care setting. A multiple-choice questionnaire regarding smoking behaviour, attitudes and knowledge on smoking cessation was supplied to 71 doctors.

Results: Sixty-two doctors returned the questionnaire (87.3% response rate), 33 men and 29 women aged 29.81±3.85 years old. Smoking status: 29 smokers (46.8%), 28 non-smokers (45.1%) and 5 former smokers (8.1%). Mean age of smoking initiation: 19.06±2.49 years. Of the smokers' group 58.6% were heavy smokers (>15 cigarettes/day). Nineteen smokers (65.5%) desire to quit and 15 (51.7%) tried to quit in the past. Most doctors (72.6%) ask their patients about smoking and almost all (95.2%) claim that they give advice on quitting. Smoking status was not found to influence doctors on asking their patients about smoking  $(x^{2}_{(4)}=3.253,p=.516)$  but heavy smokers were less likely to promote smoking cessation (F<sub>(2,5)</sub>=7.978,p=.028). When questioned about their level of knowledge on smoking cessation only 17 (27.4%) think it is adequate. The majority of doctors (82.3%) have never attended a course/seminar about smoking or a smoking cessation centre, even though 35.3% of them state that they would like to. Attendance of a relative seminar was found to have positive impact promoting smoking cessation to their patients  $(x^{2}_{(6)}=13.645,p=.036)$ . Finally, only 25.8% are aware of the existence of guidelines on smoking.

Conclusions: The prevalence of smoking among junior doctors in rural central Greece is high and in the majority they are heavy smokers. Most of the doctors ask their patients about smoking and provide advice on quitting even though less than 30% believe that have adequate knowledge. Moreover, the attendance of seminars was significantly related to doctors' engagement with smoking cessation; thus more education is needed for young physicians.

Relations between anthropometric parameters and sexual activity of Hungarian men

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In the last decades there were visible achievements in the evaluation of sexuality-related problems and issues regarding sexual life. However, there are limited reliable and comparable data on the average values of sexual activity and its relation to anthropometric parameters in different populations and age

This study tries to examine the association anthropometric parameters and male sexual activity.

A clinical population of 1,146 male patients between 25-45 years of age attending an outpatient clinic of andrology in Budapest (Hungary) was examined and questioned in a medical setting. Age, body height, weight, body mass index and self-reported sexual activity were the main outcome measures.

The patients were allotted into age groups (25-29, 30-39y and 40-45y), the youngest group showing the highest coital activity. Although obesity and overweight were present in 61% of the study population, no connections between BMI and sexual activity were apparent. Comparing less active persons to those reporting at least two intercourses per week, significant difference was found between body height groups. Men below 170 cm reported higher activity than men over 180 cm.

Despite the fact that the prevalence of obesity among younger generations is increasing, it has had no visible influence on the sexual activity of this age cohort as yet. Our data suggest that sexual activity was not clearly related to other anthropometric parameters, and depends mainly on the characteristics of the population examined. There is a great need for large-scale studies worldwide, on larger representative samples, using similar methods, to acquire reliable data from other nations and different age groups.

### P06 19

# Does fat mass index predict metabolic syndrome better than total fat mass?

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Metabolic syndrome and obesity are one of the major medical concerns of the future society.

In this study we aimed to compare the cut points, defined to express the excess total body fat (TBF) percent and increased fat mass index (FMI) as a predictor of metabolic syndrome (MS). A total of 162 obese (body mass index [BMI] > 30 kg/m2) patients' TBF were measured by "Tanita TBF 300 Body Composition Analyzer". Patinets divided into two groups called normal obese (NO) and fatty obese (FO) according to the cut points determiend in De Lorenzo. NHANES and Switzerland models and cut point determined for FMI (Table 1). Then we compared MS (National Cholesterol Education Program critera is used) ratio in NO and FO groups. The number of FO patients according to the DeLorenzo, NHANES, Switzerland cut points and FMI cut point were respectively 142 (88%), 112 (69%), 119 (73%) and 88 (54%) (Table 2). The ratio of MS among FO patients were respectively 34% (p:0,916), 35% (p:0,858), 34,5% (p:0,853) and 42% (p:0,02) (Table 2). According to these results, while cut of points for FMI were significantly associated with MS, the others were not. The number of MS among FO patients were highest (%42) and the patients without MS among NO patients were the highest (%76) according to the FMI cut point. Different cut points used to define excess body fat by gender and age groups according to De Lorenzo, NHANES and Switzerland seems not to predict the MS significantly, but cut point for FMI significantly predicts MS. Gender, age, race, height and even other anthropometric measures specific cut points for TBF, may increase the value of TBF to predict MS and other morbidities.

Cut points for excess total body fat percents according to different models and FMI					
Age groups (year)	De Lorenzo (%)	NHANES (%)	Switzerland (%)	FMI (kg/m2)	
Male					
35-44	30	29.1	28.1	8.3	
45-54	30	29.1	28.7	8.3	
55-64	30	29.1	30.6	8.3	
65-74	30	29.1	32.6	8.3	
Female					
35-44	30	37.2	35.9	11.8	
45-54	30	37.2	36.5	11.8	
55-64	30	37.2	40.5	11.8	
65-74	30	37.2	44.4	11.8	
FMI: Fat mass index (total body fat[kg]/ square of height [m2])					

MS	MS prevalence in NO and FO patients according to cut points of different Models and FM								
	De Lorenzo NHANES Switzerland FM								
	NO	FO	NO	FO	NO	FO	NO	FO	
MS	13	94	34	73	29	78	56	51	
(+)	(65%) (66%) (68%) (65%) (67%) (65.5%) (76%) (58					(58%)			
MS	7	48	16	39	14	41	18	37	
(-)	(35%)	(34%)	(32%)	(35%)	(33%)	(34.5%)	(24%)	(42%)	

MS: Metabolic syndrome

NO: Normal obese

FO: Fatty obese

FMI: Fat mass index (total body fat[kg]/ square of height [m2])

### P06.20

# Prevalence of lower extremity artery disease in high-risk patients (using ankle-brachial index - ABI) in Romania

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#### Context

- patients diagnosed with LEAD (lower extremity artery disease) have an increased risk for cardiovascular events, therefore early diagnosis and intervention improves the prognosis
- ABI is an inexpensive test which diagnoses LEAD (esential in asymptomatic LEAD) and is a strong predictive factor for cardiovascular events.

Objective: to determine the prevalence of LEAD (low ABI) in high-risk patients in Romania

Design, setting and participants:

The survey was conducted from November 2010 to February 2011, involving 800 patients living in different regions of Romania. Including criteria: patients aged >18 years, with one or more cardiovascular risk factors.

Patients were screened for LEAD (ABI test). A low ABI ( $\leq$  0.9) is considered as an indicator for LEAD.

Data was also recorded about patients medical history (especially cardiovascular diseases), cardiovascular risk factors, presence of symptoms/signs suggestive of LEAD, current treatment (antiplatelet agents)

#### Results:

- 50% of patients included in survey had low ABI (≤ 0.9)
- Baseline characteristics of the included patients with low ABI:
- Average age was 60 years, and distribution by gender was balanced  $\,$
- The main identified risk factor was dyslipidaemia (84%)
- Smoking was identified in 33% of patients
- Medical history: 35 % of patients were previously diagnosed with coronary artery disease, 19% with cerebro-vascular diseases, 17% with LEAD
- Signs and symptoms: 56% of patients had intermittent claudication, 43% of patients had decreased/absent pulse, 42% of patients had skin changes
- Medication: 28% of patients had no treatment with antiplatelet agents

Conclusions: Despite the fact that LEAD is an important predictive factor for cardiovascular events and mortality, it is still under-diagnosed and under-treated in Romania.

### P06.2

Appropriateness of the indication of anticoagulant therapy in patients with non-valvular atrial fibrillation

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Aims and background. Anticoagulant therapy is the most effective treatment in non-valvular atrial fibrillation for prevention of tromboembolism. The purpose of the study is to evaluate the appropriateness of anticoagulant therapy in non-valvular atrial fibrillation in general population at primary care center with European Society Cardiology criteria.

Methods. A descriptive, cross-sectional study was carried out in an urban primary health care center in Barcelona, Spain. The total number of patients with non-valvular atrial fibrillation of the center were studied (electronic database). The variables analyzed included demographic data, treatment (anticoagulant or antiplatelet therapy), and criteria for anticoagulant therapy: indicate treatment with CHA2DS2-VASc score ≥2 points (one point with cardiac failure, hypertension, diabetes mellitus, peripheral vascular disease or myocardial infarction, age 65-74 years, and female sex; and two points with age ≥75 years, and ictus or transient ischemic attack or tromboembolism); and non-indicate treatment with HAS-BLED score ≥3 points (one point with systolic pressure >160

mmHg, ictus, bleeding, labile INR, age >65 years, liver disease, renal disease, drugs, and alcoholism).

Results. 256 patiens had a non-valvular atrial fibrillation. The mean age was 78.6 years old (SD 9.1), and 56.6 % were women. The 5.1% of patients were not treated with anticoagulant or antiplatelet therapy, 75% were treated with anticoagulants, and 19.9% of them with antiplatelet drugs. The 93,8% of patients had a CHA2DS2-VASc score ≥2 points. In this case, the 77,1% received anticoagulants. The 6,2% of patients had a CHA2DS2-VASc score <2 points. In this case, the 43,8% received anticoagulants (not indicated). Only 1,6% of patients had a HAS-BLED score ≥3 points. In this case, all of them were taking anticoagulants (not indicated). The 98.4% of patients had a CHA2DS2-VASc score <3 points. In this case, 74.6% received anticoagulants.

Conclusions. The European Society Cardiology criteria suggests anticoagulant treatment in non-valvular atrial fibrillation in most cases. The proportion of patients with anticoagulant treatment was high.

# P06.22

Acenocumarol overdosage: treatment depends on INR or the severity of the patient?

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Introduction and Aim: acenocumarol overdosage as a reason for visit is common in emergency departments (ED). It can occur without symptoms or with adverse effects. The choice of treatment depends not only in the INR Lumber. Our aim is to evaluate the treatment followed for all anti-vitamin K, acenocumarol type, poisoning

Material y methods: every poisoning have been collected in a database of the Clinical Toxicology Unity (UTC) for 2 months. This unit has a record of epidemiological control which includes all poisoning of our hospital. Demographic variables are collected as well as type of substance, symptoms and therapeutic approach.

Results: during the analyzed period there have been reported 20 acenocumarol poisoning on a total of 63 registered (31,7 %). It is the second leading cause of poisoning after drugs of abuse (cocaine and benzodiacepines). 50% were men and the average age of 79,7 years +/- 7,9.

The indication for anticoagulation was atrial fibrillation with 80% of cases, 15% 15% for thromboembolic disease and 5% for stroke. The mean INR on arrival to the emergency room was 5.8 (Rank 3-11,1). 15% had neurological symptoms of cerebral hemorrhage, 35% had symptoms and soft skin, epistaxis 15% and 45% did not show any symptoms.

The 25% required supportive treatment and discontinuation of the drug and the remainder (75%), administration of vitamin K (VK) (30%), prothrombin complex (PCC) (30%) and fresh frozen plasma (FFP) (5%). The INR of patients treated with PCC was 3.5, that of patients treated with VK 6.3, the PFC-treated patients of 9.55 and those receiving supportive care only 4. However no significant differences between the other groups. 100% of cerebral hemorrhages received CCP.

Conclusion: Oral anticoagulant poisoning is one of the most important causes of drug poisoning. More often, the patient arrives at SU asymptomatic although there is a non-negligible percentage of severe cases. The therapeutic management is independent of the INR, except for patients receiving PFC. More serious cases receive CCP.

### P06.23

# Knowledge attitudes and behaviors of Turkish clinicians towards the changing needs of iodine during pregnancy

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Since the mandatory iodination of salt program started in 1998, Turkey becomes a mild deficient area for lodine. This study aims to evaluate clinicians from three different specialties including family physicians, endocrinologists and obstetricians regarding knowledge, attitude and behavior towards the changing needs of iodine during pregnancy. Of the mentioned specialties, 322 physicians selected randomly from 7 different geographic regions of Turkey volunteered to include the study. The group composed of 107 family physicians, 108 endocrinologists and 107 gynecologists. A questionnaire composed of 5 demographic, 4 knowledge, 4 attitude, and 4 behavior questions were applied to the subjects. All subjects were contacted by phone during working hours and all answers from each subject were collected at once to avoid biases. As a result, while family physicians and obstetricians reached almost similar average scores, endocrinologists achieved significantly better scores. (Table 1) All three specialties had better knowledge and attitude scores. (Table 1) Especially in administering iodine during pregnancy and lactation in all pregnant women were refused by most of the physician by mistake. Again almost all physician thought inaccurately that iodination of salt is a sufficient preventive measure during pregnancy and refused to make iodine supplementation. In conclusion the physicians working in our country don't have enough information about providing iodine support during pregnancy and lactation. Although endocrinologists are significantly more aware of following up pregnant women in an iodine deficient area, family physicians and obstetricians who are the primary physicians in performing antenatal screenings are far from sufficient in this issue. All this results are indicating that national and international efforts in Turkey during the past decade didn't suffice to raise awareness in physicians.

Distribution of correct answers of subjects from different specialities						
Correct Answers Endocrinologists Family Physicians Obstetricians						
Knowledge	85,40	33,65	28,72			
Attitude	79,85	58,40	60,82			
Behavior	58,57	32,72	26,4			
Average	74,61	41,59	38,65			

# P06.24

The self-perceived role of general practitioners in care of patients with gastrointestinal diseases. Central and Eastern European survey.

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Aims: Explore differences in primary care physicians self perception of care provided for patients with gastrointestinal problems in Central and Eastern European countries, to recognize the relationship between physicians characteristics and self perceived care.

Methods: A cross sectional survey of 3000 primary care physicians randomly chosen from relevant register in nine European countries was performed. Data were collected via anonymous questionnaire dedicated to care provided for patients with gastrointestinal disease.

Results: Direct access to the basic additional tests essential in gastrointestinal disease management was declared to be high. General Practitioners comply with recommended procedures, they have access to the investigative methods and they collaborate with specialists. General practitioners are moving from simpler to more complex methods. More than 80% of general practitioners consider as the most important method and an option of first step:

physical examination, rectal examination and basic laboratory tests.

Conclusions: Primary care physicians from Central and Eastern European countries accept their responsibility for care of patients with gastrointestinal disease and declare good access to basic additional examinations.

#### P06.25

# Preventive program for colorectal cancer in health centre Obrenovac

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Introduction. Number of patients with colorectal cancer is increasing. In the world affect about one million per year, and died about half a million people. In today's world there are about 24.6 million with CRC. Among 43 European countries, according number of patients, Serbia is on the 26-th place for men and 28-th for women; the number of deaths in the 6-th place for men and 7-th place for women. This speaks to the high rate of mortality and late detection of cancer, when treatment results are much weaker. The reason is inadequate prevention. About 2/3 of patients are diagnosed at an advanced stage of disease. It is the second most common cancer after lung cancer for men and for women, after breast cancer. It is therefore made up the National Programme for the prevention of colorectal carcinoma.

**Aim**. To demonstrate the effects of preventive programs for colorectal cancer in DZ Obrenovac.

**Method.** Retrospective study was done for the period 01.01.-31.12.2010. which included analysis of screening tests that detects blood in the stool for the population above 50 years old, and follow-up of these patients.

Results. The total number of tests performed was 1605, of which 59 patients had a positive finding, which is 3.67% of the subjects (equivalent to the results of larg controlled studies: 1% -5%). All patients were sent for further testing for definitive diagnosis. In 1/3 of the subjects was excluded colorectal cancer. Obrenovac has 26 834 inhabitants older than 50 years. The work plan for 2010 was a full coverage of this population, but coverage was 5.98%.. The number of new cases of malignant disease in Obrenovac was 1993, died 2264, and total registrated was 4257. According to an estimate that one in ten patients with malignant disease have CRC, 199 subjects in Obrenovac are CRC cases.

**Conclusion**. CRC is an important public health problem and should have been discovered in preclinical stage. The treatment of disease detected before the appearance of clinical symptoms offers greater benefit. It is therefore necessary to strengthen prevention activities: screening and health-education.

### P06.26

Hepatoprotective/-toxic properties of flavoring agents: the case of the naturally occurring methyl and isopropyl *N*-methylanthranilates

S. B. Aleksić<sup>1</sup>, N. Radulović<sup>2</sup>, N. Stojanović<sup>3</sup>, P. Ranđelović<sup>3</sup>, A. Miltojević<sup>2</sup>, P. Blagojević<sup>2</sup>, I. Milenković<sup>3</sup>; <sup>1</sup>Dom Zdravlja, Ni , Serbia, <sup>2</sup>Façulty of Science and Mathematics, P. University of Ni , Ni , Serbia, 3Faculty of Medicine, University of Ni , Ni , Serbia. Methyl anthranilate (MA), a constituent of a number of different plant species (grape hybrids, bergamot, lemon, mandarin, etc.), is widely used as a flavoring of candies, soft drinks, gums and drugs. Structurally and biosynthetically MArelated compounds, methyl N-methylanthranilate (MNMA) and (IPNMA), *N*-methylanthranilate isopropyl antinociceptive secondary metabolites of Mexican orange (Choisya ternata), Petitgrain mandarin (Citrus reticulate) and tangerine (Citrus tangerina), also have the same potential. However, to the best of our knowledge, there are no data concerning the potential hepatotoxic effects of MNMA or IPNMA. Thus, the aimed of our work was to test the possible influence (toxic or protective) of these two esters on rat liver. To assess this, experimental animals (20 adult male Wistar strain rats; body weight 200±20 g) were divided into 4 groups (five animals each): G1-G4. The title compounds (MNMA and IPNMA), dissolved in olive oil (0.2 ml), were administered to G1 and G2 groups, respectively, for seven consecutive days, in a dose of 200 mg/kg by intraperitoneal (i.p.) route. Other two groups, G3 and G4, served as controls and were receiving vehicle (pure olive oil) only. After the treatment, on the eighth day, the animals from G1-G3 groups received CCl<sub>4</sub> (1:1, v/v, in olive oil, i.p.). Twenty four hours later, all animals were killed; blood and liver were removed and further analyzed. Some selected blood serum parameters (AST, ALT, cholesterol, total and direct bilirubin levels) were determined and histopathological observations on liver sections were performed. The obtained results (both biochemical parameters and histopathological observations) indicated that the two esters have no toxic effect on liver, whereas only MNMA possesses hepatoprotective properties (CCI<sub>4</sub>-induced liver injury). Based on these results, it could be concluded that the studied natural compounds, characterized by unique and pleasant flavoring properties, have no harmful effect on the liver histoarchitecture or on its biochemical parameters, when applied in a dose of 200 mg/kg or less. Thus, in respect to MNMA and IPNMA effects on the liver, it seems that there is no safety issues associated with their potential usage as flavorings in human nutrition

#### P06.27

# Hypothyroidism and metabolic syndrome

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Hypothyroidism is often related to obesity. Obesity is measured by body mass index (BMI). If high BMI is accompanied by high waist girth (WG), person has abdominal obesity, which is the main criterion for metabolic syndrome. The aim of the study was to investigate the frequency of obesity and to determine the type of obesity among the patients with hypothyroidism. Material and Research included 45 patients with diagnosed hypothyroidism, who underwent anthropometric measurements body weight, height and WG and were divided in 3 groups according to BMI - normal weight (17,5≤BMI <25), pre-obesity (25≤BMI<30) and obesity (BMI≥30). Data had been analyzed using single factor parametric ANOVA. Results and discussion: Normal weight was found in 19 subjects (42,2%), pre-obesity in 16 (35,6%) and obesity in 10 (22,2%). Results showed highly significant statistical difference in WG values between the groups with different BMI in people with hypothyroidism (Femp=10,5; F2,42(0,05, 0,001) =3,23;5,18; p 0,01).

Conclusion: Majority of hypothyreotic patients were pre-obese or obese. WG and obesity were significantly related among patients with hypothyroidism, which showed that patients had abdominal obesity. Therefore, we suggest a relation between hypothyroidism and metabolic syndrome.

Key words: hypothyroidism, metabolic syndrome

### P06.28

Adherence to hypertension management recommendations for patient follows up care and lifestyle modifications in the patients attending GOPD, BPKIHS DHARAN

### P. P. Gupta:

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**Objectives:**- To find out the level of understanding of hypertensive patients regarding lifestyle modifications and to find out the level of application of those lifestyle changes in their daily activities and also to study the effect of those lifestyle modification in the management of hypertension.

**Data Sources:** Published guidelines and abstracts identified through PubMed (1994 to 2008) and Medline (1994 to 2008) using the search terms hypertension, prehypertension, lifestyle modification, nutrition, physical activity, weight control, behaviour

modification, smoking cessation, guidelines, and prevention, as well as the JNC 7 guidelines.

**Methods:**- We conducted a observational study with a patients of hypertension who presented in a GOPD of BPKIHS.we assess the level of knowledge of those patients who were included in this study with a self made questionare which was based on JNC VII guidelines and then who were not known were told about lifestyle modification and then patients were reassessed by same questionare in one month and three month follow up.

Results:- A total of 100 patients were included in this study in which there were 50 males and 50 females. Each of the participants were assessed by a questionare and found that only 26% of patients knows about lifestyle modification. After being knowing about lifestyle modification which was told to every patients about Salt intake, Exercises, Smoking and Alcoholic, they adopted it in their lifestyle and the effect was shown in result where many of the patient's blood pressure were in controlled with lifestyle modification only without medication. About 68 among 100 patients were came in follow up in one month and 51 patients in three month follow up and among them 94% were having high blood pressure in first visit among them 13% were having started on medication.after adopting those lifestyle changes the frequency decreased to 13.2% and in three month follow up it falls to 2% after using chi square test the p value came to be <0.001 which was highly significant.

**Conclusion:** Adhering to lifestyle modification as given by JNC VII one can take control of thier blood pressure and if one had already started treatment then these guidelines helps in dose reduction.

### P06.29

Outcomes and Efficiency of National Gastric Cancer Screening Program in Korea - Single Center, Large-scale Study

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Background: Gastric Cancer is a major cause of death and a substantial socioeconomic burden in Korea. The National Cancer Screening Program for Medicaid recipients was initiated in 1999 and has contributed to reduction of cancer-related mortality in Korea. Endoscopy may be cost-effective screening tool in Korea, where the cost of endoscopy and UGIS are similar and the incidence of gastric cancer is high. Most of Japanese studies on the efficiency of mass screening for gastric cancer have dealt with photoflurography as a screening tool. Although biennial gastric cancer screening by endoscopy has been increasing in Korea as part of the National Cancer Screening Program, few studies have evaluated its efficiency. Therefore, we analyzed the outcomes and efficiency of the National Gastric Cancer Screening Program using endoscopy in Korea.

**Methods:** We reviewed medical records from the National Gastric Cancer Screening Program at Chung-Ang University hospital in Korea from January 2007 to December 2010. The study population was comprised of Medicaid recipients ≥ 40 years of age who were taken from the National Health Insurance Corporation.

Results: A total of 41,150 asymptomatic subjects underwent endoscopy for gastric cancer screening. The mean age of the screened subjects was 56.3 years for men and 48.9 years for women. The male to female ratio of the screened subjects was 1.57:1. Gastric cancer was diagnosed in 102 (0.24%) of 41,150 subjects (60 men and 42 women). Their mean age was 54.4 years. Of these, 76 subjects (0.18%) were diagnosed as early gastric cancer and 26 subjects (0.06%) as advanced gastric cancers. The proportion of early gastric cancer among total gastric cancers was 74.5%. During the period, only 6,586 (16.0%) subjects participated in the biennial gastric cancer screening (59% for men and 49% for women)

**Conclusions:** Despite accomplishments of the National Gastric Cancer Screening Program in Korea, low compliance to the screening program remains an issue. Furthermore, its cost-effectiveness analysis will be needed for successful progression.

# P.07 - Medical Education/Training

#### P07.01

Family Medicine in pre-clinical years of medical school: Fruitful or Futile

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Family medicine is the one field that gives you full satisfaction and a sense of being the complete physician because of taking care of the whole person and others around. However it is not fully accepted from the medical students as an admiring medical specialty and different efforts have been made to accept it at different stages of medical schools.

The family medicine introduced currently in different models and different shapes in different parts of the world but mainly exist three models - resident trainings, on job trainings and undergraduate teaching. Family medicine usually started in clinical period of undergraduate medical education in many part of the world and found effective.

Ataturk University is one of those universities, which took a lead and established a family medicine department in 2009. This department has managed to enter into curriculum and was able to apply a new model of family medicine i.e., teaching family medicine in first and second year. This paper emphasizes the importance of family medicine in undergraduate medical education by presenting the Atatürk University's model as an example.

### P07.02

# Continuing educational development of trainers in General Practice in Europe

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### Introduction:

The Leonardo da Vinci Project - Framework for continuing educational development of trainers in General Practice in Europe has been running since 2010. Its realization is conducted by a consortium of 8 institutions from 6 countries. The Promoter of the Project is the College of Family Physicians in Poland. Four other European Colleges of Family Physicians and two research and consulting institutions are involved. The last partner is EURACT, which through its rich capacities plays pivotal role in development, dissemination and exploitation of the Project results.

Aims and methods:

The aim of the Project is to develop, implement and sustain in a long-term perspective Framework for continuing educational development of trainers in General Practice in Europe. The document will present the European GP/FM teacher expertise profile with specific domains of competence. The integrated part of the realization of the Framework's objectives will be provision of educational courses for GP/FM teachers on 3 different levels: for competent educators in (level1), for proficient educators (level2) and for educational experts (level3). The realization of the project will lead to the construction of a European Network of GP/FM teachers supported by an innovative Internet based educational platform connected to the EURACT website (www.euract.eu). Results and conclusions:

The project results can only be achieved by joining the current knowledge of GP/FM training, current approaches and existing expertise within European countries, in order to develop the new high quality conceptual Framework. The Framework will have a continuous and multilateral character, leading to setting basis standards and harmonization of the European vocational training of GPs. The tangible outcomes of the Project will be The

Framework document and educational courses materials. The materials will include complete and comprehensive set of files - 'ready' to use for the courses provision. All products will be available in English as well as the Project partners languages: Polish, Danish, Slovenian, Portuguese, Greek and Turkish (electronic versions will be available at the Project website: www.klrwp.cedingp).

### P07.03

Why do medical students attend Family Medicine meetings? - Survey results and insights

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Introduction: Bringing medical students to meetings is a way to teach them how to cope with the academic environment outside the classroom. The 15th Brazilian Society of Family Medicine (SOBRAMFA) annual meeting took place in the year of 2011 in Brazil. This year's event's theme was palliative care and humanistic medical practice, having been attended by 102 people amongst medical professionals and academics, nursery, physical therapy, nutrition and pharmaceutical professionals as well as palliative and healthcare managers. Aiming to a deeper knowledge of the undergraduate public, a survey took place at the meeting. Objectives: Our aim was to know what motivates undergraduates to attend a Family Medicine Meeting, leading to a more accurate promotion towards this specific audience. Results: Most medical students came to this meeting because they were invited by their Family Medicine teachers. Conclusions: Our results highlight the importance of Family Medicine teachers in promotion of meetings and therefore, to academic development outside the classroom. Our results already lead to actions towards promoting and integrating medical academics to the universe of Family Medicine Practice.

# P07.04

Contribution of home visits to medical training: principles of the Brazilian Health System in practice

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Introduction: This article aims to describe the experience of home visits conducted by second year medical students from the University of Uberaba in Brazil. Home care was developed with a single patient with chronic disease indicated by the Family Health Strategy. The activity took place weekly and lasted three months. Home visiting can be considered as part of the Brazilian health system, whose axis are comprehensiveness, universality and equity. It can be understood as a technique, a method and an apparatus. Objective: To integrate theory and practice in order to consolidate learning about humanized health. Furthermore, to develop bond through imputing responsibility by regular home follow up of this patient with chronic diseases in Primary Care, aimed at comprehensiveness on health promotion. Methodology: The tools used for home visit were: paper, pen, patient's files, guide to anamnesis from a semiology book, stethoscope, sphygmomanometer, field notes and visits schedule. The methodology is based on a case report qualitative research, with participant observation. Results and Discussion: There were bonding and good communication with the patient and her family. Additionally, it was possible to acknowledge her reality and note that lifestyle contributed to her chronic mental illness, learning from that the comprehensiveness of individuals. We took responsibility for the patient and her family, proposing a care plan to provide them with quality of life and to promote health. For this purpose, a client and family agreement was required. After suggesting the plan, we observed improvement in their lifestyle. Conclusion: The experience was satisfactory and Home Visit contributed to medical

education. We performed the activity directed to health education, as well as to awareness of the patient in relation to aspects of her health in her own context, enabling more autonomy in health care, considering the dimensions that influence it.

#### P07.05

# Analysis of two different educational systems of General Practice in Europe

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Introduction: Educational systems are supposed to prepare new doctors for the NHS where they are going to work. An analysis of the Italian and Portuguese educational systems have been performed to realize how the different organization of Primary Care (the Portuguese state system and the Italian convention-based system) and GPs school influence each other.

Materials and Methods: During a short visit to Coimbra school, two trainees compare their experiences analysing the outcome of the management of some chronic and acute conditions.

Results: Although the schools are supposed to give a similar performance, some important differences have been registered in the practice organization (mostly for the nurse/doctor ratio), in the management of the hypertensive, diabetic and in COPD patients. In particular, some differences have been noticed in data registration in the electronic medical records and in the outcome (in the waiting list). Conclusions: Comparison between educational systems may suggest which are the critical outcome of the different National Health Systems, particularly the Italian system could improve the data entry in EMR and the Portuguese system could increase the accessibility of the patients to the doctors.

### P07 06

# Quality of education in Family Medicine based on Self-Assessment Questionnaire (SAQ)?

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General Practitioners (GPs) should be well prepared throughout their career to provide high quality primary medical care. As quality improvement (QI) has nowadays become an indispensable part of everyday family doctors' work, therefore QI methods and skills should be taught at different levels of medical education. The use of the innovative - based on the IT achievements - tools that may ensure a dynamic approach to the QI process allowing to adapt the benchmarks for needs of growing expectation concerning competencies in FM sector are highly desirable.

The inGPinQI project: Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology, No. 2010-1-PL1-LE005-11473, is focused on the QI education in FM. Main objective: to improve the existing training programs for both, GP and teachers and their competencies in the field of QI.

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Expected outcomes of the project: (1) GuideBook, (2) new guidelines for the management of: arterial hypertension and diabetes mellitus, (3) innovative VET program, (4) distance-learning module, (5) Internet tool to identify individual, QI educational needs of GPs (SAQ).

Using rigorous systematic research methods a tool for GPs' educational needs assessment (SAQ) in QI area enabling identification, ranking of individual and changing needs of GPs was developed. Special attention for the need of measuring quality for the sake of QI and accountability has to be put to the self-

assessment web-based questionnaire a unique, web based, the tool, which aims to assist in improving the GPs' competencies in the QI area. Concluding, the use of the SAQ can launch a wide cross-national longitudinal educational studies on competence -based education and serve as a continuous monitoring tool showing the dynamism of the rapidly changing FM field in Europe. Thus, the GPs' real requirements can be reflected in every stage of planning, execution and assessment of training programs.

The SAQ is a powerful mechanism providing a framework for course leaders to reflect on the competencies their courses currently equip GPs with. Encouraging GPs to fill in the self-assessment questionnaire allows them to reflect on the competencies they currently possess and identify their professional development needs.

### P07.07

# Funding opportunities for the Hippokrates Exchange Programme

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Introduction Hippokrates is an exchange programme for trainees and junior General Practitioners, promoted by the Vasco da Gama Movement (VdGM). Participants of the programme acquire an insight into the context of General Practice in the primary healthcare system of other European countries either by hosting an exchange participant or visiting a GP practice in another country

Aim Our aim is to present the funding opportunities for colleagues who would like to take part and to investigate their impact thus far. **Methods** VdGM has suggested two funding methods for the Hippokrates programme. First, member countries can receive funds to cover the expenses of their participants through the Leonardo da Vinci Programme, which is part of the European Commission's Lifelong Learning Programme. Second, three Hippokrates Exchange prizes have been established. One of them has been dedicated to the memory of Dr Claudio Carosino and is awarded to a trainee or junior GP who has completed an exchange in a rural practice; this award is granted with the kind support and contribution of EURIPA.

Results In 2010, the Leonardo da Vinci Programme was awarded to a number of UK and Slovenian outgoing Hippokrates exchange participants, while in 2011, the Czech Republic and Austria have been awarded with such a support. The contribution of the Leonardo funds has led to an increase in the number of participants of the Hippokrates programme and to a better quality of the required reports after the completion of the exchange. Moreover, this year, for the very first time, the Hippokrates prizes are awarded.

**Conclusion** The funding opportunities support and motivate trainees and junior GPs to participate in the Hippokrates Exchange programme.

# P07.08

# Dermatology in family medicine curriculum

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Aim: In this study, we examined the out-patients of dermatology department in a tertiary care hospital in order to discuss if dermatology should be involved in family medicine curriculum.

Methods: This is a retrospective and cross-sectional study. We evaluated the demographic characteristics and diagnoses of the out-patients of Konya Training and Research Hospital

Dermatology Department through November 2011. Frequencies, percentages and chi-square tests were used in statistical analysis.

**Results:** 561 patients were examined in a dermatology polyclinic in November 2011. The 48.67 percent (n=273) of the patients were female. None of the patients were hospitalized. 39.21 % (n=220) were between 25-49 years old (mean age 33.36). Most frequent diagnoses were dermatitis (12.83 %), acne (10.87%), warts (10.16%), contact dermatitis (6.77 %), urticaria(6.23%) and tinea infections(6.23%). 53.9%(n=298) of the out-patients were prescribed for these 6 most common diagnoses.

Conclusions: In Turkey, family physicians should complete the three-year formal residency in either a university hospital or a training and research hospital. One serious deficiency in Family Medicine residency program is; residents are working at only 5 main branches(General surgery, Internal medicine, Pediatrics, Psychiatry, Obstetrics and Gynecology), but not for other branches often experienced in primary health care, such as ear-nose-throat, eye, physical treatment, urology, radiology and dermatology. In some countries like USA and Malaysia, dermatology is implanted in the family medicine residency curriculum. According to our study, more than half of all patients could have been treated in primary care. After evaluating the outpatients of a tertiary care hospital, we strongly recommend that dermatology is essential for family physicians and should be involved in Turkish Family Medicine residency program.

#### P07.09

# Evaluation of a three-year General Practice vocational training

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**Introduction** In Italy, the GP vocational training course includes seminars and rotations in GP practices, hospitals and specialist territorial services. The trainees of the 2007-2010 class in the Emilia-Romagna Region evaluated the course in order to help shape and improve the educational programme, especially considering Italy's new healthcare framework, which entails a better and cost-effective integration of primary care services.

The aim of the study was to evaluate the vocational training course of a specific region by carrying out a self-audit, which focused on the areas of treatment, care and management.

**Methods** An ad-hoc questionnaire was distributed to 64 trainees. Besides the demographic and professional data, there were open questions and Likert scales (ranging from 1 (more negative) to 5 (more positive)), with which both the lessons and the rotations were assessed. The issues and motivation throughout the course were also investigated.

Results The seminars received a positive appraisal (mdn=4), even though there were some areas that were not covered in a satisfactory way (paediatrics, emergencies, legal medicine). The integration between the lessons and the rotations, albeit not officially established in the programme of the course, was considered being very constructive (mdn=4). Furthermore, the simulation of medical cases and the work in small groups were among the most valuable training tools according to the trainees. Despite the fact that the GP rotations were essential (mdn=4) for enhancing their motivation, the rest of the rotations in the hospitals and the territorial services were considered only as sufficient (mdn=3). Finally, the relation with the administration of the course was judged as mediocre (mdn=2).

**Conclusions** Overall, the trainees appraised this three-year course positively. Problematic areas were identified and their improvement will be of aid for the future of this vocational course.

#### P07.10

Student's attitude Toward the Newly Proposed Model of Case Based Learning for Undergraduate Medical Students in Family Medicine Elective Course

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**Background** Emerging literature identifies a shift towards students centered learning in a variety formats such as "problem" and "case" based learning. In Family Medicine Elective Clerkship, Ramathibodi Hospital Medical School, the PBL strategy was used in the new teaching session.

**Work done** Before the session, the 4<sup>th</sup> and 5<sup>th</sup>-year-medical student selected the real case that he saw in the practice during the elective period and then created a problem scenario from the case. In the session, the problem was progressively disclosed to his peers. The peers discussed the problem. At the end, the students summarized the learning points as his/her take home messages.

Summary of results The activity was evaluated from the feedback from students (verbal and questionnaires). The 23 medical students participated in this new teaching session. The students appreciated it as a good activity and felt comfortable with it. Most of them could develop greater understanding of the cases and could have an opportunity to approach the variety of cases under the collaborative environment.

**Conclusion** We had success in establishing Case Based learning in elective course. Although the sample size is small, most of students in the course suggested the new session should be used as a teaching method for medical students in the regular course.

### P07.11

Motivation and satisfaction status of the residents after the establishment of family medicine departments in training and research hospitals in Ankara.

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BACKGROUND: Family medicine is relatively a newer discipline according to other clinical branches and less known by people and even by physicians in Turkey. There are two alternative institutions for training of family medicine specialization in Turkey; one of them is universities, the other one is training and research hospitals within the body of Ministry of Health (MoH). Although family medicine departments has been established in some universities approximately twenty years ago, many of the training and research hospitals of MoH don't have family medicine departments yet. Some of the family medicine departments have just been established. The aim of this study is to evaluate motivational and satisfaction status of the residents after establishment of family medicine departments training and research hospitals in Ankara, in Turkey.

MATERIALS AND METHODS: This study was carried out in four training and research hospitals in Ankara between July and October 2011. 57 family medicine residents were included in the study. A questionnaire about professional motivation and satisfaction of the residents were applied. Demographic characteristics and information about professional motivation and satisfaction of the residents were collected. The data were analyzed by SPSS 15.0.

RESULTS: The number of the residents was 64 in four training and research hospitals. The questionnaire forms were sent out each resident. But we couldn't reach three of them and four of them refused to fill out the questionnaire. Totally 57 residents participated in the study. 79% of participants were women, 21% were men. 39 residents (79.4%) defined that family medicine department has not been established when they started to work as a resident. It was found out that the motivation and satisfaction status of 74.4% of these residents became better after establishment of family medicine department. Also 73.7 %(n=42) of the all residents considered about academic career in family

medicine discipline. 40.8% of the participants were hopeful of the family medicine in the future.

CONCLUSION: Training of family medicine residents should be managed by family medicine departments in training and research hospitals. Lack of the departments is one of most important factors of reducing motivation and satisfaction of the residents.

#### P07 12

# Popularity of postgraduate family medicine training in Turkey

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**Aim**: In Turkey, family physicians should complete the three-year formal residency in either a university hospital or a training and research hospital. In this study, we aimed to assess the family medicine preferences in "The Residency Examination for Medical Doctors" between years 2005 - 2011.

**Methods**: This is a retrospective and cross-sectional study. We searched the quotas between years 2005 - 2011 in the official webpage of Higher Education Council Student Selection and Placement Center (OSYM).

Results: "The Residency Examination for Medical Doctors" is done twice a year, in every spring and autumn. In every exam, 3 groups of residency vacancies is opened; in training and research hospitals of Ministry of Health (MoH), in university hospitals (divided into two for Turkish residents and foreigners), in Military Hospitals. The data of 2006- 2007- 2008 autumn exams were missing. Quotas were minimum in spring 2008(n=113), maximum in autumn 2005(n=330) (average 150 per exam). 47,18 % of university hospitals, 47,13% of training and research hospitals of MoH, 8.6% of military hospitals weren't preferred(45.8% of all) . 92.8% of foreigner quotas in university hospitals were not placed. Conclusions: Postgraduate training opportunities in family medicine have been available in Turkey since 1983. In order to get their certificate, they should do obliged work for 300-600 days. Implementation of the family medicine model as a pilot project started in 2005 by MoH. As there were not enough family medicine specialists (~1500 for 70 million people), medical practitioners had an introductory training in family practice for 10 days after their undergraduate medical training. They are working in primary health care centers now. After attending a 6-year distance learning course in family practice, they will be awarded by "family medicine specialist" certificate. This can explain why nearly half of the quotas were not filled. Although MoH is trying to increase the number of postgraduates, as a result of unjust practices, postgraduate family medicine training is loosing popularity.

### P07.13

Feedbacks of the preceptors on their teaching experiences in the family medicine clerkship of Ondokuzmayis University, Samsun-Turkey

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Aim: We aimed to explore preceptors' perceptions of their teaching role for more effective community-based teaching.

Methods: We have four week clerkship in the internship year in Ondokuzmayis University Department of Family Medicine. We performed a round table interview exploring preceptors' views of their role. Preceptors reflected also on their own teaching experience. Of the 30, 11 participated in two focus group interviews. A trained interviewer conducted each interview; all were recorded, transcribed and subjected to content analysis in November 2011.

Results: Preceptors (female 8, male 3) described their learnercentered approaches. Demonstration, guided practice, observation and feedback were integral to the experience. Preceptors recognized the dynamic teaching environment, described

strategies to adapt their teaching to meet the needs. Answers on main domains are summarized. 1. General opinions on preceptorship: Preceptors attempted to maximize students' learning experience. They wanted students to understand, "being a family doctor". "I am a role model". "I do my best in decreasing anxiety". "I give them responsibility" "One student, four weeks are enough". 2. Effect of preceptorship on daily workload: Preceptors were generally positive. "It makes me happy, encourages learning much to teach". "Teaching cause slowing, waiting time of the patients increases." "Some patients are anxious with the students, some ask where they were." "Staff is happy to teach". 3. Their contribution on the professional development of the students: They think the students don't know primary care. "They practice in the actual primary care". "They understand low-prevalence in primary care, see patient without syndromes". "I am not able to help students thinking surgical specialties". 4. Student feedbacks to them: Generally positive. "Students did not know the importance of primary care previously." 5. Is education for preceptorship necessary?: Of the preceptors ten thought it was necessary, one taught that brain storming sessions are necessary. "We need to learn how to teach". "We need practical clues". 6. Most funny and boring conditions in preceptorship: "Eager students are funny, others boring". 7. What to do for a better preceptorship? "More responsibility, more learning".

Conclusion: Preceptors combine learner-centered approaches with educational practices, concern for the students' professional development.

### P07.14

# Focus groups about issues in becoming a Family medicine doctor

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**Background:** In Slovenia we have a problem filling posts for family medicine specialty training. There are not enough medical students that decide to become a family doctor. Lack of family doctors is an important problem because there is already a lack of family doctors in the last 10 years. This problem can eventually result in less quality health care.

**Method:** We run three focus groups to get the insight into medical students` thoughts about their future professional orientation. Key question was what influences the decision about becoming a Family medicine doctor?

Results: Preliminary results from first three focus groups show the influence of the study year. At the beginning they would like to become one of the leading surgeons or some other important medical personality. While in the last years the tendency goes more towards family medicine orientation. Other influence is also the negative attitude of colleagues towards this decision; and negativity from other specialists through the colleague education. They may give the students feeling that being a family doctor is not really desirable job. But there is also the influence of the system with too much bureaucracy on one hand and with not enough time to spend with one patient on the other side. We expect that further results will give us detailed reasons about this issue.

**Conclusions:** In order to motivate students for family medicine speciality it is important to introduce family medicine before the last year of the medical studies. However, also health care system plays a significant role in students' choosing future medical speciality.

**Points for discussion:** What in addition can be done to stimulate also perspective students to decide to become family doctor?

#### P07.15

# Design a strategy to strengthen Health Education among professionals in the health area

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INTRODUCTION: According to the WHO, Health Education and Health Promotion are fundamental tools to address the major health problems today and are both low cost and high impact.

OBJECTIVES: To assess the situation of Group Health Education in the healthcare area. To strengthen Health Education among professionals in the health area. To set up a local reference multidisciplinary group on Health Education.

METHODOLOGY: After creating a multidisciplinary and experienced working group, we proceed to identify the baseline and existing resources for Health Education. We performed a literature search, several brainstormings, an affinity diagram, a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), and a prioritisation grid of the improvement opportunities, assessing feasibility, relevance, impact and cost of addressing those. Development of a plan of action. Dissemination and Evaluation Plan: The Gantt chart for the first year of the Plan development included the working groups, specifics objectives and areas for improvement, and the setting indicators.

RESULTS: The Group Health Education in our healthcare area is at a standstill situation, being the existent human and logisitical resources underused, although we do identified experienced reference healthworkers, institutional motivational policies and positive assessment of professional aimed courses. SWOT analysis proved to be favourable to develope a plan. Lack of professionals' motivation and training, unstructured educational content and logistical difficulties were the 4 selected improvement opportunities. The accomplishment of the plan so far has been 70% of all the scheduled activities and the Promoter of Group Health Education is consolidated, motivated and keep working in a 4-years Strategic Plan. We are currently in phase of dissemination and evaluation.

CONCLUSIONS: Developing a plan with a properly-structured design methodology facilitates the identification of areas for improvement and optimisation of resources, motivation of the professionals and serves as a reference for future action. The plan has been welcomed by managers and its implementation will result in a consistent, high-quality health promotion service for the population.

### P07.16

The impact of Primary Care Physicians' (PCPs) training in electronic Medical Record (EMR) use on their competence: report of a pragmatic trial

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Introduction: Information systems in healthcare are expected to improve the quality of care, increase patients' safety and cut down medical costs. To achieve these goals, they must be utilized effectively.Israel enjoys a virtual universal deployment of the Electronic Medical Record(EMR) in its HealthCare system, with Primary Care at the forefront. However, there is little evidence about the abovementioned expectations being met. While most attention is being paid to the data the EMR generates for health services

management, it is high time to look into the patient-doctor-computer

interaction, and its impact. We have piloted a framework for teaching and evaluating patient -doctor- computer communication and EMR proficiency of community physicians.

Objective: to measure and explain the influence of instruction in EMR usage competence in a simulated environment on the patient-doctor communication in the computerized office of community based physicians.

Methods: A mixed methods design comprising an experiment comparing an educational intervention with a control group. 36 Family Medicine residents were randomized into the intervention and control groups and 35 completed a pre-test (6 simulated encounters), an intervention (one day workshop of 6 simulated encounters with extensive feedback, or control intervention- a day of lectures on the topic) and a post test (6 simulated encounters). Results: No striking or uni-directional impact of intervention as compared with control, both groups improved significantly in self-assessment of attitudes and competencies, as well as in physician observers grading. Reliability, validity and acceptability were fair to excellent. Feasibility was wanting, and educational impact seems to reside with the exposure to the simulated encounters more than with the intervention.

Conclusions: A simulation based exposure improves patient doctor communication skills and PCPs attitudes in the computerized setting. The intervention itself failed to make a difference between the experimental and control group. Changes in the research format such as omission of simulated pretest and posttest, and transfer of the training and evaluation to the CME or office setting are required.

Discussion/implications for field: Possible implications include support for a policy of educational interventions and continued monitoring to empower the clinical encounter by EMR use in primary care.

### P07.17

What are the challenges that family doctors and health professionals face with in Samsun and Trabzon-Turkey?

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Aim: We aimed to identify the most frequent challenges in patient encounters to design workshop.

Methods: We delivered an open-ended questionnaire about challenges before workshop sessions organized by the department of family medicine for family doctors, interns, secretaries and hospital doctors between October 2009 and October 2011. Workshops about challenges were performed 30 times with 15 participants each. The question was "What are the first three challenges in patient encounters for you?" The content of the workshops were organized dynamically according to the answers. The year of experience in medicine and gender were noted. Answers were categorized.

Results: Of the 407 participants, 223 (54.8%) were female, 184 (45.2%) male, 144 (35.4%) were secretaries, 109 (26.8%) interns, 93 (22.9%) family doctors, 61 (14.9%) hospital doctors. The participants identified 62 different challenges. Most frequent challenges were communication problems (22.4%) with the patients and relatives, breaking bad news (11.5%), aggressive patients (6.9%). Of the secretaries, 44 (31.3%) reported communication problems as the first challenges, 37 (33.9%) interns reported breaking bad news. Of the 93 family doctors, 16 (17.2%) reported inadequate time, 14 (15.1%) reported patients with high expectations as the first. Of the 61 hospital doctors, 10 (16.4%) reported communication problems, 10 (16.4%) reported breaking bad news as most frequent challenges. Answers of communication problems and aggressive patients were more common in the female and younger health professionals. Communication problems found to be decreased with the year of experience. Answers of patients with high expectations were common in males. Other frequent answers were irrational demands of the patients, lack of trust, elderly, noncompliance, addict, aggressive, rambling patients, inadequate conditions, unknown medical history, psychotic, hurried patients, greater healthcare use, small children with serious problems, phone consultancy, health insurance, legal problems, medical uncertainty, reticent, resistant, insisting, exaggerating patient, multiple diseases, domestic violence, sexual, communicable diseases, health professional as patient, VIP patient, homeless

patient, internet diagnosis of patient's own, lab delays, patient with a gun.

Conclusion: The most common challenges were communication skills. We organized a new course for family doctors and health professionals according to the results of this study and recommend such courses.

Family Medicine Trainers Need More Educational Support-The Lifelong Learning Programme.

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Background: Lifelong learning programme is needed for trainers in FM to obtain good outcomes in the process of teaching. EURACT is an international academy of teachers in FM which developed a good programme of teaching for FM trainers. There are three levels of international courses (competent educator, proficient educator, and educational expert). However, there is a lack of information about trainer's professional needs.

Aim: To explore trainer's needs in lifelong learning process

Method: E-mail questionnaire was sent to twenty two FM practices involved in the process of training residents and students in Ma łopolska, cooperating with the university centre. Questionnaire had some statistical information about teachers, including position in practice, years of experience, teaching methods used, and lack of professional knowledge, skills, and behavior.

Results: We obtained information from fifteen FM teachers (mean age = 47,4 yrs, mean experience = 10,7yrs). Most teachers expressed a need of one day intramural training course to receive a better preparation for teaching. The most needed topics included delivering feedback, forms of teaching is small groups, management of ineffective trainee, and positive approach to continued education.

Conclusion: There is a need for developing a lifelong learning programme for FM teachers. Periodic one day intramural courses seem to be the most convenient way of addressing this issue.

Feedbacks of the last year students about the primary health care services and family medicine -A qualitative study from Ondokuzmayis University, Samsun-Turkey.

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Aim: We aimed to determine the opinions of final year students concerning the reasons why they wish to specialize in medicine and perceptions about the primary health care services.

Methods: We have mandatory four week clerkship in the internship year in Ondokuzmayis University Department of Family Medicine. We performed a round table interview exploring students' views of the specialization choices and perceptions about the primary care. 17 students participated in two focus group interviews. A trained interviewer recorded, transcribed and subjected to content analysis in December 2011.

Results: Students (female 8, male 9) described their opinions about the primary healthcare services, faculty members approach toward the primary care and specialization choices.

- Answers on main domains are summarized.:

  1. Why faculty of medicine? Students specified more than one reasons concerning the reasons why they preferred medical school like "parental and environmental pressure", "job guarantee", "job satisfaction", "social status" and "financial gain".
- 2. What is your ideal expertise area and why? They want mostly specialization areas without duty hours, more comfortable and with low risk of malpractice.
- 3. Do you want to be family physician and why? Although they don't want to be generalist and be more specialized, most of them don't think family medicine expertise in first place.

- 4. Do you think that family medicine is recognized sufficiently by you, by public and by health professionals? They believe that there is lack of information about the family medicine.
- 5. Do you think that family medicine expertise encouraged by faculty staff? Students believe that just oppositely faculty staffs present primary care as a punishment place
- 6. Did mandatory family medicine clerkship program change your attitude toward the primary care? Most of them answered positively and they declared that if they don't have enough score for their ideal expertise areas they could be preferred family medicine.

Conclusion: In order to increase the interest in primary care, family medicine clerkship program should take place in every medical faculty curriculum.

### P07.20

A research about the requirement for education of family physicians who work for primary health care in family health centers about restless legs syndrome (RLS)

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Objective: In this study it was aimed to find out the awareness, behaviors and educational requirements of family physicians about restless legs syndrome.

Method: This was a sectional study which included 400 family physicians who have been working in family health centers in 6 central county towns randomly selected out of 11 in province İzmir. Out of expected 400, 384 (94%) of the physicians participated the study. A questionnaire was applied to the physicians to investigate the awareness and the acquirements of them about RLS. The questionnaire included questions investigating how frequently the physician encounters RLS, how she/he manages the patient, participation of the physician in training activities after graduation about RLS, diagnosis codes she/he prefers, demographic data of the physician and her/his level of knowledge about RLS. The data were gathered with face to face interview in her/his office atmosphere by applying questionnaire and evaluated by SPSS 15.0 program. When evaluating the data chi-square and t test with ONE WAY ANOVA were used and founded that p<0.05, accepted as significant.

Results: The mean age of physicians was 43.21±7.00 and 39.8% (153) were women, 60.2% (231) were men and the career period was 18.90±6.24 years. 94% (361) of the physicians didn't participate in any educational program about RLS. 50.3% (193) never diagnosed RLS. The mean knowledge score of the physicians was 2.70±2.05. Women gender, physicians who participated in any educational program after graduation and the ones who have diagnosis of RLS of herself/himself or relatives, friends had significantly higher scores of knowledge.

Conclusion: Even though some of the physicians had higher knowledge' scores, generally the scores were low. The family physicians need training about both RLS diagnosis and managing RLS.

# P07.21

The role of UK medical college postgraduate membership exams overseas: A qualitative study of motivating factors and outcomes of doctors in Sri Lanka sitting the UK's Royal College of General Practitioners' accredited International Membership Examination, MRCGP[INT]

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Background: The UK's Royal College of General Practitioners (RCGP) accredits family medicine exams in various countries

overseas. These are known as MRCGP[INT] exams. The South Asian version of the exam (MRCGP[INT]SA) is led by a South Asian team of doctors but supported and accredited by the RCGP. In Sri Lanka the MRCGP[INT]SA has been available since 2007, where it is optional and can be taken in addition to the national Sri Lankan family medicine exams.

Aims: To describe factors motivating Sri Lankan doctors to sit the MRCGP[INT]SA and describe their perceived outcomes of obtaining the exam.

Method: Qualitative interviews of 14 successful past MRCGP[INT]SA candidates in Sri-Lanka were undertaken. A phenomenological approach was used. Findings were analysed with NVIVO software. Interpretive dimensions were applied by also drawing on information obtained during informal conversations with candidates, examiners and policymakers, as well as through observation of workshops with local and UK MRCGP[INT] examiners.

Results. Strong drivers to sit the exam included intrinsic motivation and seeking "recognition" as a family doctor. More recently qualified doctors had hopes of increased future income. There was a degree of expectation that the exam may unofficially improve overseas employment prospects. Sitting the exam conferred greater "confidence" and in particular developed new "patientcentred" communication skills. It introduced the use of evidencebased guidelines to most participants and increased awareness of the UK health system. There were examples of doctors as 'agents of change' and examples of diffusion of knowledge through formal and informal teaching channels. The use of a UK college name for the exam was perceived favourably as raising the profile of the qualification. Relative to local exams formal training opportunities were limited and pass rates were low. Value for money of an membership fee was questioned. Financial and geographical barriers to access the exam were noted.

Conclusion: Currently the MRCGP[INT]SA offers additional value for family doctors in Sri Lanka. However there is a need to improve training opportunities and post-qualification support for candidates. Further research into the long-term impact of the exam is necessary, in particular with regards to emigration and local training and exam development.

## P07.22

# General practice for the first year students presenting the hollistic reality of the good family medicine

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Introduction: With the advent of the nacional curriculum guidelines whose priority is the formation of a general doctor who is capable to respond to the needs of the individuals, family and community, the medical school began to prioritize the insertion, since the first year of the graduation, of their students at the primary health attention scenarios on the municipal health attention network. The formation of this professional-key for the SUS(Unique System of Health), as most complex as could be, is coming foward at last years. Scenario: Due to the notorious hardness of apprentive about health public system just in theory ambit, the institution witch this authors take part, established a covenant with the health family basic treatment units(UABSF), for visitations and development of workshops in benefit of community. Development: The first year students, after a brief period of conceptual alignment, are divided by the health units for the development of yours activities. The same have a four hour seminal shift in wich a lot of primary health attention aspects are experienced including action planning, individual approach, familiar organization according to population needs, popular participation also ethics There are the envolvment of several actors envolved(attention, management and social control) with active participation of the community health agents. As a assessment methodology, the students have to, after the achievement of the unit demands, elaborate and execute a project of common interest to both community and health unit. Conclusion: The approximation of the medical students to the health units, is a very important activity, because beyond letting the future health professionals more acquainted about the public health of their country, fosters discussions and improvements to such even earlier. And, so, such methodology come to contribute also with a development of this

system besides bring notorious aggrandizement humanitary to the academics.

### P07.23

# Last Year Students Knowledge and Attitude Toward the Primary Care

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**Aim:** We aimed to determine the final year students' knowledge and perception level related to family practice discipline and to evaluate students' attitudes toward to primary care.

Material and Method: Last year students who were studying at Ondokuz Mayis University Faculty of Medicine, during the 2010-2011 Academic Year and who take mandatory family medicine clerkship program completed a structured questionnaire before and after the program.

**Results:** The total number of students who participated in the study was 100 and their ages varied between 23-25 years. The average of age was  $23.80 \pm 0.53$  and 53(53%) were male while 47 (47%) were female.

Looking at some of the responses rates as answered correctly; the question about defining characteristics of a family doctor 84%, about the doctor patient communication 89.8 %, about the patient centered care 74%, about the health promotion %61.1, and about the evidence based medicine % 85.7. When we asked them if they want to be family medicine specialist % 64 of them (n:64) answered "no" while 36 % (n:36) as "yes" in pretest. But positive responses rate was 53 % and negatives were 47 % in posttest.

(Table I)

(1.0.0.0.1)							
Table I.							
		Would you like to specialize in family practice?"(posttest)					
		Yes	No				
Would you like to specialize in family practice?"(pretest)	Yes	30	6	36			
	No	23	41	64			
Total		53	47	100			

(<sup>2</sup>:20,77, p:0,000)

Comparing pretest and posttest scores there was significantly difference (Table II)

difference. (Table II)							
(Table II)							
					95% Confidence Interval of the Difference		
	t	df	Sig. (2- tailed)	Mean Difference	Lower	Upper	
score(pretest)	64,266	99	,000	14,25000	13,8100	14,6900	
score(posttest)	78,479	99	,000	14,74000	14,3673	15,1127	

Conclusion: In order to increase the interest in primary care, medicine faculties should update their curriculum and create opportunities for training in primary healthcare organizations.

### P07.24

'Train the Trainer' (TTT): A primary care-based mixed medical education intervention in heart failure. Effectiveness and predictors of evidence-based prescribing behaviour

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**Background:** Heart failure (HF) management needs to account for changeable and complex individual clinical characteristics. The use of renin angiotensin system inhibitors (RAAS-I) to target doses is recommended by guidelines, however, not always followed. Little is known about the physician and patient predictors of adherence.

Methods: To examine the coherence of primary care (PC) physicians' knowledge and self-perceived competencies regarding RAAS-I with their respective prescribing behavior being related to patient-associated barriers. Cross-sectional follow-up study after a randomized medical educational intervention trial with a seven month observation period. PC physicians (n=37) and patients with systolic HF (n=168). Measurements were knowledge (multiple choice test), self-perceived competencies, and patient variables. Prescribing was collected from the trials' documentation. The target variable consisted of ≥50% of recommended RAAS-I dosage being investigated by two-level logistic regression models. Results: Patients (69% male, mean age 68.8 years) showed symptomatic and objectified left ventricular (NYHA IIvs III/IV: 51% vs. 49% and mean LVEF 33.3%) and renal (GFR<50%:22%) impairment. Mean percentage of RAAS-I target dose was 47%, 59% of patients receiving ≥50%. Determinants of improved prescribing of RAAS-I were patient age (OR 0.95,CI 0.92-0.99,p=0.01), physician's global self-confidence at follow-up (OR 1.09,CI 1.02-1.05,p=0.01) and NYHA class (II vs. III/IV) (OR 0.63,CI 0.38-1.05,p=0.08).

**Conclusions**: A change in physician's confidence as a predictor of RAAS-I dose increase is a new finding that might reflect an intervention effect of improved physicians' intention and that might foster novel strategies to improve safe evidence-based prescribing. These should include targeting knowledge, attitudes and skills.

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### P07.25

Promoting Reflective Orientation Among Clinical Clerks on Family Medicine Precepts

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Promoting A Reflective Orientation Among Clinical Clerks on Family Medicine Precepts

A clinical workbook was designed to promote the habit of reflective and introspective practice among clinical clerks even as they rotate in various clinical departments. This largely hones their sensitivity and mindfulness to self, to patients and to the holistic nature of healing. The workbook is classified according to the 3 typologies: promotive (highlighting the psychosocial dimension), acute (embracing even critical care) and chronic (delving on terminally ill/debilitated). They log cases according the US STFM Clinical Clerkship curriculum 2009 objectives ---tabulating what is doable, what resources helped and the practical insights gleaned. Reflecting about the experience of conducting supervised family meetings is likewise encouraged. They also have documentation and narrative about home visits\_the interpersonal, technical and critical thinking skills they develop. Space for documentation and CD attachment is also provided. Summary and inspiring insights from the accomplished workbooks of the 92 clerks are to be presented.

### P07.26

The place of illnesses and diseases of otorhinolaryngology in family medicine specialty training

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Aim. The illnesses related to ear-nose and throat region of the body are the conditions mostly encountered by primary care physicians. The specialty training in family medicine in Turkey does not cover required training about otorhinolaryngologic diseases. The aim of the study is to determine the opinions of the heads of family medicine departments in Turkey on competencies of the family medicine trainees required for managing the problems related to ear-nose and throat region of the body and to discuss the improvment of family medicine specialty training program in light of these opinions.

Methods. There are 65 departments of f imily medicinen the universities anr teaching hospitals in Turkey. Online surveys were sent to the heads of family medicine departments. Survey assessed how much time was dedicated for electives during family medicine specialty training and whether training programs dedicated a specific amount of time for training in the field of otorhinolaryngology. Heads were asked whether family medicine trainees were trained in some otorhinolaryngology-related skills such as otoscopy and tympanogram and audiogram interpretation and diagnostic evaluation of congenital hearing lose. They were also asked to rate their graduate trainee's ability to manage four clinical scenarios including newborn hearing impairment. A total of 65 surveys were sent using e-mail addresses of the department heads.

Results. Response rate was 40%. There were no specialty training programs in two departments. The departments mostly had elective rotations from two months to more than five months in their specialty training programs. Fifty-eight percent of the departments had an otorhinolaryngology elective in their programs. Diagnostic otoscopic examination skills were formally taught by 47% of them, while tympanogram and audiogram interpretation skills were taught by 44%. Heads rated the competence of their trainees to manage hearing disorders as insufficient levels while the competence of managing speech patologies was rated as sufficient levels.

Conclusion. Most respondent heads of family medicine departments devote effort to teach otorhinolaryngology related topics. A greater emphasis and more formal teaching on speech disorders and tympanogram and audiogram interpretation skills is needed.

# P.08 - Mental health

# P08.01

Care of dementia patient: diagnostic suspicion and screening of cognitive disturbes in the general medicine setting

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Rationale and objectives: Dementia is a highly disabling condition. Its underhand onset makes the General Practitioner act as first analyser and therefore makes him the only one able to carry out an up-regulation of directing the patient to the Dementia research centre.

The aim of this research is to verify if the TYM (Test Your Memory), not yet validated in our Country, is a useful instrument for the screening of dementia.

Case histories and methods: On a sample of 71 patients, GP's trained for the correct administering of MMSE (Mini Mental State Examination), first administered the TYM (self-evaluation Test) and after 15 days the MMSE. The patients who reached a total equal to, or lower than 42/50 with the TYM and lower than 24 with the

MMSE were sent to the Alzheimer's Desease Assessing Unit of the Department of Neurology of the OORR Hospital of Foggia.

Results: 18 subjects were included in the analysis of the data, 7 of these with certain diagnosis (5 affected by Mild Cognitive Impairment and 2 by Vascular Dementia) and 11 sane subjects. The sensibility, the specificity, the positive predictive value and the negative predictive value of the TYM and of the MMSE were then calculated.

- 1. TYM: 100% Sensibility; 73% Specificity; 70% Positive predictive value (VPP); 100% Negative predictive value (VPN)
- 2. MMSE: 57% Sensibility; 100% Specificity; 100% Positive predictive value (VPP); 79% Negative predictive value (VPN)

Conclusions: The results of this research show that the two tests can be useful to identify people with suspect cognitive decline, in fact, it is clear how in case of MMSE+ or TYM- we won't need anything else to confirm the diagnostic suspect, considering the extreme sensibility of the TYM and the extreme specificity of MMSE; whereas in case of TYM + or MMSE - it could be useful to use both the tests. All in all, considering the easiness of use of the TYM, we can conclude that, if duly validated, this could prove to be extremely useful for the screening of cognitive disturbs in the General Medical Setting.

#### P08 02

# Screening of Depression in Primary Care: Outcomes of a Cross-sectional Study in Erzurum, Turkey

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#### Aim.

Depression is one of the most common psychiatric disorders and also frequently seen in primary care. Prevalence studies on this issue are limited in Turkey. Therefore, we aimed to assess the prevalence of depression among adults.

Material and method:

It is a cross-sectional study conducted during August to September 2011 at a family medicine health care clinic in Erzurum, Turkey. The study was invited older than 17 years old outpatients of the clinic. Primary Care Evaluation of Mental Disorders (PRIME-MD) screening questionnaire for depressive symptoms which is adapted to Turkish was applied 524 of patients who accepted to participate in the study. Out of 9 questions were considered as major depression who answered "yes" for 5 or more questions, minor depression who answered "yes" for 2 to 4 questions and normal who answered "yes" for 1 or none. Results:

Mean age was  $35.8\pm$  14.3 years. 286 participants (54.6%) were females while 238 participants (45.4%) were males. According to the evaluation questions determined that 248 (47.3%) of participants had no depression. Symptom questions were applied to remaining 276 (52.7%) participants. Among all the participants it is determined that 453 (86.5%) participants had no depression, 52 (9.9%) participants had minor depression and 19 (3.6%) participants had major depression. Among males; 223 (93.7%) of participants had minor depression symptoms, 10 (4.2%) of participants had minor depression symptoms, 5 (2.1%) of participants had major depression symptoms, 42 (14.7) of participants had minor depression symptoms, 14 (4.9%) of participants had minor depression symptoms. Depression symptoms was significantly seen in females more than males (X2:19.833, p<0.001).

Conclusion:

Depression in primary care is widely seen as compatible with the literature. Early diagnosis and treatment of major depression is important because of suicide risk and it was seen remarkable degree in our study. Psychiatric patients generally are applying to primary health care centers. Because, primary health care services are more common and psychiatric disorders often have somatic complaints. Therefore, PRIME-MD should be widely used for screening and diagnosis of common psychiatric disorders in primary care.

### P08.03

# Depressive disorders in the daily work of chosen physicians

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According to the WHO data, by 2020 depression will become the leading cause of death and incapacity among the female population, and the second leading cause among the entire population, after the cardio-vascular diseases. The depressive disorders lead to the detriment of the psycho-social functioning and suffering both with the depressive patients and their families. The chosen physicians encounter this growing problem on the daily bases. The objective of the study is to examine the presence of depressive disorders among the registered patients (1535), its frequency among the two genders, age groups, and groups of medications in the pharmaceutical anti-depression therapy. The work method used is the retrospective reviewing of electronic files of registered patients over the age of 18 in the period September to November 2011.

Results: Within the population of 1535 registered patients, one fifth has some type of mental disorder, out of which 79 patients (24,61%) have depressive disorders, 56 (70.88%) women and 23 (29.12%) men. In relation to age groups, the biggest number of registered ill patients are between 50 and 70 years of age - 39 (49.37%) and over 70, 21(26.58%). Within the age group 30-50, there are 15 (19.99%), while 4 (5.06%) are registered in the group up to 30 years of age. Pharmacological anti-depression therapy up to 30 years of age. Pharmacological anti-depression therapy up to 30 years of age. Pharmacological anti-depression therapy up to 35.17%), tri-cyclic antidepressants (TCA) are used by 30 (37.97%), MAOI (mono-amino-oxides inhibitors) by 2 (2.53%), while other antidepressants are used by 5 (6.33%).

Conclusion: Statistics show the continuous growth of depressive disorders, as well as big number of disorders that are not treated and not identified as depressive due to the depression being hidden behind various somatic problems, pain syndromes, mistakes in establishing the diagnosis and treatment, particularly in a country in transition which has not fully implemented the reform of the health system.

# P08.04

# The impact of the Economical crisis on mental health and suicide in Barcelona, Spain

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### **OBJECTIVE**

Mental health disorders contribute to the total burden of visits in the primary care settings. Unemployment and precarious employment are associated to a higher prevalence of mental health disorders and an economical crisis period increases these risk factors for mental health disorders. We aim to assess the differences in mental health disorders and suicides prevalences before (2007) and during (2011) an economical crisis period in a population of public primary care users of the city of Barcelona, Spain.

# METHODS AND MATERIALS:

We designed a longitudinal study in which we will compare the prevalences of mental health disorders and suicide in 2007 and 2011 of a population older than 16 years and attending to the public primary care settings in Barcelona. Data regarding employment status and socio-demographic characteristics of the study population is obtained from the Spanish Statistics Office and mental health data from the Catalan Institute of Statistics Department in the Catalan Health Institute.

RESULTS:

Preliminary results show an increase in the prevalence of mental health disorders and suicides during the year 2011, compared to 2007.

#### P08.05

# Frequency of depressive symptomatology among patients in a civil medical center

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**Introduction** Depression is one of the most common mental illnesses of our time and according to the World Health Organization affects millions of people in the world.

It is a multifactorial disease caused by biological and psychosocial factors.

**Purpose** The purpose of this investigation was to study elements and characteristics of depressive symptoms in patients who approached Civil Medical Center for provision of primary care and the degree of influence of factors such as age, sex, marital status, educational level.

**Material-Method** Were included a total of 344 people who used Health Center of Vyron (KYV) services.

Patients aged from 20 to 80 years of which 147 (43%) were men and 197 (57%) women.

All patients were examined and subjected to anonymous questionnaire for depression based on diagnostic criteria for DSM-IV. Multivariate analysis of variance was used.

The above research was conducted for a period of 6 months from April 2011 to October 2011. Patients were studied on the 1  $^{\rm st}$  , 3  $^{\rm rd}$  and 6  $^{\rm th}$  month.

None of the patients did receive antidepressant treatment in the past.

#### Results

Of the patients examined, 144 (41%) developed major depression of which 77 (54%) were women and 67 (46%) were men, while 200 patients (59%) developed minor depression of which 120 patients (60%) were women and 80 (40%) were men.

Additionally, ages of 40-60 years developed higher rate of major depression, with women showed 47,5% while men in their respective aged group developed rates of 39%.

Regarding the educational level there was an increase rate of depressive symptomatology in secondary education with a 42,5% Finally, regarding to marital status there is an increased rate of 55% in married people, followed by widows with 17%, singles 15% and divorced 13%.

# Conclusion

Depression is a very serious problem for modern society with ever increasing incidence in the Western world. Women is clearly superior to men.

Early diagnosis is very important. The early start of antidepressant medication and psychotherapy are necessary.

### P08.06

# The prevalence of psychiatric disorders among elderly patients in family medicine outpatient clinics

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Aim: In this study, we aimed to determine the prevelance of psychiatric diseases among elderly patients who were admitted to family medicine outpatient clinics of Ankara Diskapi Yildirim Beyazit Training And Research Hospital in two years period.

Methods: The data were collected from electronic medical record system of Central and Pursaklar outpatient clinics of family medicine between January 2009 and December 2010.

Results: A total of 65779 patients were admitted to Family Medicine Clinics in two-years period. 9678 of these patients (14.7%) were aged 65 and over. 6616 (68.4%) of geriatric patients were women. The average age of geriatric population was 72.9  $\pm$  6.1 years. The most common five diseases were, hypertension (25.3%, n = 2451), type 2 diabetes (13.7%, n = 1330), osteoporosis (5.3%, n = 514), coronary artery disease (4.2%, n =

415), and joint disorders (3.8%, n = 367) respectively. One hundred and fifty patients (1.6%) had a diagnosis of a psychiatric disorder requiring medication.

Discussion: Elderly patients constitute a significant part of the applicants of family medicine clinics and chronic diseases are more frequently seen in that population. Although it is well known that psychiatric disorders such as anxiety, depression are also prevalant among geriatric patients, we found that family doctors less focuses on psychiatric disorders than other chronic diseases in this group of patients. Family doctors should improve their skills in the diagnosis of psychiatric diseases particularly in geriatric population, in order to improve the quality of care provided in primary care settings.

# P08.07

# Health, money or love. What is more influence in patient with suicidal behavior?

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Introduction / Background: Stressful economic problems based on social, emotional and health problems can be triggers for suicidal behavior in patients with other risk factors.

Objectives: To assess factors that influence or precipitate suicidal behavior.

Design: Descriptive cross-sectional, observational study.

Methodology:

Sample: 118 patients assisted at Carlos Haya Hospital emergency room for suicidal behavior in the first trimester of 2011 (precission=0.009; Alfa=0.05)

<u>Instruments</u>: medical records of patients, randomly chosen

<u>Statistical analysis</u>: assessing the relationship between precipitating factors for suicidal behavior and suicidal purpose ( SPSS. V15). Logistic regression analysis ( dependent variable: purpose of the act)

Results:

113 valid entries Regarding the precipitating factor associated, 49.5% reported emotional causes, 24.7% economic and social problems and only 5.3% reported health issues.

Among patients who acted for sentimental reasons, 23.8% acted on impulse compared with 15.9% who planned the event with suicidal intention. In the patients with socio-economic problems occurred the opposite, 6.1% acted impulsively and 15% to schedule the event.

Conclusions:

Regarding the eternal question of what moves humans, health, money or love, in patients with suicidal behavior, emotional trigger is what most often leads a person to wish to end his life. There is an increase in cases related to economic and working problems versus previous studies, maybe related to the big current crisis.

### P08.08

Is correct the collection of data in medical record of the patients with suicidal behavior seen in the emergency ward?

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<u>Introduction / Background</u>: The identification of factors that increase or decrease the level of suicide risk is very important

because of the close relationships with such behavior. A lack of data can modify the correct approach to the patient.

<u>Objective</u>: To evaluate the data included in the medical record of patients seen in the emergency room for suicidal behavior and the impact of such loss of data.

<u>Design</u>: Cross-sectional, observational study.

Methodology:

<u>Sample</u>: 118 medical records of patients attended in the emergency room of Carlos Haya Teaching Hospital, during the first three months of 2011, randomly selected (precision=0.09, Alfa=0.05)

<u>Instruments</u>: Medical records of patients admitted, Clinical Practice Guideline for the prevention and treatment of suicidal behavior published by the Spanish National Health System in 2011.

<u>Analysis</u>: Evaluating losses in the collection of data for the following variables: age, sex, nationality, marital and employment status, toxic habits, psychiatric history and /or autolysis, medical treatment, psychiatric evaluation, purpose and tools of the act, related factors, psychiatric assessment during admission and destination on discharge in relation to suicidal behavior. SPSS V.15

Results: After analyzing the records of 118 patients, we found that 77.2% of the medical records was incomplete for some variables. There was only 22.8% of complete medical records.

The greatest losses were found in marital status variables (36.8%) and employment (69.5%).

Conclusions:

The medical records of patients with suicidal behavior in the emergency ward have deficits in the collection of data, especially marital status and employment status. According to the latest updates of Clinical Practice Guidelines those data are important precipitating factors in the suicidal behavior.

### P08.09

# Attitudes, Knowledge, and Behavior of Family Physicians about Generalized Anxiety Disorder

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**Aim:** We assessed knowledge, attitudes, and behaviors of family physicians regarding identification and management of generalized anxiety disorder.

Materials and Methods: 35 family physicians were mailed a questionnaire included items related to knowledge and treatment practices for generalized anxiety disorder. Their knowledge and treatment strategies were then compared with current guidelines.

**Results:** 28 physicians (80%) responded. 82,1 % of physicians took responsibility for diagnosing and treating generalized anxiety disorder.25 % of physicians reported that they routinely referred the patient to a psychiatrist to treat generalized anxiety disorder. 82,1 % of physicians responding to the survey were aware of alternative presentations of GAD in patients, and 60,7 % of them were well informed about the duration of treatment with medications for GAD. 35,7 % of the physicians rated themselves as "very confident" and 57,1 % rated themselves as "confident" in evaluating GAD.

**Discussion:** The primary care setting plays a key role in the care of patients with GAD, but identifying and managing can be a challenge. We should increase our effectiveness as family physicians in managing GAD.

### P08.10

# To describe job burnout in workers of a primary care health center

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Objective: To describe job burnout in workers of a primary care health center and compare the results between different groups (doctors, nurses and administrative staff)

Design: descriptive transversal study.

Location: urban Primary Health Care Center

Material ant methods: A self-administered anonymous survey questionnaire Maslasch Burnout Inventory that assesses three dimensions of the syndrome: Emotional Exhaustion (EE) ( $\leq$  18 low, 9-26 medium,  $\geq$ 27 high), Depersonalization (D) ( $\leq$ 5 low, 6-9 medium,  $\geq$ 10 high) and Personal Accomplishment (PR) ( $\geq$ 40 low, medium 34-39,  $\leq$ 33 high, in this case the score is inversely proportional to the degree of burnout), and a questionnaire that include personal and labor aspects.

Results: They responded to the survey 26 of the 46 workers, 72% are women. (answered the 82'5% of the doctors, the nurses of 46'7% and 28'6% of the administration). The following results were obtained for each of the dimensions measured EE: 44% low, 36% medium, 20% high; E: 68% low, 16% medium, 16% high; PR: 5% low, 36% medium, 40% higher. Comparing different groups, 100% of the nurses got a low score on depersonalization compared to 57'1% of physicians and 50% of administrative (P>0'05). The 64'2% of physicians scored low, compared to RP 28'6% of nurses and 0% of administrative (P>0'05)

Conclusions: There is a low prevalence of "burned" professionals, and there aren't statistically significant differences between groups. However, there is a high percentage of administrative staff who has not answered the questionnaire, and this may hide high levels of burned workers.

# P.09 - Art

#### P09.01

"No. But in my case...": complementary and alternative medicine use by Spanish doctors

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Spain there are no studies on the use complementary/alternative medicines (CAM) by physicians. The aim was to study the frequency of CAM use by doctors and medical students in Madrid. Material and methods: cross-sectional study by a self-administered survey on a sample of physicians, residents and medical students from two university hospitals and two primary care areas, conducted between February and November 2009. For a expected proportion of 50% (confidence level=95%, margin of error=5%), the sample was composed of a total of 435 physicians and residents and 45 medical students (n = 480). Results: The response rate was 64%, with 54% medical staff (165), 31% residents (96) and 15% students (45). 65% were women. 42 doctors (25.5%, confidence interval (CI) 95% :18,7-32, 1), 35 residents (36.5%, CI 95% :26,7-46, 2) and 7 students (15.6%; CI 95% : 4,5-26, 6) said they had visited CAM (p = 0.022). The median of CAM that doctors and residents had gone was 2 and students were 1. The most commonly used therapies were massage and relaxation. They visited CAM between 1 and 4 times in the last year, doctors and residents more often than conventional medicine consultations. The main complaints for using CAM were musculoskeletal diseases (41%) and mental health (19%). Between 50 and 75% of therapies were performed by non-health professionals. Over 50% said they had improved considerably and for most their level of satisfaction was high (satisfied or very satisfied). The main reason of medical staff for attending CAM was the failure of conventional treatments, and of residents "to prove", advised by a friend or relative. 65% had suggested others to visit CAM, 85% said that clinicians should be trained in CAM and these be included in the medical career. Conclusion: As demonstrated by the international literature, doctors use and have a favorable growing opinion on CAM. In

Spain, although the percentages are lower than other Western countries, it shows a discreet use and favorable opinion of the CAM

### P09.02

# Influence of social support in quitting smoking habits and relation with different risk pathologies

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Objective. - To prove that smokers with associated pathologies or elevated social support are more abstinent six months after a structured intervention for quitting smoking in primary care.

Design.- Multicentre and observational study

Material and Methods.- We recruited 52 patients from two primary care centers in Barcelona that were in contemplative phase and were included in a smoking cessation program with seven structured visits. The studied variables were: age, sex, marital status, origin, consumption, Fagerström Test, Richmond Test; diseases that increase the cardiovascular risk (hypertension, diabetes, cardiovascular diseases), COPD, related neoplasms and the social support questionnaire of the University College of London. The results were analyzed with SPSS.

Results - 50% are women aged 48,8 years on average (SD 12.3, range 23-87), 54 % live with a steady partner, 86% are Spanish in origin, 7.6% from other European countries, 3.8% American and the rest African; 40.3% of total completed/started a university degree, 34,6% college studies and 21% only primary. Average tobacco consumption was 21.6 cig/day during 22.3 years; 71% have high motivation in Richmond test and 78% show moderate/high dependence in Fagerström test, 61% live with smoking partners, 90% have smoking friends, 42.3% have an associated disease (31.8% two or more simultaneously), hypertension (59%), diabetes (22.7%) and COPD (20%). High social support is present in 34%.

Conclusions - 50% of patients included in the program have quitted smoking 6 months later. In this study, elevated individual motivation proved to be the main influence to reach abstinence, while associated pathologies or social support were not statistically significant differences.

# P09.03 Gingko biloba potential on memory disorders

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Introduction: Extracts from the leaves of Gingko biloba (GB) have been used therapeutically for centuries. Its main indications are peripheral vascular disease such as intermittent claudication and "cerebellar insufficiency". This latter is an imprecise term that describes a collection of symptoms, especially in elderly people. Memory disorders are included and are associated with impaired cerebral circulation. Evidence suggests that free radical oxidation reactions are part of the ageing process. GB contains flavonoids which have been shown to be scavengers of superoxide anions. It could be used for cognitive decline.

Goal: The goal of this review is to assess GB's effectiveness in the improvement of memory disorders, when compared to placebo.

Methods: Researches were performed on databases Tripdatabase, National Guideline Clearinghouse, Guideline Finder, Cochrane Library, Dare, Bandolier and Medline using the MeSH terms "Gingko biloba" and "memory disorders". The researches were limited to the articles published in the last 18 years in English, Spanish and Portuguese. To evaluate the results, the taxonomy SORT (Strenght of Recommendation Taxonomy) of American Family Physician was used.

Results: From the research resulted 115 articles, from which were selected 7: 2 randomized clinical trial and 5 systematic reviews. From their analysis, we conclude that GB appears to be safe in

use with no excess adverse effects compared with placebo. However, excess bleeding-related complications associated with GB have been reported. Many of the early trials used unsatisfactory methods were small, and publication bias cannot be excluded. Overall, evidence that Ginkgo has predictable and clinically significant benefit for people with dementia or cognitive impairment is inconsistent and unreliable. Conclusion

Evidence is actually insufficient to support the efficacy of GB (SORT B), in the improvement of memory impairment and loss. No evidence was found for an effect of GB on global cognitive change and on specific cognitive domains of memory. Other concern is the interactions between herbal treatments and other drugs. Rigorous studies are needed to identify adverse effects and inherent dangers associated with the combined use of prescription drugs and herbal products. Herbal remedies need to be further evaluated before practitioners can adequately assess risk benefit ratios.

#### P09.04

# Knowledge and attitudes of family physicians about influenza vaccination

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Background and aims: Family physicians are included in delivering influenza vaccine to patients. Risk groups for influenza vaccination have been defined by international health authorities. However, the national health policies lack in programmed preventive strategies and there are no elaborated vaccination protocols. Information on how family physicians manage their activities in this area of preventive medicine is scarce.

Methods: Twenty three experienced family physicians, specialists, from the Slavonia region, Croatia, were assessed by 36-item questionnaire on their knowledge and attitudes towards influenza vaccination, on the way they deliver influenza vaccine to their patients and on their own behaviour as the target group for influenza vaccination.

Results: All interviewed physicians possess knowledge on high risk groups for influenza vaccination and influenza virus infection related complications; 60% of them call their patients for vaccination, providing them information on benefits due to vaccination; 10%-15% of their patients with chronic diseases are vaccinated; 55% of interviewed physicians assume this as a satisfactory result of vaccination, as most of volunteers are included, while the others (45%) assume that this vaccination rate is not enough to include all patients to whom vaccination is needed. Specifically, they provide 15% of chronically ill children with influenza vaccine; 85% of interviewed doctors have the assumption that healthy children should not be vaccinated. A half of them systematically perform vaccination for their patients with malignant diseases, while another half assume that this group of patients should not be vaccinated. Their own coverage with vaccination is 56%, while the others assume that they have already acquired immunity due to the silent infections. A large proportion of interviewed doctors (40%) are not satisfied with the support the public health services provide them with, as many key decisions and procedures, including medical waste disposal, are left them on their own care.

Conclusions: Influenza vaccination is the area of preventive medicine where family physicians, in their decision-making, largely deal with uncertainties. Experienced doctors tend to develop their own strategies, although there is a need for more sound external support.

### P09.05

The role of alginate dressings impregnated with honey in the healing of diabetic neuropathic ulcers

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#### Aims

Alginate dressings impregnated with honey have been reported to be complementary in the healing process of diabetic ulcers and also decrease the possibility of amputation. The aim of the present study is to investigate the effectiveness of the above dressing in the healing of diabetic, lower limb, neuropathic ulcers

Methods

The study population consisted of 63 type diabetic patients with lower limb neuropathic ulcers. 32 patients were treated with alginate, impregnated with honey dressings and 31 with conventional dressings. All patients were given instructions regarding ulcer care and ulcer cultures were taken when clinically judged necessary. All patients were thoroughly followed up and ulcer temporal course was documented photographically. Antibiotics were also prescribed according to clinical judgment and off - loading of the affected limb was applied to all patients.

97% of neuropathic ulcers healed in the group of alginate, honey-impregnated dressings vs 95% in the group of conventional treatment (p: NS). Mean duration of healing has been 33 days in the alginate, honey-impregnated dressing vs 43 days in the control group (p<0.05, Cl 95% -10.7N to -8.7). Conclusion

Alginate, honey-impregnated dressings is an effective complementary treatment can accelerate healing of neuropathic ulcers but further research is needed in this field. This acceleration of healing process could reduce the possibility of amputation.

# P09.06

Do we know what kind of alternative products consume our patients?

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Scientific literature shows the increasing use of alternative and unconventional pharmaceutical products by the population. Objective: to analyze the percentage of general population consuming alternative products and the prescriber, the most consumed groups and consumption-related factors. Material and methods: cross-sectional study by postal survey on a sample of 288 primary care users in Madrid, Spain, between December 2008 and March 2009. The questionnaire asked the use of products and their name (up to 8) and the prescriber. Results: 190 users (66%, 95% CI: 60.5 to 71.5) consumed products sometime in their life, with a median of 2 (interquartile range, IQR = 1-4). Number of products entered was 533. The most consumed groups were herbal medicine (200, 37.5%), nutritional supplements (148, 27.8%), homeopathy (52, 9.8%), infusions (excluding tea, chamomile, tila and pennyroyal: 35, 6.6%) and weight loss products (34, 4.4%). The distribution of herbal products is shown in the table below:#

Product	Frequency	Percent
Valerian	31	15,5%
Seaweed	18	9,0%
Propolis	15	7,5%

12	6,0%
8	4,0%
8	4,0%
6	3,0%
5	2,5%
4	2,0%
4	2,0%
111	55,5%
	8 8 8 6 5 4

The main nutritional supplements consumed were: royal jelly (14.2%), evening primrose (11.5%), yeast (10.8%), soy lecithin (9.5%), pollen and wheat. For homeopathy, 50% were drug unit. Prescription of products together was attributed to an alternative medicine therapist (24.4%), the council at the herbarium (23.6%) and on their own initiative (17%) or advised by a friend or relative (16.8%). Statistical association was found in prescription products (p <0.001): the herbal and nutritional supplements had a high percentage of self-prescription or prescription by therapists and in the herbarium, while homeopathy was never consumed by their own initiative but for prescription from doctors or therapists. Consumption was associated with female sex (p <0.001) but not with age. Have attended alternative medicine consultations was associated with the consumption of products (p <0.001) and the number of products consumed (p <0.001). Conclusion: use of alternative products is widespread among general population so it is recommended that GPs asked about their use.

#### P09 07

Complementary and alternative medicine research in Western countries: resources for GPs

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World Health Organization (WHO) works for the implementation and research in complementary/alternative medicines (CAM) for over 30 years. In the Beijing Declaration 2008, the WHO urged governments to respect, preserve and promote them, establishing policies to regulate their use and safety, including in health systems, regulating the exercise of therapists and ensuring the training of health professionals and researchers. For WHO, member states should recognize the CAM as part of primary care to increase access, to care and preserve knowledge and resources. During these years, WHO has given guidance on methodologies to investigate and evaluate the CAM, as well as for the protection and promotion of safety in the development of herbal and other products of alternative medicine. WHO currently has 20 reference centers for research in CAM, of which five are in Western countries (one in Italy, one in Norway, two in the U.S. and one in Australia), two in Africa (Sudan and United Arab Emirates) and 13 in Asia (seven in China, two in Japan, three in the Republic of Korea and one in Vietnam). However, in the West there are 20 other centers of public and private initiative which investigate in CAM. This paper lists the CAM research resources available to the scientific community and GPs.

#### P09.08

# Do our patients improve with complementary and alternative medicines?

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The percentage of people who go to complementary/alternative medicine (CAM) at some time in Western countries varies between 25 and 90%, according to the World Health Organization. Objective: To determine the therapies used, the pathologies and reasons that led to its use, and perceived improvement and satisfaction obtained from a general population sample of Spanish. Material and methods: Descriptive study using self-administered survey on a sample of 288 people, of which 162 (56.3%, 95% :50,5-62, 0) had used MAC. Results: The number of CAM that they had used was 574, with a median of 3 per patient (interquartile range, IQR: 2-5). The design of the questionnaire limited to a maximum of 5 therapies for which other questions were asked, so we analyzed 382 therapies. The more frequently used CAM were relaxation therapies (24.3%), massage (20.8%), aromatherapy (19.8%), phytotherapy (16%), acupuncture (14.2%), homeopathy (13.5%) and chiropractic (11.5%). 56.8% attended more visits to CAM, 20% equal and 9.5% more visits to conventional health professionals. Reasons for visiting CAM were the absence of improvement of symptoms with conventional medicine (40%), avoiding side effects of conventional treatments (29%) and handle by disappointment with conventional medicine (17%), together with greater personal affinity for the postulates of CAM (26%). Main causes for consultations were: musculoskeletal disorders (41.6%), mental health (22.7%) and general (fatigue, improve health, 11.6%). Almost 50% of therapies were conducted by non-health professionals (14% were unaware of the degree). 45.5% reported having improved "enough," 28% "a lot", 21.2% "little", 4.8% "no relief" and 0.5% worsened. 44.2% was "satisfied" with therapy and outcomes and 35.5% "very satisfied". Therapies with the highest levels of perceived improvement (p <0.001) were: chiropractic, massage, homeopathy and relaxation therapies. Likewise, the same therapies as well as aromatherapy obtained the highest levels of satisfaction (p <0.001). Conclusions: the use of CAM has a high perception of improvement and satisfaction among user population, who often visits them to complement conventional medical treatments.

### P09.09

# Status of complementary/alternative medicines in the Spanish health system

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World Health Organization (WHO) ranks the states according to the model of incorporation of complementary/alternative medicines (CAM) in national health services: tolerant, inclusive or integrative. Spain is among the first, although there are no laws regulating the use of CAM except for some products derived from them. We don't currently know the exact percentage of general population that uses CAM because there are few studies and with conflicting results: between 25 and 66% of the population would use CAM. However, health surveys included one or two questions about the use of therapies in the last year and obtained a prevalence less than 5% overall. Though sold in pharmacies as well, none of the

products used by the CAM is included in pharmaceutical provision of the national health services. There is no national registry of physicians who practice CAM, while many medical councils have created collegiate sections of homeopathy, acupuncture and naturopathy, to welcome these professionals, accredit and register them. But it is a voluntary register. To perform any of the CAM the only legal requirement is a commercial register with the Ministry of Labour and obtain local licenses to bear a CAM office. The training and accreditation of therapists is not regulated and there are no required register as such, which has resulted in several lawsuits with the group of doctors who accused them of intrusion. Unlike other Western countries where training is provided by universities, there are few similar examples in Spanish universities, only as a postgraduate training, and training lies mainly on private entities. Nevertheless, the interest of health professionals by CAM is increasing and there are isolated examples of CAM professional practice within the national health services.

### P09.10

"We don't use complementary and alternative medicine" -Reasons from patients and physicians

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World Health Organization (WHO) has reported that 70 to 80% of the western population has used complementary/ alternative medicine (CAM). The aim of this study was to determine the reasons for non-CAM users in general population (GP) and a group of physicians and medical students (P&S). Material and methods: observational study using a survey in two samples: one of GP (n=288) and other of P&S (n=313) in Madrid, Spain. Results: 126 GP (43.8%) had never attended CAM consultations, but 42.1% (53) of them had consumed alternative products. In the case of P&S, 74.5% of physicians (n=123), 63.5% of residents (n=61) and 84.4% of students (n=38) did not use CAM, but 22 physicians, 17 residents and 8 students had consumed alternative products. The most common reason for GP for not visiting CAM was the good health (65%). Other reasons were: being expensive treatments (19%), doubts about its effectiveness (16.7%) or safety (16%) or knowing nothing about them (15%). For the P&S the main reason was the same, followed by reservations about its effectiveness. 26.8% of GP had advised therapies or alternative products, despite not ever having used them. 26.8% of physicians, 23.7% of residents and 31.6% of students also have advised them, with no statistical differences between the three groups. 75.8% of GP felt that CAM should be subsidized or provided by the national health services (in P&S rates ranged from 29 to 45%), and 83.1% thought that conventional health professionals should be formed in such therapies (P&S: 68 to 70%). From 63 to 73% of P&S believed that CAM should be included in a medical career. 83.5% of GP responded affirmatively to the question whether they visit CAM if they need to improve their health anytime. In case of P&S, they were from 68 to 76%. Conclusions: although there is a percentage of non-CAM users, their intended use and reasons for non-use indicate that the use of CAM could increase in GP as in P&S.

### P09.11

Change your Adicction - Communitary programme to replace smoking habits with physical activity

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OBJETIVE: To replace the smoking habits of sedentary smokers with physical activity.

AREA OF STUDY: Communitary programme on which local health centres, city councils, sport centres and patient associations (Spanish association against cancer) have collaborated.

SUBJECTS: sedentary smokers aged over 17 who want to quit smoking and start practising some supervised physical activity without any medical contraindication to do so or take medication for a period of three months.

INTERVENTIONS: Recruitment, initial assessment and periodic medical follow-up. Consultation with a sports instructor to prepare, supervise and control a three-month personalized programme of physical activity. Psychological support if it is necessary. Financial assistance for medication if they finish the programme.

RESULTS: number of participants: 48 people. Average age: 46 years old. 51% female. Average consumption: 22 cigarettes a day, and 27 years smoking, 59% with a result over 7 on Fagestrom test. 90% with previous attempts to quit smoking. 43% have taken medication for those three months. 66.7% of participants have attended 60% or more of the sessions organized at the sport centre and 42% continue taking part in physical activity once the programme had finished. 53.3% of the participants managed to give up smoking after three months (measured by co-oximeter). More than 80% recommended the programme to a friend.

CONCLUSIONS: Communitary programme with a multi-sectorial approach which has shown some positive results so as to quit smoking and do exercise with great satisfaction of participants.

# P09.12 What do we know about musicotherapy?

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Aim: Musicotherapy is a system documented over about one thousand years, of therapeutic, prophylactic and rehabilitative relevance, as we see it today, and has proved its worth in practice. There are many scientific investigations about its benefits of use for autism, psychiatric and onkologic diseases. In this study we aimed to investigate the knowledge of people about musicotherapy, the methods they use to deal with stress; the kind of music they listen; the relationship between musicotherapy and socioeconomic features.

Designs and Methods: This study is conducted in Sisli Etfal Training and Research Hospital and Istanbul Medeniyet University-Goztepe Training and Research Hospital in December 2011. One hundred two volunteers, in different socioeconomic and education status, working in these hospitals were included the study. The data (socioeconomic, sociocultural status, knowledge about musicotherapy and subquestions) were collected with a questionnaire. SPSS for Windows 16.0 was used for statistical analysis.

Results: In 102 volunteers (68 females, 34 males) 60 people (58.8%) were university graduate. Sixty three (61.8%) people spend their time with friends for managing stress. In our study 74 (72.5%) volunteers have heard about musicotherapy and 95 (93.1%) of them think that it can be used in medical treatment like autizm, oncologic and psychiatric diseases. The most known music kind for musicotherapy was "sufi" music (67,6%, n= 69). Education level, socioeconomic status and gender were not statistically important factors for the awareness of musicotherapy and its use for some diseases (p>0.05).

Conclusions: In this study we learned that although people do not know everything about musicotherapy, they look optimistically and curious to therapeutic effect of this method. We need to practice outcome studies to present the detailed effects of musicotherapy. Keywords: Musicotherapy, questionaire, knowledge, people.

#### P09.13

How do family physicians think and practice about herbal medicine? Which herbs patients ask in Turkey?

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**Aims:** The aim of this study was to investigate the knowledge and experience of family physicians about nutrition and herbal use during cancer treatment.

**Methods:** The study was performed in 131 family physicians and certified family doctors who participated national congresses from September 2010 to May 2011. A questionnaire investigating demographic data and nutritional approach was completed. Data were analyzed by a statistical program.

Results: Of the 131 physicians, 51 (38.9 %) were male and 80 (61.1 %) were female. Mean age was 41.20  $\pm$  0.59 years. Of the participants, 71 (54.2 %) were family doctors, 46 (35.1 %) were family medicine specialists, 8 (6.1%) were residents, 5 (3.8 %) were system specialists. Patients of 91 (69.5 %) physicians had asked about herbs to get information. Patients wanted to get information about nettle (52.5 %), garlic (6.8%), flax seed (5.1 %) and oleander (5.1 %) frequently. From 113 (86.3 %) responded questions, 97 (85.8 %) physicians thought that herbs have benefits on disease management. We observed that 78 (59.5 %) participants has cancer patients around them and of these physicians, 41 (52.5 %) were using herbal medicine. 31 (27.3 %) of the participants had seen the side affects of herbal theraphy and the most common side affect was high liver enzymes. 79 (60.3 %) were not well-informed about herb drug interactions and side affects of the herbs. Of the participants, 71 (54.2 %) approved to use herbal and alternative theraphies and 53 (40.5%) were using herbal medicine by themselves. The most common herbs that physicians use were green tea (18.4 %), ginger (11.4 %) and flax seed (11.4 %). Of the participants, 117 (89.3 %) thought that education about herbal use and oncologic nutrition was necessary. Conclusion: The study confirms that primary care patients want to get information about herbal use, however family physicians do not give adequate counselling for oncologic nutrition and herbs. Family physicians have to provide information for their cancer patients, especially about most common herbs, their side affects and drug interactions by using evidence based medicine. Family physicians agree that education on this subject was necessary.

# P09.14 From Informed Consent to Quaternary Prevention

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Ideally grounded in scientifically acceptable medical care, individual and population needs, ethically justifiable, tailored to the needs and values of society in which they are promoted, Preventive Medicine measures have given its steps during the last century, with General Practice revealing to have a major role contribution to its implementation. The current five levels of Prevention have been focused on studies and evaluations within the scientific community, but little is known about the patients perspective.

Wonca has defined Quaternary Prevention by the "action taken to identify patient at risk of overmedicalization, to protect him from new medical invasion, and to suggest to him interventions, which are ethically acceptable". Therefore, by assuming the role on focusing potential iatrogenic harm and by closing the cycle enables a rethinking of all other levels of prevention, either among doctors and possibly also among patients.

Knowing that the art of avoiding suffering can cause suffering by creating unrealistic expectations and excessive screening or treatment, it is important to enlighten the importance of promoting Informed Consent in each action of Preventive Medicine, in addition to its classical use in curative medicine.

#### P09.15

### Reflections on a Decade at War: Family Medicine and Beyond

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Since early 2002, the United States and allied partners from across the world have been engaged in several conflicts in the Persian Gulf. Over 6,000 US serviceman have been killed and thousands others wounded. The toll on coalition partners has been heavy as well. Since the conflict began, Uniformed Family Physicians have been providing care on the battlefield and on the homefront to support military operations and families alike. Hundreds of family physicians have been deployed across the globe to support operational missions. Caregiver stress among providers has received little attention to date.

To explore emotions related to caring for war casualties, the Department of Family Medicine at the Uniformed Services University has been using poetry to allow students and faculty to reflect on an image of the Battlefield Cross. This simple picture of rifle and boots represents the ultimate price of service. This fall, one of our own faculty (LTC David E. Cabrera) was killed in action\_the first faculty from the University to ever be listed as KIA. The collected poems display a range of form and emotion. Art in its' purest sense.



Helmet
Hot and stifling, no longer
Rifle
Protector, now helpless
Boots
Required on all paths, save one
Many have come before you
Your future lasts
In those you fought to protect

#### P09.16

Developing relationship between patient and physician - ways to improve intervention compliance

#### M. Hanzevacki:

Dom Zdravlja Zagreb Zapad, Zagreb, Croatia.

Some patients require a strong therapeutic alliance before they will trully accept medication. Those patients who are mistrustfull by nature or face instability in evnironment causing inbalance in otherwise fragile psychical balance seek for confirmation of their feelings. They found their decision proces on subconscious feelings protected by more or less structured psychical defence mechanisms.

The manner in which medication has been prescribed strongly influence this patient-physican relationship. If the physician makes a patient collaborator in the medication management by efectively comunicating not only the side-effects, adequate dosage and other "hard" data but also encounting known personality aspects of patient it is much more likely that pharmacological or any other therapy will be success.

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# P.10 - Poster One Slide/5 minutes

### P10.01

Development of a classification system on medication safety events in primary care

**A. Vögele**, M. Lainer, A. Sönnichsen; Department of Family and Preventive Medicine, Paracelsus Medical University, Salzburg, Austria.

Background: Within the LINNEAUS Euro-PC project (Learning from InterNational Networks About Errors And Understanding Safety in Primary Care) the lack of a valid classification system of medication safety events in primary care was identified. The International Classification of Patient Safety (ICPS) created by the WHO and the National Coordination Council on Medication Errors Reporting and Prevention (NCC MERP) are international classification systems to categorize patient safety events. Both of these tools were created as global reporting tools; however, neither of these systems has been developed exclusively for primary care settings.

Objectives: The overall objective of our work was to create a new classification system for medication safety events occurring in primary care settings. This tool shall be usable and expandable further to lead into a standardized medication event classification system, which can be used by researchers to compare medication safety events in primary care in the different European countries as well as by general practitioners to rate medication safety events and improve medication safety in their own office.

**Methods:** A matrix referring to the systems of ICPS and NCC MERP has been developed to measure medication safety events. After pilot- testings on paper, online and one field testing the preliminary classification has been adapted and modified to result in better understanding, agreement and validity.

**Results:** The actual classification includes the following query-stages: 1) whether the event was a medication error or an adverse drug event, 2) during which use process the event occurred; 3) the problem type of the event; 4) whether it was associated with patient harm or no patient harm; and finally 5) the main cause of

the initial event. This classification is tested on ten clinical scenarios typical for primary care. As testing is still on-going, numbers will be presented on the WONCA Conference.

### P10.02

A third generation cognitive therapy (Mindfulness) effect over anxiety levels in patients with anxious disorders in primary

**F. Atienza-Martín**<sup>1</sup>, E. Moreno-SanPedro<sup>2</sup>, P. Couso<sup>2</sup>, A. Morón. Contreras<sup>1</sup>, G. Marín-Andrés<sup>1</sup>, P. Schwartz-Calero<sup>1</sup>; <sup>1</sup>Andalusian Health Service, Huelva, Spain, <sup>2</sup>Huelva University, Huelva, Spain.

Introduction/antecedents: anxious disorders are an important health problem in primary care because their high prevalence. The solely pharmacological approach is insufficient. Hypothesis: the base on mindufulness cognitive therapy reduces the anxiety levels of these patients in a long term. Objectives: to evaluate the long term effectiveness of a third generation cognitive therapy (mindfulness) over the anxiety reduction in patients with anxious disorders in primary care. Design: Pre-post cuasi-experimental study. Method: Environment: urban health center. Selectivity criteria: patients diagnosed of anxiety by their family doctor. Intervention: 8 group sessions of Mindfulness-based stress reduction program (MBSR), designed by Kabat-Zin. Variables: anxiety level, measured by Beck's Anxiety Inventory (BAI), before and after the intervention, and a year after intervention end. Statistical analysis: T-test (pre-post mean differences). The informed consent was obtained of all participants. Results: 22 patients, 86.4% women, average age 50 years (SD 10.72) Low anxiety: before: 45.5% after: 77.3% a year after: 76.2% Moderate anxiety: before: 36.4% after: 13.6% a year after: 14.3% Heavy anxiety: before: 18.2% after: 9.1% a year after: 9.5% BAI: before: 24.95 after: 12.36 a year after: 15.47 Before/after: p<0.0001; before/a year after: p<0.001; after/a year after: p = 0.130 Conclusions: MBSR could be useful to manage patients with anxiety in a long term. References: Hofmann SG, Sawyer AT, Witt AA. Oh D. The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. J Consult Clin Psychol. 2010;78(2):169-83.

# P10.03

# Impact of general practitioner on adherence to medication

**M. Leppée**<sup>1</sup>, J. Culig<sup>1</sup>, J. Boskovic<sup>2</sup>, V. Bacic-Vrca<sup>2</sup>; 
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<sup>2</sup>School of Pharmacy and Biochemistry, Zagreb, Croatia.

BACKGROUND Adherence is one of the important factors of patient behavior during treatment, and talks about the extent to which patient behavior coincides with the recommendations of general practitioners about taking the prescribed therapy, healthy living, or other acceptable behavior, OBJECTIVE The purpose is to explore the relationship between general practitioners and patients with special emphasis on the comparison of adherent and nonadherent patients. METHODS Relationship is investigated using a questionnaire where patients respond to a series of questions relating directly to this relation and, indirectly, the persistence of the treatment. RESULTS The study included 635 persons, of whom there were 265 (41.7%) adherent, and 370 (58.3%) nonadherent. More than 3/4 of respondents (75.3%) was treated for more than five years at their present general practitioner, there were more adherent patients that were treated for more than five years (83.4%) than non-adherent ones (69.5%). The analysis of respondents claims about their relation with physician shows that in the first place, with the highest number of positive responses, is the claim of respondents that his/her general practitioner always explains the results of laboratory tests, X-rays and other specialized findings (n=489, 77.0%). In the second place is the claim that a patient can consult his/her physician whenever he/she has some personal or emotional problem (n=467, 73.5%). In the third place, the claim that a physician monitors the patient's problem solving (either directly or by telephone) with 71.0% (n=451), whereby the adherent patients did not differ from nonadherent in accepting these claims (72.5%:70.0%). CONCLUSIONS Adherence is affected by several factors that are common among people with cronic diseases, mostly older, such as physical or mental impairments, the use of more medications, and an increased risk of drug-drug interactions and side effects. General practiotioners may be able to simplify the medication regimen by using one medication that serves two purposes or by reducing the number of times a medication must be taken, to improve adherence and to reduce the risk of interactions.

### P10.04

Clinical interview style and user's satisfaction in primary care

J. J. Gascón-Cánovas<sup>1</sup>, P. Pérez-Fernández<sup>2</sup>, J. E. Pereñíguez-Barranco<sup>1</sup>, I. Vicente-López<sup>2</sup>, M. D. Medina-Abellán<sup>1</sup>; 
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Aim(s) and background: User's satisfaction is an added value of the results of Health Care and also have important implications over treatment adherence and doctor-patient relationship. This study aims to identify and asses which features of clinical interview have influences on user's satisfaction.

Material and method: Were included all the subjects diagnosed with hypertension (HBP) that have had changes in their pharmacological treatment over last year, from five different Health Centres. Anonymous and self-administered questionnaire sent by post was used, collecting data over clinical interview style in directed consultations of management HBP (11 items over personalized communication, bidirectional, adapted to the needs of information and eye contact). An item was including assessing the global satisfaction in relation with the professionalism of the GP in the management of HBP.

We used chi-square test to analyze the association between every characteristics of interview and user's satisfaction. Logistic regression was used to build an explanatory model of user's satisfaction.

Results: Response rate was 73%. All the characteristics of the clinical interview have an influence on user's satisfaction. In explanatory model of satisfaction four are the main features: to show interest on user's comment (IC95% OR=3,6-20,3), to address the patient by his/her name (IC95% OR=2,3-18,2), purposely slow steps in order to the patient to express doubts (IC95% OR=1,6-12,9), and to provide written/oral information over HBP (IC95% OR=1,1-8,3).

Conclusions: Clinical interview style, especially when personalized and settled in the user, have a crucial influence over satisfaction.

# P10.05

Systematic review: the Impact of Physical Activity on the Immune Status of Patients Infected with HIV

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**Background:** Our aim was to evaluate the association between physical activity and the immune status of people living with HIV/AIDS (PLWHA).

**Methods:** We conducted a systematic review of the literature between 1<sup>st</sup> January 2000 and 1<sup>st</sup> January 2011 on the following sources: Pubmed, Cochrane Library, Web of Knowledge and Biblioteca Virtual de Ciencias de la Salud. Languages included were English, Spanish, Portuguese and Galician. Mesh terms used were HIV infections AND (Viral Load OR Immunology[Subheading]) AND (Motor Activity OR Exercise). We focused on original articles and systematic reviews about PLWHA that presented measures of both physical activity and immunological status.

**Results:** Our search retrieved 665 abstracts. Finally, only 15 studies accomplished all inclusion criteria. A total of 555 participants were included in the review. The studies included both men and women. Participants are HIV-infected adults (18 years old onwards) in various AIDS stages. Whereas immunological measures were standard (CD4 count and viral load), physical activity was measured through different tools. Thus, we could not carried out any comparison analysis.

11 studies did not mention adverse effects related to physical activity in these patients. Furthermore, the duration and/or intensity of the exercise program was not related to new symptoms.

4 out of the 15 included studies did find an increase in CD4 count related to greater levels of physical activity; and a statistically significant reduction in viral load after exercise. Nevertheless, 10 studies did not find significant differences between physical activity and immune status. Finally, one study concluded that exercise improves quality of life, but not the level of CD4.

Conclusions: In summary, physical exercise is safe and may be beneficial for PLWHA. Even so, this systematic review is based on a small number of items (n = 15) and its results should be interpreted with caution. Individual studies in this review included samples of varying sizes, usually not large enough to demonstrate significant differences. Discrepancies in selection criteria and in exercise programs difficult any comparison. Further studies should be done in order to determine the type, duration, frequency and intensity of exercise needed to cause physiological changes in PLWHA.

### P10.06

Nasal corticosteroids as treatment for nasal obstruction caused by adenoid hypertrophy - what scientific evidence?

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Introduction: Adenoid hypertrophy is a common finding among children. It is usually associated with noisy breathing, nasal airway obstruction, mouth breathing, snoring, obstruction sleeping apnea and recurrent sinus and middle ear infections. Long term complications may include neurological, cardiovascular and growth problems. When these last ones occur, adenoidectomy is often recommended. In less severe cases, non-surgical interventions may be an option. A pathophysiologic link between adenoid hypertrophy and allergy suggests that nasal corticosteroids may have a role on these patients. The aim of this work was to review the current available evidence about nasal corticosteroids efficacy in improving the symptoms of nasal airway obstruction among children with adenoidal hypertrophy.

Methods: A bibliographic research was carried out using the MeSH terms Adrenal Cortex Hormones, Adenoids and Hypertrophy in several databases: National Guidelines Clearinghouse, Guidelines Finder, CMA-InfoBase, Cochrane Library, Clinical Evidence, DARE, Bandolier, PubMed e Index de Revistas Médicas Portuguesas. Data was collected if published since January 1995. To assess the levels of evidence and strength-of-recommendation grade was used the Strength of Recommendation Taxonomy (SORT) by American Family Physician.

Results: 38 articles were found, but only 2 Systematic Reviews complied with the established criteria. In the first Systematic Review studied, a Cohorte Study found a decrease in symptoms when nasal corticosteroids were used as long term therapy, although a premature ending would get them worse. Also in this Systematic Review, 5 of 6 Randomized Controlled Trials (RCT) had as final outcome the decrease of nasal symptoms. Of these, 4 RCT successfully showed symptoms improvement (Evidence Level 2). In the second Systematic Review studied, 5 of 6 RCT assess the same outcome and 4 showed symptoms improvement in the group undergoing nasal corticosteroids therapy (Evidence Level 2). However, only one of these RCT was not mentioned in the first Systematic Review.

Discussion: The current evidence refer that nasal corticosteroids are effective in decreasing the nasal airway obstruction symptom among children with adenoidal hypertrophy (SORT B). Therefore, the need for more research is pressing, as is the search for

scientific evidence that may reliably offer advice regarding the optimum treatment of these cases.

### P10.07

'Not only safely excluding pulmonary embolism but also any other clinically relevant disease': A new strategy in primary care?

W. A. M. Lucassen, H. C. P. M. van Weert; Academisch Medisch Centrum, Amsterdam, Netherlands.

**Introduction:** In patients consulting their general practitioner (GP) with symptoms as sudden dyspnoea or pain on inspiration, the GP can safely exclude pulmonary embolism (PE) with a negative PE-decision rule in combination with a negative (point-of-care) D-dimer-test. (AMUSE-2-study, not published yet). After excluding PE the GP still faces a diagnostic challenge. Non-life threatening causes (e.g. musculoskeletal pain) of the symptoms are common, but clinically relevant diseases must not be overlooked.

**Purpose:** To assess whether a negative Wells-clinical decision rule in combination with a negative D-dimertest not only could safely exclude PE but, in combination with a negative CRP-test, any other clinically relevant disease.

Methods: We used data from a prospective study including 598 primary care patients suspected of PE.( AMUSE-2-study, not published yet) This study evaluated a diagnostic strategy consisting of the Wells-PE-rule and a point-of-care D-dimer-test. We analysed the prevalence of relevant diseases in patients with a negative Wells-PE-rule ≤4 and a negative Simplify D-dimer-test. In these patients we calculated the negative predictive value for relevant diseases of a negative D-dimer-test in combination with a negative CRP-test.

**Preliminary results:** We included 272 patients with a negative Wells-PE-rule and a negative D-dimer-test. 79 patients were not referred to secondary care. In these not-referred patients the GP diagnosed 12 times a relevant disease (15%). In this group the CRP-results were only available in 6 patients so we were not able to evaluate the additional value of the CRP-test.

In 193 referred patients we observed 31 of 76 CRP-positive-patients (CRP>10 mg/l) with relevant disease. (40.8%) In 117 CRP-negative-patients we observed 12 patients with relevant disease. (11.3%) (P<0.001)

The negative predictive value of a negative CRP-test for relevant disease was 105/117=89.7%.

**Conclusion:** In patients suspected of PE the GP cannot only safely exclude PE with a negative Wells-PE-rule and a negative D-dimer-test but in combination with a negative CRP-test also significantly reduce the chance on clinically relevant disease. Because both D-dimer test and CRP-test are available as point-of-care test this strategy is easy to use in primary care. Before implementing this strategy needs to be evaluated in a prospective management study in primary care.

### P10.08

Pacifier and Breastfeeding: Forbidden Association?

### A. C. Santos,

USF S. João do Porto, Oporto, Portugal.

Introduction and Objective: Breastfeeding has unquestionable benefits for baby and mother. The World Health Organization in the "Ten Steps to Successful Breastfeeding" recommends complete avoidance of artificial teats or dummies to favor a longer duration of breastfeeding. However, the evidence suggests that pacifier use may decrease the risk of "Sudden Infant Death Syndrome."

The objective of this review is to assess whether the available evidence suggests a detrimental effect of pacifier use on the duration of breastfeeding.

Methods: Was conducted a survey of clinical practice guidelines (CPG), systematic reviews (SR) and meta-analysis (MA) published between 10/2006 and 10/2011, and of original articles published between 10/2010 and 10/2011, at sites of evidence-based

medicine, using the MeSH terms "Pacifiers" and "Breast Feeding". Strength of Recommendation Taxonomy (SORT) was used to assign levels of evidence (LE) and strength of recommendation. Results: Were found 29 articles, 6 of which were selected: 3 CPG, 1 SR and 2 MA. The CPG reported that to promote breastfeeding, should not be given pacifiers to healthy full-term babies (SORT C). The MA show contradictory results: the first included only cohort and cross-sectional studies and considered that pacifier is associated with a decreased duration of breastfeeding (LE 2). The second, supported by randomized clinical trials, indicates that pacifier use does not significantly affect prevalence or duration of breastfeeding (LE 1). The SR concludes that the highest level of evidence does not support an adverse relationship between pacifier use and the duration or exclusivity of breastfeeding (LE 1). Discussion: The reviewed articles present some contradictory results, however, when evaluating the highest level of evidence, the results point to an absence of deleterious effect of pacifier in breastfeeding. The studies that suggest a negative effect of pacifiers in breastfeeding are mainly observational studies that do not indicate whether pacifier use is leading to a decrease in breastfeeding or if breastfeeding reduction leads to increased use of pacifiers. On the other hand, these studies do not allow to control the various factors involved in the complex behaviors that breastfeeding and pacifier use represent.

### P10.09

In Search of a Perfect Storm: Provider self-efficacy, adherence to treatment, and continuing medical education

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While the challenge of patient adherence and persistence to a therapeutic regimen is driven by a plethora of variables, the literature pays little attention to an important element that transcends and influences all the others\_the quality of the relationship between the healthcare provider and the patient. Hippocrates wrote, "The patient, though conscious that his condition is perilous, may recover his health simply through his contentment with the goodness of the physician."

Because successful treatment adherence is highly influenced by the quality of the provider-patient exchange, as medical educators, we must position communication as an advanced competency, included as a critical component in the education of physicians-intraining. Current medical school curricula rarely provide courses in communication skills in 1st or 2nd year training due to the limitations of time, and when available in 3rd year training, physician-patient communication training is relegated to "orphan topic" status. This may result in a degradation of attitudes toward medicine and patient care by the new physician. If adequate communication skills are not mastered during undergraduate medical training, it clear that current postgraduate or continuing medical education cannot fill the gap.

Organizations that monitor health care quality\_the International Society for Quality in Healthcare, the European Society for Quality in Health Care, the Council of Europe, and the World Health Organization\_have identified the need for education and training in quality improvement, and have focused on issues that affect provider-patient governmental communication. With recommendations for demonstrable measures of quality patientcentered care, the role of integrated continuing education becomes essential. Just as patient self-efficacy, that is, confidence and competence to successfully achieve a healthcare-related goal, is part of every adherence discussion, so too should provider selfefficacy be addressed, specifically the provider's ability to communicate effectively.

This poster/presentation) will present a continuing medical education model that frames provider communication as an essential competency and critical component of provider self-efficacy. Currently, several stand-alone programs support and enhance physician communication and patient-centered care; however, this model will demonstrate how various patient-centered approaches can become an integral component of chronic illness management and contribute to the measurement of patient adherence.

### P10.10

### Teaching minor surgery skills

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Minor surgery is not completely developed in Spanish Primary Care, even though is part of the portfolio of services provided by our National Health System. This situation is given by a lack of time, work overload and a lack of training on surgery skills of our GP

OBJECTIVE: To describe our training programme on minor surgery skills and to analyze the improvement of our learners.

DESIGN: Retrospective descriptive study.

SETTINGS: Our Minor Surgery Unit (3 familiy doctors, 3 trained nurses and 1 clinic auxiliary), provides this service to all the inhabitants of Sant Cugat del Vallés (Barcelona, pop. 75.000) from 2003. About 350 surgical procedures are performed per year. Resident doctors of family medicine are trained by us since 2007. They also attend a ten hour workshop on Minor Surgery with 5 hours of practice on pig skin and 5 hours of theoretical instruction. Before starting the course they take a 32 question test to check their previous knowledge on minor surgery, and when the course is finished another examination is taken. We also deliver the same course to senior doctors and a 5 hour course for nurses.

PARTICIPANTS: Attendants to our 4 last minor surgery courses (20 junior doctors and 23 senior doctors).

OUTCOME AND MESURES: The results of the tests taken pre and post-training in the last 4 courses, per knowledge area (general knowledge, procedures, dermatology and surgical instruments) and professional category.

RESULTS: 32 questions were performed before and after their training programme on the 43 doctors. The average of correct answers was: pre-training test of senior doctors 11.9(37%); junior doctors 13.4(42%). Correct answers of after-course examination: Senior doctors 25.6(80%); junior doctors 28.9(90.3%). Right answers by knowledge areas in the before-course examination: general knowledge 81(47%), procedures 331(35%), dermatology 106(62%) and surgical instruments 21(24%). After-course test: general knowledge 115(89%), procedures 739(82%), dermatology 241(93%) and surgical instruments 73(85%).

CONCLUSIONS: Minor surgery training courses in primary care are a positive experience. Significant improvement in knowledge is demonstrated. It also shows that junior doctors got better marks than senior doctors in both cases. Further analyzes are on progress.

### P10.11

Al Ain Family Medicine residency program experience in learning evidence based medicine.

**L. M. Baynouna**<sup>1</sup>, A. Al Muhiri<sup>2</sup>, S. Major<sup>3</sup>, M. Al Kwuiti<sup>4</sup>, A. Shamsan<sup>4</sup>, I. Blair<sup>5</sup>;

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**Background:** An understanding of research methods and practical experience of designing and conducting research improves practitioners ability to make use of the literature and in clinical and policy decision making. Tow main strategies were used in Al Ain Family medicine program;

- 1- over 17 years a requirement in the program was to conduct research project.
- 2- EBM Program starts from the first month of the 4 year program and continue longitudinaly.

**Methods:** 1. In research projects, Residents work in small groups with the research rotation starting with a two-week introductory course on research methods and then complete it over two years.

2. With regards to EBM teaching, after an introductory week residents construct PICO for their search question, learn to search the medical databases, and use the tool to appraise their chosen article. Each resident presents it formally to their peers facilitated by program faculty at least 4 times per year. The current critical

appraisal checklist/tool used, has been adapted from a number of known EBM sources (1), (2) and encompasses the 6 A's (Ask, Acquire, Appraise, Aggregate, Adapt, Assess) (3) with the 7th A for (Re-Ask) having been added in program.

A self reporting anonymous questionnaire was circulated to each resident at the end of the last academic year to evaluate the program.

### Results:

- 1.To date, research topics have included; Women's health, Injury prevention, Diabetes, Obesity, Metabolic disorders, Child health, Antenatal care, Cardiovascular risk factors, Quality of care, and infectious diseases.
- 2. Weekly appraisal assessment by faculty were excellent as all were satisfactory or better. 17/28 (61%) residents agreed to participate. Residents responses are in

### table 1

I'm confident in assessing an article in	Average
therapy	7.6
meta-analysis	7.5
diagnosis	7
prognosis	6.3

### and table 2

80% of the residents agreed that the teaching of EBM in the program is adequate and 87% that they have enough literature searching skills.

### Conclusion:

AAFMP the program provides useful tools and adequate time to skill residents in research and EBM. Future studies will be worth conducting to see effect on practice post graduation.

### P10.12

# A course to teach empathy to the medical students and health professionals in Samsun-Turkey

F. Yaris, M. F. Dikici, F. A. Artiran Igde;

Ondokuzmayis University School of Medicine, Samsun, Turkey.

Aim: Empathy is important in professionalism. We organized a one day empathy course for medical students and secretaries. We aimed to present the details of the course and assess the effect of this course to increase the empathy of the participants qualitatively.

Method: Since 2008, 706 first year students have taken this course in the communication section of the clinical skills education by the department of Family Medicine. In 2011 we organized same course for the 144 secretaries of the university hospital. The course is one day training program composed of role-play sessions and presentation. In the beginning the participants are asked to discuss the meaning of empathy. Later, all participants are asked to experience as a patient and relative of a patient according to the scenario. They experience blindness with black painted sun glasses, using wheelchair for own and for the friend and deafness. We also put their limb and arm to the cast to create disability. Each participant has each experience in this curriculum and discusses them in the round table. Anxiety scales were used before and after the course. At the end of the session, a presentation about the empathy has been provided. The learners participate in a qualitative group interview after the intervention with the course.

Results: Empathy and attitudes toward the humanities improved after participation in the class. Understanding of the patient's perspective became more detailed and complex after the intervention. Anxiety of the students increased after the experience. Some feedbacks: "I realized the value of health, sorry for the ones who don't have" "I realized what I had" "Disability is very difficult" "I feel lucky, because I am not disabled" "Worst is the blindness" "I will be careful about the disabled patients" "I will work for the disabled ones in social life" "Disability needs patience" "The program helped me to develop empathy" "The patients should understand that we feel empathy, my feelings are not meaningful if they don't understand".

Conclusion: A brief course can contribute to greater empathy. We have a responsibility to provide education for empathic understanding as family medicine teachers.

#### P10.13

# Qualitative characteristics and risk factors involved in the prognosis of the patients with bronchiectasis

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Aim: To evaluate the importance of the main factors and of the qualitative characteristics which are influencing the prognosis of the patients with bronchiectasis.

**Method**: We studied a lot of 1063 patients diagnosed with bronchiectasis who where hospitalized at the Pneumology Hospital, lasi, Romania, between 2000-2009. For the evaluation of the prognoses there were used anamnesis data (sex, age, residence environment), there was follow up of the hospitalization period and the involved costs. The main pathogenic agents isolated from the sputum of the patients with bronchiectasis were also studied.

Results: After analyzing the main qualitative characteristics it was noticed a difference of 8% between the patients from the urban environment and those from the rural environment (572 as compared with 491); the feminine gender was 55% of the total of 1063 patients; most of the patients are of 40 - 60 years old (561 out of 1063). The main pathogens isolated from the sputum of the patients with bronchiectasis, ordered after their frequency were: Haemofilus influenzae, Pseudomonas aeruginosa, Stafilococus aureus, Klebsiella pneumoniae.

Regarding hospitalization periods, it was noticed that 282 patients were hospitalized for a period of over 14 days, 434 patients were hospitalized 8 - 14 days and a number of 347 were hospitalized for a period of 1 -7 days. The maxim number of hospitalization days was registered during the year 2009 (1506 days), with almost 500 more days as compared to 2000. Most hospital registrations were observed during winter months. The hospitalization costs got gradually greater during the year 2004 and 2009, the biggest sum being registered in 2009. A duplication of costs was noticed in 2008 as compared to 2005.

Conclusions: All obtained data indicate a growth of the total hospitalization costs of the patients with bronchiectasis which can be correlated with the long hospitalization periods and the microbial supra-infestation with microbial agents which leads to chronic airwaves colonization. Both the germs isolated from the sputum and the hospitalization period, correlated with the main studied characteristics are influencing the prognosis of the patients. Deepen studies are necessary in order to improve the management of these patients.

# P10.14

An review of the appropriate use of anticoagulation therapy in patients with non-valvular atrial fibrillation using the CHA2DS2-VASc score

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Background: Atrial fibrillation (AF) is a condition which presents relatively regularly in Primary Care. The pathogenesis of AF is varied ranging from thyrotoxicosis to rheumatic heart disease, making the diagnosis and management of AF an essential part of all fields of medicine. An important part of this is anticoagulation, to reduce the risk of systemic emboli. The European Society of Cardiology uses a scoring system known as the CHA2DS2-VASc score. Based on their guidelines, patients with a low score (<1) are low risk and therefore do not require anticoagulation or antiplatelet medication

Aims: To review the prescription of oral anticoagulation therapy in patients with atrial fibrillation and a low CHA2DS2-VASc score (<1). To assess whether prescribing is in line with the current European Society of Cardiology guidelines on Atrial Fibrillation. Method: A case note review of patients with AF at a rural GP

Method: A case note review of patients with AF at a rural GP practice in Scotland was undertaken. 159 patients (94 male; 65 female) registered with the practice had a pre-existing diagnosis of non-valvular AF (both paroxysmal and constant atrial fibrillation were included).

Results: 10 patients (6.3%) with non-valvular AF were calculated as having a CHA2DS2-VASc score <1. 2 (20%) of these patients were currently prescribed oral anti-coagulation therapy (warfarin). Of those, who were not being anticoagulated, 2 (20%) were being treated with an antiplatelet agent. 6 patients (60%) were receiving no thromboprophylaxis in line with the European guidelines.

Conclusions: Risk stratification is essential is deciding whether patients require anticoagulation or not. Our study shows, that using the new European Society of Cardiology Guidelines, the vast majority of patients (93.7%) have a CHA2DS2-VASc score >1 and therefore require anticoagulation. This study demonstrates, however, that a proportion may be being unnecessarily anticoagulated. The overuse of warfarin, and indeed antiplatelet medications, in these patients should be addressed as it may have implication for the patients risk of bleeding. We did consider the possibility that the new scoring system may have changed a patients level of risk and therefore the recommended treatment, so additional education was recommended for the practice.

#### P10.15

# Hand pocket echocardiograph for use in screening hypertension primary care patients

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RELEVANCE OF PROPOSED PROJECT: Conventional echocardiography is the most used imaging technique in the diagnosis of heart diseases because it is rapid and cost-effective. However, this methodology is limited in Primary Care units. A hand pocket echography device (PED) is commercially available for clinical use offering an excellent image quality by 2D-echo and colour Doppler.

OBJECTIVE: To assess the usefulness of PED in the evaluation of cardiovascular alterations in the primary care hypertension population and the benefit in a better selection of conventional echocardiography.

METHODS:: Type of study: transversal. Study Area: Outpatient Primary Care.

Criteria for inclusion: hypertension patients.

Criteria for exclusion: explicit refusal and housebound patients.

SUBJECTS:: Systematic samples from all the hypertension patients from two general practitioners. The calculated sample is 295 patients to evaluate the concordance between the family doctor and the ecocardiographer's interpretations (disagreement 20%, precision 5%, confidence level 95% and lost prevision 20%). STUDIES UNDERTAKEN:

Medical history: patient characteristics, cardiac events, degree and duration of hypertension, present treatment, symptoms.

Physical examination.

ECG.

INTERVENTION WITH HAND PED: Study acquisition: longitudinal and transversal parasternal, apical and suprasternal views.

Variables: LV diameter, interventricular septum thickness, left atrial diameter and area, ascending aortic diameter, atherosclerotic plaques in the aortic cross, and valvular diseases.

Study interpretation: Semiquantitative evaluation by family doctor (blind). Quantitative evaluation by echocardiographer (blind).

EXPECTATIONS USING HAND PED IN PRIMARY CARE: Early detection of cardiovascular abnormalities secondary to systemic arterial hypertension.

Improvement in the optimization in the therapeutic management of these patients. Efficient tool for triage of patients in need of conventional echocardiographic study.

### P10.16

# The Observation Of Social Tendencies In Adolescents According To Age-groups

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Introduction: The social tendencies of adolescents are one element of the biopsychosocial approach to family medicine. In our study, we aimed to observe the social tendencies of adolescents in the 11-20 age-group.

Materials and methods: Prospective, observational and analytic methods were used. Adolescents between the ages of 11 and 20 took part. The adolescents were divided into 3 age groups. These groups were 11-13; 14-16 and 17-20 yearolds. The people in these age-groups were evaluated according to the "Fatih Social Tendencies Scale"-(11-20 year-olds version). Consisted of 6 factors and 26 characteristics. The characteristics measured were awarded points on a 5-Point Likert-type scale. The measurement factors were: Social Adaptation; Substance Avoidance; Violence Avoidance; School Status; Family Status and Aims and Ideals. Taking the overall average of the factors, we calculated the total score. SPSS program( Statistical Package for the Social Sciences) was used.

Results: The study group consisted of 13 males and 35 females. The average age was (  $16.3\pm2$  years ) for the males and (  $15.5\pm2.8$  years) for the females. 11 People were in the 11-13 age group, 15 in the 14-16 age group and 22 in the 17-20 age group. We calculated the age-group average factor scores. In the paired comparisons; the following significant result were found. Between the 11-13 age-group and the 14-16 age-group, Violence Avoidance (  $4.13\pm0.6;\ 3.4\pm0.7,\ p=0.049),$  between the 11-13 group and the 17-20 group Violence Avoidance (  $4.13\pm0.6;\ 3.5\pm0.7,\ p=0.035),$  between the 14-16 and the 17-20 in the Family Status scores (  $3.8\pm0.9,\ 4.4\pm0.6,\ p=0.05).$ 

Conclusion: In particular, while in the Violence Avoidance category younger groups were more significant, the older groups had beter scores on Family Status. It is seen that age factors affect social tendencies. The previously prepared "Fatih Social Tendencies Scale" can be used to show these attitudes and differences. In the approach to adolescents, their age group should be taken into account, and the counselling services should be planned accordingly.

# P10.17

# The association between the results of vibration sensation testing with potentiometer and perspiration testing

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# Aims

Sensorimotor neuropathy as well as autonomic neuropathy (malfunction of the sympathetic system) play an important role in lower limb ulcer development. The qualitative assessment of vibration sense testing has been suggested as a predictive factor for potential ulcer formation. The aim of this study was to determine the association between vibration sense testing using a potentiometer (as a mean of sensorimotor neuropathy evaluation) and perspiration testing using neuropad test (as a means of sympathetic system malfunction evaluation)

# Methods

The researchers studied 73 patients with diabetes (34 men), who were chosen randomly from the outpatient diabetic clinic of our hospital. The subjects had a mean age of 64,74±10,29 years, mean known diabetes duration of 10,48±8,49 years, and mean BMI of 29,65±5,2. Vibration sense using a potentiometer was noted for each patient as well as qualitative assessment of perspiration using neuropad test.

### Results

Using the potentiometer the frequency of patients that presented with high possibility of ulcer formation was 42,11% (≥25V),

whereas using neuropad test was 56,58%. The statistical analysis showed strong correlation between the values of potentiometer and the results of neuropad test (p<0.0001). Additionally, an association between the values of the potentiometer and the subjects' age was revealed (p<0,001). However, no association between the potentiometer's values and the known diabetes duration of the participants or their BMI was observed. The mean values of potentiometer at the group of patients that tested negative on neuropad test were 19,56±9,75 and were significantly different compared to those at the group that tested positive on neuropad test (28,93±10,46). (p< 0.0001).

Conclusion
There is a strong correlation among the results of vibration sense, perspiration testing and age. The perspiration testing identified in a higher percentage in patients with future development of ulceration probably due to the fact that it evaluates the function of smaller nerve fibres.

#### P10.18

# Which antidiabetic medication is associated with better long term prognosis after an ischemic stroke?

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#### Aims

The impact of various antidiabetic medications [insulin (INS), biguanides (BIG), sulfonylureas (SULF), meglitinides (MEG), alpha-glucosidase ( $\alpha G$ ) inhibitors, thiazolidinediones (TZD), dipeptidyl peptidase-4 (DPP-4) inhibitors, glucagon-like peptide-1 (GLP-1) analogs] on the prognosis of ischemic stroke (IS) diabetic patients is an unsolved matter in current literature. The aim of our study was to evaluate the effect of various antidiabetic medications on the long-term outcome of an acute IS.

Methods

This prospective study was conducted in a tertiary Greek hospital. 266 consecutive IS patients with type 1 or 2 diabetes, admitted between January 2008 and February 2009, are comprised the study population. End points were relapse of stroke (RS) or death due to primary cause within 2 years following the initial episode. Multivariate analysis was used to identify independent predictors, such as patients' demographics, concomitant medications and other risk factors, regarding study's end points.

After 24 months, 80 (30.1%) out of 266 patients, 31 (11.7%) men and 49 (18.4%) women, suffered RS or died. In particular, RS occurred in 13 (4.9%) patients, 8 (3%) women and 5 (1.9%) men, while 67 (25.2%) patients, 41 (15.4%) women and 26 (9.8%) men died. There was a statistically significant beneficial effect of TZD (HR=0.34, 95% CI:0.11-1.01, P=0.043), as well as of DPP-4 inhibitor (HR=0.105, 95% CI:0.01-0.79, P=0.008) on RS or death. A multivariate analysis of all risk factors, identified TZD (HR=8.26 95% CI:1.75-39, p=0.008) as the strongest significant negative predictor of RS or death, followed by the use of antiplatelet (HR=5.63, 95% CI: 1.92-16.46, p=0.002) and angiotensin receptor blocker (ARB) (HR=0.04, 95% CI: 0.01-0.18, p<0.001). Long diabetes duration (HR=0.85, 95% CI: 0.81-0.91, p<0.001) and elevated admission HbA1c levels (HR=3.45, 95% CI: 2.45-4.85, p<0.001) were also positive predictors of RS or death.

Conclusion

High-risk diabetic patients that receive TZD or DPP-4 inhibitor in addition to their existing medication significantly reduce the risk of RS or death within 2 years after an acute IS. TZD along with the concomitant use of ARB and antiplatelet agents significantly decrease the long-term risk of RS or death, taking into consideration patients' initial glycemic control and diabetes duration.

#### P10.19

# Correlation of specific antihypertensive treatment to the prognosis of ischemic stroke in diabetic patients

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#### Aim

Arterial hypertension (AH) and diabetes are major risk factors for cardiovascular events. AH among other risk factors such as coronary artery disease (CAD) and previous lacunar ischemic strokes (IS), increases the risk of new severe stroke. Drug intervention and control of arterial pressure significantly diminishes stroke recurrences. The aim of the present study is the evaluation and correlation of various antihypertensive agents such as  $\beta$ -blockers ( $\beta$ BL), calcium blockers (CaBL), diuretics (DIU), angiotensin converting enzyme inhibitors (ACE), angiotensin II receptor blockers (ARB), nitrates ,  $\alpha$ -blockers ( $\alpha$ BL), centrally acting (CA) and their commonest combinations to the functional outcome of IS in diabetic patients within a year.

This prospective study was conducted in a tertiary Greek hospital. 212 consecutive IS, patients with type 1 or 2 diabetes, admitted between January 2008 and February 2010, comprised the study population. Neurological assessment was performed at admission to the hospital and after one year according to NIHSS (0-42). Improvement of functional outcome was considered a decrease of at least 4 units at NIHSS. End points were recurrence of stroke (RS) or death due to primary cause within 1 year following the initial episode.

#### Results

Diabetic patients who received CaBL (OR=3.73 95% CI:1.25-11.06, p=0.012], ACE (OR=1.11 95% CI:1.05-1.18, p=0.009), CA (OR=1.08 95% CI:1.03-1.13, p=0.025), ARB and DIU (OR=1.18 95% CI:1.1-1.27, p=0.001), exhibited improvement of functional outcome. Respectively, lower frequencies of death or recurrence of stroke (RS) were observed in diabetic patients who received CaBL (HR=0.77 95% CI:0.71-0.84, p<0.001), ACE (HR=0.9 95% CI:0.85-0.94, p=0.021), ??? (HR=1.19 95% CI:1.05-1.34, p<0.001), ARB and DIU (HR=0.85 95% CI:0.79-0.9, p=0.004),  $\beta$ BL and DIU (HR=5.98 95% CI:1.86-19.23, p=0.001). Conclusion

Indicative control of AH, as defined by the use of single or combinative pharmaceutical therapy, improves significantly the prognosis of IS diabetic patients. Antihypertensive treatment with CaBL, or ACE, or CA, or combination of ARB and DIU, is associated with better functional outcome. Medication therapy with CaBL, or ACE, or ACE + DIU, or combination of ARB and DIU, or  $\beta BL$  and DIU is correlated with lower frequency of death or RS in diabetic patients, one year following the initial episode.

# P10.20

The importance of non amendable stroke risk factors to the prognosis of diabetic patients after an acute ischemic stroke

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### Aims

Studies have shown that diabetes doubles the risk of a new episode and worsens the prognosis in stroke patients. Stroke is a disease depended on several factors. Depending on the possibility of modification, risk factors are classified in two main categories; in amendable and non amendable. The purpose of this study was the evaluation and comparison of non amendable socioeconomic risk factors to the functional outcome of ischemic stroke (IS) in diabetic patients within one year.

### Methods

The study population consisted of 212 consecutive, patients with type 1 or 2 diabetes admitted between January 2008 and August 2009 due to ischemic stroke. Neurological assessment was performed on admission and one year after according to NIHSS (0-42). Improvement of functional outcome was considered a decrease of at least 4 units at NIHSS. Comparisons between categorical variables were evaluated by the Pearson Chi-Square test or Fisher's exact test as appropriate.

Male patients had significantly better functional outcome compared to female patients (OR=5.85 95% CI:2.60-13.14, p<0.001). On the contrary, single patients (OR=0.05 95% CI:0.01-0.16, p<0.001), patients without children (OR=0,12 95% CI:0,06-0,24, p<0,001), and patients who lived alone (OR=0.17 95% CI:0.07-0.38, p<0.001) exhibited lower frequency of neurological improvement. Conclusion

Diabetic female or single patients, or patients who live alone, seem to deteriorate their neurological outcome within one year after an IS. Diabetic patients with children have better prognosis within one year after an IS.

### P10.21

Is the IScore a reliable and exact tool to predict mortality ratios after acute ischemic stroke in diabetic patients?

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Aims: IScore is a novel tool developed by Canadian researchers to identify mortality rates within 30 days and 12 months after an ischemic stroke (IS). The aim of the present study was to evaluate IScore mortality prediction rates in diabetic IS patients.

Methods: This retrospective study was conducted in a tertiary Greek hospital. 266 consecutive ischemic strokes patients with type 1 or 2 diabetes, were comprised the study population. Thirty day and 12 month scores were individually calculated for each patient and actual mortality was monitored at the same time intervals. IScore's predictors of mortality included older age, male sex, severe stroke, non-lacunar stroke subtype, glucose ≥ 7.5 mmol/L (135 mg/dL), history of atrial fibrillation, CAD, CHF, cancer, dementia, kidney disease on dialysis and dependency prior to the stroke

Results: Thirty one (11.7%) out of 266 patients died 30 days after the IS. In total 41 (15.4%) patients died after 12 months. Mean ( $\pm$  SD) values for the 30 day and 12 month IScore were 176.4  $\pm$  42.1 and 142.6  $\pm$  31.5 respectively. Thirty day (HR=1.07, 95% CI: 1.04-1.09, p<0.001) and 12 month scores (HR=1.12, 95% CI: 1.08-1.16, p<0.001) were significant predictors of mortality in diabetic IS patients. A ROC curve estimated that a score of 208 (AUC=0.941, 95% CI: 0.91-0.96, p<0.001) has 100% (95% CI: 88.8-100) sensitivity and 83.8% (95% CI: 78.5-88.3) specificity for 30 day mortality, while a score of 169 (AUC=0.964, 95% CI: 0.93-0.99, p<0.001) reflects 92.6% (95% CI: 80.1-98.5) sensitivity and 92% (95% CI: 87.7-95.2) specificity for 12 month mortality. Compared to previous study in diverse population, these results exhibit higher sensitivity and specificity indicating that IScore can predict mortality more precisely in diabetic patients.

Conclusion: IScore represents a well validated and accurate tool in identifying mortality early after hospitalization in acute IS diabetic patients. The identical acute clinical parameters and chronic comorbid conditions, identified within hours of admission, can be used in order to predict mortality in a high-risk population after an acute stroke. In addition, IScore exhibits higher predictive accuracy specifically for diabetic patients regarding the 30 day and 12 month mortality rates.

#### P10.23

Brain injury in the elderly and the "easy" administration of antithrombotic treatment

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Introduction: The diagnosis of brain injury in the elderly patients caused by a fall or by other mechanism is a clinical entity in every health level. Chronic subdural hematoma (CSH) is a common problem in the elderly patients who receive antithrombotic treatment with or without absolute indications.

Purpose: The aim of this study was to evaluate the impact of the antithrombotic treatment in elderly patients as a predictor factor to show chronic subdural hematomas.

Materials and methods: A retrospective study was performed at the Department of Neurosurgery of Tzaneio General Hospital of Piraeus over a period of 5 years. The study included 115 patients with chronic subdural hematoma, range age 68-82 years, with or without antithrombotic treatment, that were treated by surgical operation or conservatively. Statistical analysis based on percentage evaluation.

Results: Of 115 elderly patients with CSH, 65(56,5%) were receiving antithrombotic treatment. Of the 65 patients on antithrombotic treatment, 35(30,4%) were receiving antithrombotic treatment due to absolute indications ( past history of heart infarct, atrial fibrillation, cardiac valve pathology, deep venous thrombosis, pulmonary embolism, ischemic stroke). The rest of them, 30 (26,1%) were receiving antithrombotic treatment with relative indications like dislipidaimia, diabetes, coronary artery disease and cardiac insufficiency. A great percentage 43,5% (50/115) of elderly patients were on antithrombotic treatment as a prophylaxis of ischemic stroke.

Conclusion: Many elderly patients take antithrombotic treatment without absolute indications. This treatment accompanies the elderly patient for many years without always being necessary. The consequences of this practice could be very serious in the case of brain injury and for this reason we must reevaluate the long term "easy" administration of antithrombotic treatment.

# P10.24

# Assessment of depression in patients after ischemic stroke

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Introduction: Ischemic Stroke is a multifactoral disease which remains a major healthcare problem. It is the 3<sup>rd</sup> leading cause of death in the nation, after heart disease and cancer. Depression is the most common neuropsychiatric disorder after an ischemic stroke episode. The background and the risk factors responsible for depression remain unclear. The inclusion of depression with risk factors such as biological, medical, socio-economic, as well as the identification point and the degree of brain damage seem to have been most powerful predictors.

Purpose: The aim of the study was to identify the rate of depression in a cohort of patients after an ischemic stroke during one year.

Material and methods: Participants were 157 patients (84male/73female, mean age 73±8years) who were hospitalized in Internal Medicine Clinic due to ischemic stroke. The diagnosis was confirmed by CT brain. All patients were evaluated and completed a questionnaire for depression based on diagnostic criteria DSM-IV on time 0, 3, 6 and 12 months after hospitalization. None of the patients had been received antidepressant treatment in the past.

Results: The analysis of collected data showed that 39% (61/157) of patients were fount to have major depression, 33% (52/157) minor depression and 28% (44/157) without depression symptoms at the end of the study. The percentage of patients with major depressive on time 0 was 54% (33/61) and the new cases on time 3, 6 and 12 months were 15% (9/61), 18% (11/61) and 13% (8/61) respectively. The percentage of patients with minor depressive on time 0 was 36.5% (19/52) while the new cases on time 3, 6 and 12 months were 15,4% (8/52), 26,9% (14/52) and 21,2% (11/52) respectively. Out of 113 patients with major and minor depression, 59(52%) were women and 54(48%) were men.

Conclusion: Our results suggested that the majority of patients with ischemic stroke met criteria for depression. Also, there is a tendency to women to show depression probably due to their temper to depression. Early diagnosis of depression is very important as it can prevent recovery and influence the subsequent social reintegration and the quality of the patient's life as well.

#### P10.25

# Effects Percieved Parenteral Attitudes on Turkish High School Student's Attitudes Toward Addictive Substances

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People usually don't understand why and how other people become addicted to drugs and alcohol. Addiction is not simply a behavioral problem involving too much drugs, internet or sex. This situation is usually misunderstood and stigmatized by public and doctors. Addiction is a "chronic relapsing brain disorder" and affected by genetic, neorobiological and social factors. Therefore, like other chronic diseases, addiction also needs treatment over lifetime. Addicted persons have a wide range of serious economic, social, health complications. Alcohol and drug users have significantly lower life expectancy. Young adults have a great impact on their mortalitiy. Drug users also have housing, relationship and judical problems. Due to multiple hospitalizations and treatment episodes, addiction treatments are highly cost. For this reasons, best way to tackle it should be with prevention efforts. Drug addiction is a preventable disease. Prevention programmes involving families and schools are effective in reducing drug abuse. Convinient parents attitude is important for developing individual social skills. Parenteral attitudes have a considerable effects on the psycho-social development of the adolescents.

The aim of this research is to determine students' attitudes toward addictive substances in terms of perceived parental attitudes. For this, we gave high school students Addictive Substances Attitudes Scale and Parental Attitudes Scale

Survey studies are continuing. The results will be shared in the conference.

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#### P10.26

# The importance of the early diagnosis of subarachnoid hemorrhage in primary healthcare level

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Introduction: Spontaneous subarachnoid hemorrhage (SAH) is an important clinical entity, mainly caused by rupture of aneurysm or arteriovenous malformation. It may present with specific clinical symptoms like acute headache, loss of consciousness and neurological signs such as Bruzinski and Körnig sign.

Purpose: The purpose of this study was to evaluate the early diagnosis of SAH as well as the importance of a detailed history report in primary healthcare level.

Materials and methods: A descriptive study was performed at the Department of Neurosurgery of Tzaneio General Hospital of Piraeus during a period of one year. Participants were 40 patients, age range 42-67years, with a diagnosis of spontaneous SAH and were treated with surgical operation or embolization.

Results: Only 9 (22,5%) of the 40 patients were initially evaluated in the primary healthcare unit or by a family doctor. The symptoms were judged as a migraine episode and were treated conservatively. Because of the persistence of the symptoms, these 9 patients were transferred to Emergency Department of the Hospital. By this time only 10% (4/9) of the patients were alert while 12,5% (5/9) of them were in a coma. Computer tomography of the brain showed the subarachnoid hemorrhage in all 9 patients. Conclusions: A considerable number of patients with symptoms of spontaneous SAH is initially evaluated by primary healthcare unit or family doctors, but due to the level of consciousness are often underestimated. Consequently the knowledge and excellent evaluation of the symptoms, combined with a good history report and clinical examination can lead to a better prognosis and outcome for these patients.

# P10.27

# The effect of high levels of serum uric acid in elderly patients with ischemic stroke

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Introduction:\_Uric acid is the end product of purines metabolism in humans and is mainly produced in the liver and to a lesser extent in small intestine and kidney. It has been associated with atherosclerotic disease in carotid and the manifestation of stroke in patients with unregulated hypertension and cardiovascular disease. Drugs such as thiazide diuretics, beta-blockers and acetylsalicylic acid implicate in the increase of serum uric acid. Hypertriglyceridemia appears to correlate with the increased levels of uric acid independently to manifestation of obesity.

Purpose: The purpose of the study was to measure and estimate the levels of serum uric acid in the acute phase of ischemic stroke. Materials and method: We reviewed 135 patients (65 male/70 female, mean age 78±7years old), who were hospitalized at Department of Internal Medicine in Tzaneio, General Hospital of Piraeus due to ischemic stroke. The diagnosis was confirmed by CT brain. We estimated the risk factors of stroke such as hypertension, diabetes mellitus, coronary disease, dyslipidemia and obesity. Laboratory parameters were evaluated serum uric acid (2,6-6,0 mg/dl) at admission, glucosylated hemoglobin (HbA1c 4,2-6,4%) and triglyceride (TG) levels (<150 mg/dl). The patients were receiving antihypertensives included thiazide diuretics, beta-blockers and other drugs like acetylsalicylic acid. Results: Of 135 patients with ischemic stroke, 48 (35,5%, 23 male/25 female) had increased levels of uric acid. Of 48 patients.

male/25 female) had increased levels of uric acid. Of 48 patients, both male and female had values range of serum uric acid between 7,0-12,6 mg/dl and 6,4-10,9 mg/dl respectively. Increased levels of TG>150mg/dl had 27,1% (13/48) of patients and HbA1c

>6,5% 43,75%(21/48). The percentage of patients who were receiving thiazide diuretics, beta-blockers and acetylsalicylic acid was 35,4% (17/48), 31,2% (15/48) and 62,5% (30/48) respectively. The 18,75% of patients with very high uric acid levels died, while the 29,2% had more severe symptoms.

Conclusion: The 1/3 of patients with ischemic stroke had very high levels of uric acid probably as a result of receiving thiazide diuretics, beta-blockers and acetylsalicylic acid. Finally, high levels of TG and HbA1c seems to be related with increased levels of uric acid in patients with ischemic stroke.

### P10.28

The importance of early detection of Intimate Partner Violence in Primary Care Settings. Successful interventions and effects on health.

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It is estimated that about 30% of women attending Primary Care have been or are victims of Intimate Partner Violence (IPV), with deleterious effects in physical, psychological and social health. Our Center collaborated in the elaboration of a Municipal Multidisciplinary IPV Detection Program. In addition, our Mental Health Care Center designed a group intervention program with the objectives of increasing self-esteem and decrease levels of anxiety and depression by a cognitive-behavioral therapy.

**Introduction:** The objective of the study was to evaluate the effectiveness of a cognitive-behavioral group intervention in women victims of IPV.

**Subjects and Method**: The intervention consisted of 20 sessions of 90 minutes each in groups of 7 women. A total of 39 women were recruited. Different techniques to increase self-esteem, assertiveness and self-consciousness of their violent situation were applied. Other techniques of emotional self-control to decrease symptoms of anxiety, depression and PTSD were also applied. Evaluation was carried out before and after intervention.

**Results:** The total of women evaluated was 39. The average age was 46.85 years. Regarding the typology of violence undergone we found: 100% psychological violence, 98.7% control violence, 82.1% economic violence, 74.4 % physical violence and 66.7% sexual violence.

Statistically significant improvement was found in STAI-R, STAI-E and BDI scales. In the MMPI statistically significant improvement was detected in the scales of depression and hysteria. The rest of the subscales showed no significant changes but for a slight tendency to decrease and the exception of the subscales of paranoia and mania, were there was a slight increase.

Conclusions: therapeutic groups were an effective intervention. In relation to the clinical profile, there was an improvement in depression, anxiety and hysteria. The United Nations Development Fund for Women's Report, concludes that IPV generates a big amount of direct and indirect expenses for the survivors (including children and companion animals), the Health System, Law-Enforcement Agents, etc. Health care practitioners should be aware of early indicators of violence since primary care can be considered a key point for early detection and intervention. Consequently, proper education about IPV and Domestic Violence should be provided even to undergraduate students.

#### P10.29

### Why should medical doctors care about animal abuse?

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Over the past 25 years, researchers and professionals in a variety of human services and animal welfare disciplines have established significant correlations between animal abuse, child abuse and neglect, domestic violence, elder abuse and other forms of violence. We will discuss the first studies in Spain about interpersonal violence and cruelty to animals and the legal, medical and social implications. In a sample of inmates we have observed conduct disorder and important lack of empathy, especially in the individuals with a high rate of violence in their felonies including animal abuse. Mc. Donald's and Pincus' triads may be useful to evaluate the dangerousness or can be an important indicator for risk assessment. Regarding violence to animals within the context of domestic violence, previous studies reveal that 71% of pet-owning women entering women's shelters reported that their batterer had injured, maimed, killed or threatened family pets for revenge or to psychologically control victims; 32% reported their children had hurt or killed animals. 68% of battered women reported violence towards their animals. 87% of these incidents occurred in the presence of the women, and 75% in the presence of the children, to psychologically control and coerce them. Mistreating animals is a warning sign that others in the household may not be safe. The Commission against Family and Gender Violence of the Primary Care Centers of Sant Cugat and Valldoreix is developing a Multidisciplinary Program to Attend Women victims of domestic violence and their companion animals. We have established collaboration with SPCAs Fundacion Altarriba and Cau Amic to provide shelter for their companion animals in case it is needed. The results during the first year of evaluation, shows commonalities with other studies.

# P10.30

# Occupational exposure to noise and the risk of hypertension

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**Objective:** It has not yet been established whether exposure to chronic noise induces an increase in blood pressure or an increase in the development of hypertension. In this study we used hearing loss values as biomarkers to investigate the chronic effects of noise exposure on blood pressure in 160 ceramic tilemanufacturing workers.

Methods: Hypertension is defined as a systolic blood pressure ≥ 140 mmHg and / or a diastolic blood pressure ≥ 90 mmHg. A total of 450 workers who were exposed to a noise level of 85 dBA or higher in average and used either earplug or earmuff in a ceramic tile factory, were evaluated with using pure tone audiometry after measurements of sound / noise levels in the plant during different production procedures. Workers with hearing loss were divided into 3 groups according to hearing loss levels and were evaluated to estimate the risk of increase in blood pressure between groups. Results: The prevalence rates of were significantly higher in the

Results: The prevalence rates of were significantly higher in the high hearing loss and median hearing loss groups than in the low hearing loss group. The workers in high and median hearing loss groups also had higher heart rates compared to the workers in low hearing loss group. Employment duration was significantly and positively correlated with the risk of hypertension among workers.

**Conclusion:** In this study, findings suggest that chronic exposure to noise and noise-induced hearing loss may be associated with the risk of hypertension.

### P10.31

# Antidepressants and Metabolic Syndrome: when essential medications provokes new health problems

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Background: The Metabolic Syndrome (MS) is characterized by specific metabolic changes: insulin resistance, abdominal obesity, hypertension or pre-hypertension and dyslipidaemia. Patients with psychiatric disorders are at increased risk of developing MS (prevalence  $\approx$  41%), whose prevalence is 138% higher in men and 251% higher in women with psychiatric illness. Among the reasons which may explain this increase, the use of psychiatric drugs must be considered. Taking into account that in general practice there is a considerable number of patients taking antidepressants, it is essential to understand the metabolic changes that these drugs may induce.

Therefore, our objective is to understand the effect of antidepressants on MS and provide guidance concerning the appropriate choice of antidepressants and course of action regarding the detection, prevention and treatment of MS in patients taking these drugs.

Methods: Survey of published literature up to December 2010, through databases of evidence-based medicine (UpToDate, National Guideline Clearinghouse, NHS Evidence, National Library of Guidelines, Cochrane, DARE, Bandolier, PubMed and Index RMP), using the keywords "metabolic syndrome, mental disorder, depression, antidepressive agents, obesity, abdominal, dyslipidemia, hypertension, overweight".

Results: 47 articles were selected. The mechanisms by which the classes of antidepressants influence changes in weight, glucose metabolism, lipid profile and blood pressure (BP) were described. Fluoxetine and bupropion were associated with weight loss while paroxetine, tricyclic antidepressants (TADs), mirtazapine and monoamine oxidase inhibitors (MAOIs) were associated with weight gain. Fluoxetine was associated with a 30% reduction of glycaemia, whereas TADs showed an increase of 150%. In the described cases the effect of antidepressants on the lipid profile was negligible. TAD is associated with orthostatic hypotension. Selective serotonin reuptake inhibitors (SSRIs) do not interfere with BP and have a cardioprotective effect; venlafaxine should not be prescribed to patients with known cardiovascular disease.

An algorithm for the management of patients taking antidepressants was elaborated and strategies for prevention of MS were established.

Discussion: The prevention and early detection of MS in populations with pharmacologically treated depression is of great importance, therefore strategies to encourage healthy lifestyles must be adopted. The metabolic effects should always be considered when prescribing antidepressants.

### P10.32

# Vitamin D Deficiency in General Practice: A Case Series of 776 Swiss Patients.

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The aim was to estimate the prevalence of vitamin D deficiency among unselected patients from general practice. Serum levels of 25-hydroxyvitamin D3 (25-OH-D3) were measured consecutively in patients attending their GPs during a 4-week period in September. Subjects were asked to provide information on fatigue, myalgia/arthralgia, and muscle weakness using a 10 point visual analogue scale. Serum levels of &lt 50mmol/l 25-OH-D3 were considered as vitamin D deficiency.

Nineteen GPs from 16 general practices recruited 776 patients. Mean 25-OH-D3 level was 53mmol/l ± 19 (range 14 - 155). Vitamin D3 levels were &lt 75mmol/l in 88.9%, &lt 50mmol/l in 45.1%, &lt 30 in 9.8% of patients. Patients with fatigue (VAS &gt 0) significantly (p=0.009) more frequent show 25-OH-D3 levels &lt 50mmol/l compared to patients who deny fatigue and have normal 25-0H-D3 concentrations. We found a significant correlation between 25-OH-D3 levels and muscle weakness assessed by the VAS (p=0.047), and, indeed, subjects reporting on muscle weakness (VAS &gt 0) more often (p=0.026) have 25-0h-D3 levels below the normal range (&lt 50mm/l). No difference (p=0.30) in patients with 25-OH-D3 levels &lt or &gt 50mmol/l was identified in terms of myalgia and arthralgia.

End of summer nearly half of subjects studied in general practices have 25-OH-D3 levels below the threshold (&lt 50mmol/l) considered as normal vitamin D concentrations. Patient with vitamin D deficiency significantly more frequent self-report on fatigue and muscle weakness compared to patients with 25-OH-D3 levels &gt 50mmol/l. Hypovitaminosis D is common and causes symptoms among unselected patients from primary care.

### P10.33

Adequate vitamin C intake is associated with decreased risk of chronic obstructive pulmonary disease in Korean smokers and non-smokers

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**Background:** The purpose of the current study was to explore the effect of vitamin C intake on COPD risk in established smokers (100 or more cigarettes) and never-smokers in a Korean population. **Methods:** The 2,974 enrolled men and women over age 40 in the Korea National Health and Nutrition Examination Survey IV 2008 were divided into four groups based on smoking pattern (never-smoker vs. established smoker) and vitamin C intake (high vs. low; median value: 77.18 mg/day).

Results: The prevalence of COPD defined as  $FEV_1$ <80% predicted ranged from 17.3% to 31.9%, and from 7.8% to 31.4% when defined as FEV<sub>1</sub>/FVC<0.7. Univariate analysis showed associations between COPD risk and age, gender, body mass index (BMI), pack-years, vitamin C intake, and additional antioxidant intake. On multiple logistic regression analysis, the odds ratios (95% CI) for COPD defined as FEV<sub>1</sub><80% predicted were 1.000 (never-smokers, high vitamin C intake), 1.067 (0.823, 1.383; never-smokers, low vitamin C intake), 1.224 (0.871, 1.721; established smokers, high vitamin C intake), and 1.479 (1.057, 2.072; established smokers, low vitamin C intake). The odds ratios for COPD defined as FEV<sub>1</sub>/FVC<0.70 were 1.177 (0.821, 1.687; never-smokers, low vitamin C intake), 1.637 (1.094, 2.445; established smokers, high vitamin C intake), and 2.093 (1.403, 3.122; established smokers, low vitamin C intake), after adjusting for age, gender, BMI, medical history and additional antioxidant intake (P < 0.001).

**Conclusions:** In the high vitamin C intake group, defined as ≥77.18 mg/day, the COPD risk of Korean smokers was significantly decreased to the risk of the never-smokers.

# P10.34

### Physical Activity Assessment and Promotion In Primary Care

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66% of men and 75% of women report levels of physical activity(PA) which increase their risk of chronic disease. This study aims to explore the feasibility of integrating brief assessment of PA into GP consultations and recruiting inactive patients to a randomised trial of a pedometer-based intervention.

Methods:Within four general practices in socio-economically deprived areas of Belfast, 35-75yo attending consultations over a

two week period were invited to complete a General Practice PA Questionnaire (GPPAQ) - 'inactive' participants were invited to participate. Each practice determined their own method of GPPAQ administration. Baseline step-counts were assessed using a pedometer for a week. Participants were then randomised. Group one were encouraged to increase their PA level to a self-determined goal. Group two were given a specific step-count goal of 2,500 steps/day above baseline. Telephone follow-up occurred every two weeks. Step-counts were re-assessed after 12 weeks.

Results: Different methods of GPPAQ administration: GP/nurse (n=2) or receptionist-led(n=2). Of 2154 consultations,192(8.9%) completed questionnaires:83(43%) individuals were categorised as inactive;of these,47(57%) participated in the trial.

There was a significantly greater increase in steps/day in group one than two (mean 2,602 steps/day (SD 1,957) v 788 (SD 2,044) - p-value 0.007).

Conclusions: PA assessment can be integrated into day-to-day general practice but there appear to be barriers in performing this. This requires further exploration.

Pedometer programmes offer a real option for general practice patients to increase their PA levels - an increase of 2,500 steps/day is an achievable step-goal. However, self-determined goals are more appropriate for increasing PA levels.

# P10.35 The influence of smoking habits on oral health

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Introduction: Nowadays, smoking is a major public health issue and related diseases have a high mortality worldwide. Changes in the soft tissue with possible signs of malignancy need to be carefully studied, such as changes in the oral tissue, more specifically, the periodontal tissue. The objective of this study was to analyze oral health indicators (oral hygiene habits and oral diseases) among smokers and non-smokers.

Participants and methods: We designed an observational crosssectional study involving 414 individuals (75.1% female). Data was collected using the medical and dental history of patients seen in a local dental clinic with the registration of oral diseases. Statistical analysis was accomplished using the *Statistical Package of the Social Science 18.0 version*. Prevalences were expressed in proportions and were compared by the Chi-square test.

Results: The prevalence of smokers was 22.5%. We verified that 13.3% had a dental appointment only when having an episode of toothache. Sixty-four point two percent toothbrush at least two times a day, but only 22% use dental floss on a daily basis. Adults aged 26 to 35 years are those that have a higher percentage of smokers compared to other age groups as well as the worst level of oral health, represented by a higher prevalence of dental caries and plaque index between 50 and 74%. Smokers consider having worse oral hygiene habits then non-smokers, but this result is not statistically significant (33.8% vs. 31.7%,p>0.05). We also verified that smokers have more gingival inflammation and bleeding problems than non-smokers.

Conclusions: It is important to aware smokers about the harmful effects of tobacco and how they can minimize oral health diseases by having good oral hygiene habits and, mainly, stop smoking. This can also be done in a routine medical appointment or awareness campaigns in the community, giving special attention to the negative effects of smoking on oral health.

#### P10.36

# Tracking antidepressant therapy patterns of an Austrian cohort

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Background: Antidepressants are a widely and increasingly prescribed drug class, the vast majority (78%) of prescriptions in Austria being issued by general practitioners. Discussions not only concern substance choice, but also and with utmost interest the duration of treatment.

Objectives: Aiming at getting a better understanding of antidepressant medication in Austria, the analysis looks at the patient-based length of treatment as well as substance combination and switching.

Methods: The data comprise all filled antidepressant prescriptions in the years 2008-2010 at the expense of 13 Austrian health insurance funds covering more than 95% of the Austrian population. For the analysis, inclusion criteria were i) a newly initiated therapy and ii) a quarterly-based medication possession ratio of at least 75%, therefore excluding interval therapies and those patients already being treated at the beginning of the time frame. Kaplan-Meier curves, with consideration of those deceased during therapy, were used to track patients' medication patterns. Results: Starting with 1.15 mio. distinct patients included in the

Results: Starting with 1.15 mio. distinct patients included in the data, 503,501 were eligible for further analysis according to the above-mentioned criteria. 39% of those patients received medication for only one month or less, and the median drug survival being four months. Almost 19% of the analysed cohort were being prescribed two or more substances at least temporarily, while about 13% were switchers.

Conclusion: Our data show an ambivalent therapy structure, with a high rate of early drop outs, while two thirds of the remaining part were being treated for at least 6 months. The results illustrate the actual provision of Austria's population with antidepressants and can help in detecting potential suboptimalities.

# P10.37

Prevalence, health status, cardiovascular disease and comorbidities of chronic widespread pain in Primary Care.

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Objectives: Estimate prevalence of chronic widespread pain (CWP), related painful syndromes, compare quality of life and cardiovascular risk factor with reference population.

Methodology: A multicenter case-control study (age-gender matched) was carried out. A representative sample of 3048 patients were recruited from May 2010 to November 2011. American College of Rheumatology (ACR) classification criteria for CWP was considered for CWP diagnosis. Questionnaires on pain severity and interference (BPI), quality of life (SF-36), functional capacity (HAQ), anxiety and depression (HADS) and quality of sleep (SQ) were administrated. Cardiovascular risk assessment (Framingham-Regicor scale) and comorbidity index (Charlson) were evaluated.

Results: 168 patients met criteria for CWP (prevalence 5.5%, 95%CI:[4.75%-6.38%]). 130 accepted to participate in the study, 120 (92.3%) were women, with a mean age  $61.7\pm11.7$ . Related painful syndromes: fybromialgia in 65 (50%), arthrosis in 53 (40.8%) and autoimmune or rheumatic diseases in 11 ( 8.4%). 124 patients without CWP were evaluated as control group. Patients with CWP have higher pain intensity and interference (BPI: 6.3 vs 3.1; p<0.001; 6.0 vs 2.6, p<0.001), worst quality of life (SF-36: 34.2 vs 44.1, p<0.001), higher disability (HAQ: 1.04 vs 0.35, p<0.001), more anxiety (HADS: 57 (43.9%) vs 16 (13.3%), p<0.001), depression (HADS: 35 (27%) vs 7 (5.8%), p<0.001) and disturbed sleep [SQ: 63 (50.8%) vs 29 (23%), p<0.001]. CWP group had

more obesity [41 (32.3%) vs. 23 (20%), p=0.04], sedentary [42 (34.4%) vs 19 (16.4%) ,p=0.002], hypertension [58 (44.6%) vs 39 (31.5%), p=0.039] and diabetes mellitus [20 (15.4) vs 9 (7.3), p=0.049]. They also had a higher cardiovascular risk [moderate risk: 27 (29.0%) vs 17 (18.5%), p= 0.112] and comorbidity (0.82 vs 0.64, p=0.087) although the differences did not reach statistical significance. Despite that, patients with WCP had more cardiovascular disease (myocardial infarction or cerebrovascular disease): 17 (13,1%) vs 6 (4,8%); p= 0,028.

Conclusion: The profile of patients with CWP is a sedentary woman with fybromialgia or arthrosis. Obesity, hypertension, diabetes mellitus and cardiovascular diseases are more frequent in CWP sample. CWP is related to a worsening on quality of life and it is associated to a higher prevalence of anxiety, depression and disability.

# P10.38 Use of TSH in primary care

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Aims: Thyroid-stimulating hormone (TSH) is the gold standard test for diagnosing hypo- and hyperthyroidism. Currently, TSH is included in many screening protocols for different pathological processes although patients may not present clinical evidence of thyroid disease. Furthermore there is no consensus for TSH screening in the general population.

Our aims were to evaluate the adequacy of TSH testing in primary

Design and method: Design: cross-sectional study.

Setting: four neighbouring primary health care areas under a single local health authority in Catalonia, Spain (87,242 inhabitants).

Inclusion criteria: patients ≥ 15 years age without previous thyroid disease, seen during 2009-2010 with a TSH request by their general practitioner.

Source: computerized patient notes.

Sample size n=400.

Variables: sociodemographic and clinical, TSH, diagnosis of thyroid disease, hair loss, asthenia, TSH screening in: hypertension, obesity, anemia, urticaria, atrial fibrillation, congestive heart failure, dyslipidemia, hyponatremia, amenorrea/subfertility, cognitive impairment, psychiatric disorder, drug therapy (lithium, amiodarone, phenytoin, haloperidol, etc).

Statistical analysis: descriptive univariable (frequencies), bivariable (p-value associated to Fisher's exact test) with 95% confidence interval.

**Results:** Of all TSH requests, 78% were considered unjustified and 22% were considered justified as investigation or screening of: asthenia (7.8%), anemia (4.3%), psychiatric disorder (3.5%), hair loss (1.5%), amenorrea/subfertility (1.3%), hypertension (1.3%), cognitive impairment (1%), obesity (0.5%), congestive heart failure or atrial fibrillation (0.5%), dyslipidemia (0.3%), urticaria (0.3%) and treatment with lithium (0.8%), amiodarone (0.3%), phenytoin (0.3%) and oral contraceptives (0.3%).

Thyroid pathology was diagnosed in 19 patients (4.8%), of which 68% had subclinical hypothyroidism.

Of those diagnosed, 15.8% and 84.2% had been TSH-tested with or without justification respectively.

**Conclusion**: Less than 5% of all TSH requests produced diagnosis of thyroid disease.

Most TSH requests were considered non-adequate, yielding degrees of subclinical thyroid pathology similar to other epidemiological studies in the general population.

Even TSH testing considered adequate gave a poor diagnostic yield, casting doubts over its use in screening for non-specific symptoms (e.g. hair loss or asthenia) or in protocols for other disease processes with possible underlying thyroid disease.

TSH testing by general practitioners should be clinically individualized, not protocollized for possibly-associated disease processes, and avoided as 'general health checks'.

#### P10.39

The Accuracy of Newspaper Messages About Cardiovascular Diseases and Their Influence on the Readers

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Objectives:Cardiovascular diseases (CVD) are the leading cause of mortality worldwide. The news about CVD and related risk factors are appearing at high frequency on newspapers. This news may create behavioral changes on readers. So, accuracy of the news is very important.

Aim:The aim of this study was to investigate the accuracy of the news about CVD and its risk factors, and to research the influence of the news on the readers.

Materials and Method:This is a descriptive study consisting of two parts. In the first step, the health news published in two weeks in top ten rated Turkish newspapers were extracted. The news about the CVD and risk factors which can cause behavioral changes were chosen. The accuracy of those news was evaluated reviewing PubMed and Cochrane database with national and international guidelines. In the second step, fifteen message were randomly selected and were included in a questionnaire. Applying the information in the news to behaviors and/or sharing them with other people was considered as "influence". Frequency analysis and chi-squared test were used.

Results:There were 105 news related with CVD and risk factors in the study period. %76.9 of them was proposing a change in behavior. Only 9 news had a high evidence level among randomised chosen 15 news and one had low evidence. Three news were considered as partly true, 1 information as completely wrong. Questionnaire is applied on 150 participants (86F, 64M; mean age:37±12.49). 44.3% of them reported that they are implementing the messages in their daily lives, 75% reported that they share with others. No relation between influence and the age, gender, presence of chronic disease of participants was found. Those who care about the quality of the news source share the news with friends than the others, significantly (p<0.001). An evidence-based information was considered as wrong by 82.9% of the participants.90% of them had shared a new that contains inadequate information with others.

Conclusion:According to our study, although the news related with CVD had wrong and inadequate information, the readers influenced by them. Our results suggest that health news should be based on scientific evidence.

# P10.40

Improving Share Care of Sickle Cell Disease in Primary Care

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Within Wandsworth in South West London a GP-led joint haemoglobinopathy working group was created in 2011. This compromised of community, primary and secondary care clinicians, commissioners and managers to oversee the development of long-term conditions model of care for adults with sickle cell disease

Sickle cell disease (SCD) is the most common and fastest growing genetic disorder in England. SCD is a lifelong condition that initially presents in childhood. SCD has a significant impact on life expectancy, daily functioning and the quality of life of patients. The most common clinical manifestations are the painful crises. Repeated pain crises result in frequent A&E attendances and emergency admissions for many patients. The most common causes of death in adults with SCD were cerebrovascular accidents, multi-organ failure and acute chest syndrome. Survival estimates suggest that people with SCD have a life expectancy of 53 years in men and 58.5 years in women.

The key issues raised by SCD patients were:

- the lack of services available in the community,
- the lack of communication with and education for patients\*,
- a lack of counselling and psychological support
- poor support from general practitioners,

- Staff attitudes and the quality of care provided in hospital An overview is given of the progress of the joint working group towards addressing these issues and improving services to SCD patients in Wandsworth. Including developing long term conditions model of care, development of shared care arrangements and supported self-management

# P.11 - Country Reports

### P11.02

Alcoholism in Sri Lanka

### N. K. Ashubodha:

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Alcoholism is a major problem in the Asian region with the same status in Sri Lanka. Sri Lanka is a small island just below India in the Asian region, minly comprising of Buddhist Sinhaleese. We studied close to 40,000 alcoholics over a period of 20 years. (1990 to 2010). There was a mal e preponderance. The peak age between 30 and 40 years in males while a little older in the females\_ between the age of 40 to 50. We were able to get all them out of alcoholism with counseling, drugs and group therapy. Success rate was above 80%.

### P11.03

# Plasma magnesium in type-2 diabetic patients from northern Greece

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Objective: Mg depletion has a negative impact on glucose homeostasis and insulin sensitivity in patients with type 2 diabetes. The aim of this study was to compare plasma magnesium concentrations of type-2 diabetics and healthy controls from northern Greece and to find the relation between Mg levels and glycosylated hemoglobin (HbA1C).

Methods: 50 type-2 diabetic patients and 100 non-diabetic controls matched for age and sex participated in the study. Each participant is followed up in primary care settings (Health Centre of Soxos) and underwent a physical exam, including a brief medical history. Of the diabetics, 8 were using insulin, 31 were taking oral hypoglycemics, 11 were using both. Patients taking loop diuretics were excluded because they are associated with higher urinary Mg excretion. Participants with a history of cancer, renal failure, chronic use of steroid medication, hepatitis, drug abuse or alcoholism, bleeding disorders and pregnancy were also excluded. None were taking Mg supplements. Venus blood samples from diabetics and controls were drawn in heparinised tubes. Plasma was separated from blood cells by centrifugation at 3000 rpm for 15 minutes. Analysis of Mg in plasma was done in Hitachi 902. For all diabetics subjects the HbA<sub>1C</sub> was determined (in Hitachi 902) from the same blood sample as the plasma Mg concentration.

Results: The mean age of the diabetics and controls was 64.5 and 55.9, respectively. Median duration of diabetes was 14.5 years. Mean plasma Mg level was 0,93 mmol/L in the control subjects and 0,82 mmol/L in the diabetic group. Although, all diabetic patients had no hypomagnesemia, their levels of plasma Mg were significantly lower (p,0,005) compared with control subjects. HbA<sub>1C</sub>, duration of diabetes and diabetes treatment did not significantly predict plasma Mg concentration.

Conclusion: Further studies on the role of Mg in type-2 diabetics are recommended. Because Mg depletion reduces insulin sensitivity and may increase the risk of secondary complications, it be beneficial to periodically monitor plasma Mg levels in diabetic patients.

### P11.04

### Politics, health standard and family medicine in Iran

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The motto of health for everyone in Iran after 1979 became the rubric of the health plans in the country. The widespread and expanded countrysides with different styles of life made it impossible for government to establish equality in offering health services to people. Family medicine as a two-fold sword was suggested to decrease the number of unemployed physicians and to avail health services for particularly rural people. The implementation of family medicine in five years in Iran showed that language diversity, lack of facilities in rural areas and lack of inservice education could discourage the physicians to participate actively in this projects. The results showed that the efficacy of family medicine program was at the preliminaries and practically could not improve the health standards in general Lack of interaction between patients and physicians with different cultures , backgrounds and language acted as a barrier to proceed the health affairs. Ineffective education about the specific disease of a region made the patients distrusted about the trend of treatment. This paper focuses on the barriers of inefficacy of family medicine program in Iran based on evidence, interview and official

### P11.05

Future Changes in British Healthcare: The Health and Social Care Bill 2011 as viewed through comparison with the Portuguese health care system

#### A. Janjua:

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The Health and Social Care Bill 2011 will have far reaching ramifications for all British doctors and will change the landscape of healthcare in the United Kingdom. Discussion of these changes is a highly politicised issue and assessments vary between presaging disaster or predicting utopia.

It is self-evident that private health provision will have a greater role in the delivery of healthcare in the United Kingdom should the Health and Social Care Bill 2011 become law. The author recently was involved in an exchange trip to Portugal, a country with an admixture of public and private health care provision. As such, the author set about recording particular details of her experience in Portugal, with an eye to matters of relevance to changes proposed in the Health and Social Care Bill 2011. It was hoped this would allow greater understanding of what general practice in the United Kingdom may look like in the future.

Portuguese health care is decentralised, involves subsidised charges for consultations, and takes place in the context of there being a greater prevalence of private health treatment. These features allowed for fruitful comparisons to be made between Portuguese and British general practice in the areas of administration and consultation style, the role of the wider health care team, the interplay between primary and secondary care, and the relation of public provision to private provision. Insight was also gained on GP training in a decentralised environment.

As a British GP, the author learned much personally from the observation of Portuguese general practice methods and would recommend a number of them for use in the United Kingdom. However, it was apparent that in some areas, particularly the relationship between primary and secondary care, the decentralisation of the Portuguese system was not to the advantage of patients or general practitioners. Similarly, the fact that some medical professionals prioritised their private practice patients even when giving publically subsidised treatment was detrimental to the system as a whole and perhaps stands as a warning of one of the possible pitfalls ahead in the United Kingdom.

### P11.06

# E-mail communication between patients and a family health team in southern Brazil

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Introduction: New technology developments and use of the internet in communication between general practitioners and patients allows non-direct encounters, thus facilitating accessibility and longitudinality, resulting in patient satisfaction. Objective: to analyze and report e-mail communication between a family health team and patients of a health centre in southern Brazil, between July 2010 and November 2011. Methods: exchanged messages were analyzed using a random sample of twenty per cent of the days included in the study, surveying subjects gender and age, type of subject involved, waiting time, number of words per message. Microsoft Excel 2007 was used for statistical analysis. Results: Totally 2233 messages were exchanged between 258 patients and the health team, including a general practitioner, a general practice trainee and a nurse, an average of 4,32 messages per patient. From the random sample, 119 messages were analyzed, including 74 different users, most of them (87,4%) females, mean age 37,3 years old. Messages involved 132 different subjects, an average of 1,3 different themes and 45,6 words per e-mail. The most commom themes were booking appointments (58%) and health information (19%). Total waiting time was maximum of 24 hours for 74% of the e-mails and maximum of 4 working hours for 77% of the messages. Ninety percent of the responses occurred during working hours, with an average of 29,6 words per e-mail. Conclusion: E-mail communication was found to be a convenient form of communication, as the volume of messages and the number of users are increasing, with low cost and instant access.

# P11.07

Turkish Diabetes Prevention and Control Program: A nationwide program to overcome challenges of fighting a growing monster

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Non-communicable diseases (NCD) are the major concern of today's and future health policy-makers, threatening quality of life of patients with high morbidity and mortality, besides being a financial burden both on patients and health care systems. Primary care physicians have an invaluable role in managing NCDs as being primary contact point and having a potential advantage of following patients closely in their own setting.

Diabetes with an expected population of 438 million by 2030 in the world, is a major NCD the health systems need to struggle with. Diabetes has a different threat in Turkey as the prevalance is increasing at a high rate. TURDEP 2 (Turkish Diabetes Epidemiology Study) of 2010 finds Diabetes prevalance as 13,7% among adults, a much higher finding than 7,2% in 1998 in TURDEP 1. The Ministry of Health needed to take an action towards this growing monster as the situation threatens lives of many patients, quality of life, and has huge economical aspects. Turkish Diabetes Prevention and Control Program (DIABTURK) has been started in 2010 as an action plan for 2011-2014. Its vision is to prevent diabetes, improve effective management of diabetes and increase quality of life nationwide. Program involves a large number of public bodies, nongovernmental organizations, academics, industry and patients. The program components are prevention of Type 2 Diabetes, raising awareness, assuring early diagnosis, increasing quality of care, training professionals and patients, producing national guidelines for management of DM, improving information systems,

improving management of related drugs and devices, encouraging research, preventing complications, providing psychological support and gaining behavioral changes. There are 5 major objectives of the program and each objective has its own targets. The objectives are 1. Prevention of DM; 2. Effective management of DM and its complications; 3. Increase quality of life in diabetic patients; 4. Management of Childhood DM; 5. Strengthening the fields supporting management of DM. In this presentation we will discuss the challenges faced in taking such a nationwide action for fighting DM; the achievements up to today; the further steps to be taken and how primary care physicians are taking action in this program

### P11.08

Improving integrated health care to increase quality of life in diabetic patients: How to organize a nationwide "Turkish Diabetes Prevention and Control Program" to meet the needs

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As a non-communicable disease (NCD) diabetes is becoming more important as a health care challenge. In 1998 Turkish Diabetes Epidemiology Study 1 (TURDEP 1) found DM prevalance in Turkey as 7,2%. TURDEP 2 (2010) gave a dramatic increase in prevalance reaching some 13,7% among adults.

Diabetes, with its well-known complications and mortality risk, has a big threat on quality of life. Primary care physicians have a major role in dealing with both prevention, management and follow-up of diabetic patients. This gives the advantage of increasing the patients' quality of life by better management skills. Also needed is a structured way of thinking for dealing with this growing issue. The Ministry of Health started "The Turkish Diabetes Prevention and Control Program (DIABTURK)" in 2010. Program involves a large number of public bodies, NGOs, academics, industry and patients. Program objectives are 1. Prevention of DM; 2. Effective management of DM and its complications; 3. Increase quality of life in diabetic patients; 4. Management of Childhood DM; 5. Strengthening the fields supporting management of DM.

The third objective of the program has 3 targets: 1. Patients should have access to integrated health care which would be necessary for better management of diabetes. 2. Urban environmentral and collective living areas should be regulated in order to facilitate prevention and good management of diabetes 3. Care services (self care, home care etc) should be improved for diabetic patients. An action plan has been set to achieve this target and some activities have been planned: 1. Primary, secondary and tertiary care will be coordinated and related legislations will be put in place in order to provide access to integrated health care; 2. The tasks of health care professionals in primary, secondary and tertiary care will be defined and necessary changes in workplaces will be done; 3. Diabetics and caregivers will be informed about the centers they could get integrated care. This presentation will focus on what has been achieved on improving integrated health care. We will discuss how primary care physicians take action in this program. Related designed researches will also be discussed.

### P11.09

Patient satisfaction in primary health care services in Kosovo

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Background: Patient evaluation of health care services is accepted as a good indicator of quality of care. However, there are wide

variances regarding health care services in different countries. We aimed to assess the patient satisfaction with primary health care services in Kosovo using an internationally validated tool namely FUROPEP

Methods: The research was conducted during September-October 2010 among 1,039 patients aged 18 years and over attending the general practice services in Gjilan Region, Kosovo. The 23-item EUROPEP questionnaire was employed, each item of which was expressed as a five-point scale ranging from "excellent" to "poor" Results: Around 56% of patients were females, 51% resided in urban areas and 31% had low education whereas, 17% were employed at the time of the survey. The items more often rated "excellent" were the thoroughness of the medical staff (51%) and providing quick services for urgent health needs (47%), whereas the less often rated "excellent" items were the possibility to getting through the practice on the phone (24%) and waiting times (24%). On average, 36% of patients rated the patient-doctor relationship and medical care as excellent, whereas information and support, organization of care and accessibility were rated as excellent by 31%, 28% and 32% of the patients, respectively.

Conclusions: Overall, in this region of Kosovo, patient satisfaction was not rated sufficiently high and this issue should raise serious concerns to health care professionals and policymakers. Patients' viewpoints and perceptions need to be taken into consideration in order to improve quality of care in Kosovo.

## P11.10

# Nutritional status and prevalence of peripheral arterial disease of elderly residents in long-term care facility in Rural Taiwan

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## Introduction

To investigate the impact of nutritional status on the prevalence of peripheral arterial disease in an elderly population who lived in long-term care facility in Taiwan.

Purpose / Methods

A cross-sectional study conducted at long-term care facility in Changhua County, Taiwan, included 61 elderly residents (75 +/- 12 years old). The Mini Nutritional Assessment (MNA), activities of daily living(ADL) and the ankle brachial pressure index at rest were used to assess nutritional status, physical function, and peripheral arterial disease, respectively. Descriptive and Binary logistic regression analyses were applied.

## Results

According to the Mini Nutritional Assessment (MNA), 32.8% of the residents were malnourished, 52.5% were at risk of malnutrition, and 9.8% were under well nutritional status. Fifty-four percent of the residents were totally dependent in ADL (ADL=0 point). The mono-variant analysis showed age(p=0.04), systolic blood pressure(p=0.047), ADL(p=0.001) and MNA(p=0.001) are significant factors of peripheral arterial disease. After adjustment for age and systolic blood pressure by binary logistic regression, the association between the ankle brachial pressure index and MNA, remained significant (p=0.003).

Conclusions

The risk of peripheral arterial disease among long-term facility residents is related to malnutrition, suggesting poor nutritional status could be a risk factor of peripheral arterial disease.

#### P11.11

## Rearrangement of Urban and Public Environment for prevention and better management of Diabetes

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Diabetes is a major public health and economic problem for all countries, because of increasing prevalence, increasing financial burden, morbidity and mortality. Diabetes is fastest growing noncommunicable disease (NCD) in Turkey according to TURDEP 1 (Turkish Diabetes Epidemiology Study) of 1998 and TURDEP 2 of 2010 that finds Diabetes prevalence among adults 7,2% and 13,7% respectively. The Ministry of Health needed to take an action towards this growing danger. Emerging action was named as "The Turkish Diabetes Prevention and Control Program (DIABTURK)". This action has 5 objectives:

- 1. Prevention of DM;
- 2. Effective management of DM and its complications;
- 3. Increase quality of life in diabetic patients;
- 4. Management of Childhood DM;
- 5. Strengthening the fields supporting management of DM. Third objective has 3 targets and the second target is "rearrangement of urban and public environment for prevention and better management of Diabetes." There are a series of activities to achieve this target, major one being increasing the number of public places suitable for diabetic life and build-up diabetes-friendly cities. This would include rearranging places such as workplace, school, dormitory, prison or barracks. One major target related to these acts would be to increase the number of diabetes-friendly cities to 20 in 10 years. To realize the targets there are 4 planned activities: 1. Creating adequate physical activity area in public places. Main output is the number of created physical activity area within 10 years. 2. Nutritional facilities will be improved in public places (workplace, school, dormitory, prison, barrack), to provide healthy nutrition. Main output is the number of organizations and institutions providing healthy nutrition facility within 5 years. 3. Trainings about diabetes will be given to directors and employee of public institute and organizations. Main output is the number of people trained within 10 years. 4. To increase diabetes-friendly cities which carry on programs to promote physical activity and healthy life. Main output is the number of diabetes-friendly cities within 5 years. The presentation will focus on the action plan taken to achieve these targets, discuss role of primary care physicians and discuss ongoing researches.

## P11.12

## Impact of health policies on reducing maternal and fetal mortality rates in Turkey

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Maternal and fetal mortality rates are the best indicators of the developmental status of a country. Turkey is a country where quick changes in social, economical and health systems have happened recently. Turkey's economy has been growing since 1980s; with ups and downs from time to time. Despite these quick changes, Turkey's efforts and successes in reducing fetal and child mortality rates since 1990 are quiet remarkable.

Reducing child deaths is determined as one of the eight main issues of United Nation's Millennium Development Goal with the aim of reducing under-five mortality rates (U5MR) to 2/3 until the year 2015. While many countries are beyond the schedule, Turkey has reached this goal already. There has been 29% decline between 1998 and 2003, and 35% 2003 to 2008. 'UNICEF's State

of the Worlds Children Report 2009' indicates that Turkey's U5MR has declined 72% between 1990 and 2007. This reduction rate in Turkey is very close to Portugal which is the only European and OECD country that has better results in reducing U5MR.

According to the 'WHO Trends in Maternal Mortality 1990 to 2008' report, maternal mortality rate for Turkey in 2008 was calculated as 23, therefore Turkey has become one of the top ten countries reducing this rate 1990 to 2008. Since maternal mortality rates was 208 in 1974, it has regressed to 18,4 in 2009/100.000 live births. After the first International Conference on Population and Development in Cairo in 1994, Turkey aimed its reproductive health care to reach global level. With this aim, many strategies developed to reduce maternal mortality rates under the level of 10/100.000, and fetal mortality rates under the level of 10/1000. With the aid of The Health Transformation Programme started in 2003, Turkey has come a long way in reducing health disparities, increasing equity and access, reducing fragmentation and improving quality care. Primary health care centers have a key role within these programmes where scheduled follow-ups for pregnants, mothers, newborns and children; programmes have been taken place.

#### P11.13

## National Tobacco Control Programme and 'Smoke Free Air-Zone' in Turkey

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Smoking is one of the most significant public health problems and it is preventable. Turkey faces serious tobacco epidemic. Nearly 16 million of adults are smokers.

The passing of Law 4207 in 1996, ratification of the WHO Framework Convention on Tobacco Control in 2004, amendment of Law 4207 in 2008 to make all closed places smoke-free and the formation of working group by the Ministry of Health (MoH) to assist in developing National Tobacco Control Program are important milestones for tobacco control in Turkey.

The National Media Campaign has been initiated with the slogans "Smoke Free Air-Zone" (SFAZ) for raising awareness of public.

Different studies evaluating the efficacy of tobacco control show that public awareness on the harms of tobacco and tobacco products have risen up with the enforcement of SFAZ.

The enforcement takes support (95%) from both smoking and nonsmoking citizens. Particle quantity in the air in closed areas seriously declined after the enforcement of SFAZ

Compared to a 2008 study, GATS (Global Adult Tobacco Survey) of 2010 (conducted by MoH, Turkish Statistical Institute and WHO) revealed that smokers declined by 6.3 % and the ratio of smoking consumption decreased from 33.4% to 27.1%. 2 million 200 thousand people stopped to smoke. When we look at the sales amounts of tobacco products, the lowest cigarette consumption of the last fifteen years has been realized in Turkey in 2010. Although not forbidden, the ratio of smokers at home decreased by 35%. Passive exposure to smoke at closed areas decreased by 60%.

In many European countries the expression "smoking like a Turk" was used in the past but today Turkey has come a long way on that issue in comparison with many European countries. The efforts of primary care physicians in such a nation-wide program have been enormous. The program today is mainly focusing on increasing the role of primary care for further success.

#### P11.14

## Association of Demographic and Work-Related Factors with Psychological Distress among Oil Workers in Kuwat

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Distress, including anxiety and depression, is an important psychological adjustment measure in a stressful work setting such as the oil production industry. Among the factors that can influence psychological distress are demographic and work-related conditions. The objective of the present study was to explore anxiety and depression among oil workers, and examine the relationships with sociodemographic characteristics and workrelated factors.

A cross-sectional study was conducted on a sample of 2123 workers selected by a stratified random sampling scheme from 10 oil companies in Kuwait. The workers were invited to complete a self-administered questionnaire including sociodemographic characteristics, work-related factors, and psychological aspects. Anxiety and depression were assessed by the Hopkins symptom checklist-25 scale. A hierarchical multiple regression procedure was used to assess the association of psychological distress with demographic and work-related factors.

The multiple linear regression analysis ascertained the significant relationship of psychological distress with gender, age, nationality, marital status, education, satisfaction with job, and shift work after controlling the variance accounted by all demographic and work related variables.

Demographic variables explained 22.5% of the variation in total distress. Dis-satisfaction with job explained an additional 10.7% of the variation in total distress, while shift work explained an additional 15.5% of the variation in total distress. All included variables explained 48.7% of the variation in total distress.

Sociodemographic and work-related variables are associated with psychological distress. Controlling workers' demographic correlates, and adjusting working conditions might reduce the levels of anxiety and depression among oil workers.

## P11.15

## Prevalence and characteristics of frequent attenders to the primary health care centers in Dakhliya region, Oman

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Introduction: Frequent Attenders' (FA) refer to a group of patients who visit their doctors much more frequently than an average patient. It is a common problem in general practice. Several studies have shown that FA represented 5-15% of the population. Objectives: To determine the prevalence and characteristics of frequent attenders at four Primary Health Care (PHC) centers in Dakhliya region, Sultanate of Oman.

Methods: Hybrid design of cross sectional and case control study conducted in four PHC centers (Manah ,Fanja ,Lazag, Hamra ) in Dakhliya region from 1st of January to 31st of December 2008,include all adult patient( 18 years and above ) who attend the GP clinic during the study period. Frequent attenders were defines as those patients who made 12 or more visits in the study year.

Results: A total number of 11782 patients made 41,196 visits to the out-patient clinics in the four PHC centers. Out of them, 477 were FAs who made 7680 visits. Therefore, 4% of patients were responsible for 18.6% of the total number of visits. Case-control study showed that the majority of FA group (57%) was females. Frequent attendance was observed to be more prevalent amongst elderly (74%), people of lower educational level (67.5%) and those who are divorced or widowed (76.7%). Also, FA reported a higher percentage of chronic illness/disease (74.7%) and more visits to other health care facilities (54.1%).

Conclusions: the prevalence of FA in four LHC is 4 % .Chronic illness correlated strongly with a high rate of attendance. Also socio-demographic factors, especially female gender, old age group and low education level were indicators of frequent attendance in general practice.

#### P11.16

## Tuberculosis epidemiological study in rural area

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Introduction: During de last two years nine patients with tuberculosis (TB), epidemiologically related, have been detected in the village. Until the fifth case the study was made among relatives and contacts. This patient worked directly with public and as spread panic amongst the rest of the village, we expanded access survey to all the community.

Aims: describe the experience done by primary care, Public health service Epidemiological surveillance Unit and due hospital preventive medicine and pneumology service studying a TB outbreak in 860 inhabitants village starting from a public establishment worker infected.

Material and methods: descriptive survey of community contacts in a rural area. Mantoux screening test (PPD) was made and with positive result were also took x-ray images and started prophylaxis. Informative lecture intended to present information of TB to all the village firstly, and therefore to the contacts in small groups. Positive PPD cases were individually followed by their primary care doctor and the person in charge of the epidemiology surveillance who came to the village once a week.

Results: studied population 87 (10% inhabitants). Men 56 (64,36%); women 31 (35,63%). The average age is 35,82 years. Positive PPD 45 (51,72%). X-ray images made 45, negative 44 and 1 unlikely. Pharmacological prophylaxis 45, refused prophylaxis 4 (8%).

Conclusions: TB is a pathology that spreads panic amongst population, moreover in a little village where everybody knows each other. Cross-functional team work makes possible an epidemiology study in a rural area which can bring positive medical and personal results.

Popular lectures lead to an accurate knowledge of the disease and act with common sense.

## P11.17

## Rural experience: elderly population considered as tuberculosis contacts

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Aims: describe an experience studying tuberculosis (TB) contacts carried out among elderly population with several pathologies in a rural area starting from the TB lung infection of a village social worker and with the epidemiology surveillance unit support.

Methods: retrospective descriptive survey. Studying contacts of a TB confirmed case. Elderly rural population from 892 inhabitants. Epidemiology surveillance unit gave an informative lecture in the village doctor's office for the direct TB contacts and their relatives. Mantoux screening test (PPD) was made twice in two months. And if the result was positive a thorax x-ray image was suitable.

Results: total reference sample 16; 6 men (37,5%) and 10 women (62,5%). Elderly motionless were 2. PPD was negative in all cases therefore none x-ray images were made.

Conclusions: TB is a disease with great impact and that can spread panic amongst the population consequently the direct control by their own doctor, with epidemiology and pneumology units support, minimizes the impact in elderly people everyday life. Results also show that suffer several diseases seem not to influence the chance of infection since none of the contacts was infected.

#### P11.18

## Experience on Genetic Diagnostics in Georgia

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In 2001, the Faculty of Family Medicine was established at Tbilisi State Medical Academy , in Georgia.

It should be considered, that nowadays, in Georgia family doctors have possibility to advice their patient new medical service Prenatal cytogenetic analysis.

Chromosome abnormalities account for a large proportion of cases involving spontaneous abortuses; individuals with congenital malformations, mental retardation, or infertility; women with gonadal dysgenesis; and couples with repeated spontaneous miscarriages. Additionally, the field of cytogenetics is now important in the workup of patients with hematologic/oncologic disorders.

Fetal cells derived from amniotic fluid (amniocytes) can be cultured successfully for cytogenetic analysis.

The Cytogenetics laboratory was established in 2007 and has the latest equipement. Prenatal and postnatal analysis are performed in this lab according to international standards.

Cytogenetic analysis is one of the important diagnostic procedure among other testes that is applied in numerous areas of clinical medicine. It is used to study chromosomal complect or individual chromosomal structures. Chromosome disorders form a major category of genetic disease. They account for a large proportion of all reproductive wastage, congenital malformations, and mental retardation . All step of analysis are performed using modern equipment, that gives opportunity getting the best quality sample. It gives possibility to analyze not only numerical chromosomal changes, but also rare structural disorders such as deletion of short arm of chromosome 20 46,XY(20p-); or 46,XY(5p-) and others

Various types of numerical and structural abnormalities observed in human karyotypes.

Some of the most common and best-known abnormalities of the autosomes and the sex chromosomes can be detected in cytogenetics laboratory is Down syndrome, Edwards Syndrome, Patau Syndrome, Turner syndrome, Klinefelter syndrome,

From 2007 cytogenetic analysis was performed for 361 pregnant wom en who were in risk-groups, from them 16(4,4%) had fetus with chromosomal abnormalities.

For Postnatal diagnosis 405 patients were analyzed, 125 from them(30,8%) identified abnormal karyotypes, most of them were Down Syndrome, but also were rare disordes Patau, Edwards , 46 XY(9q-) and otheres.

More doctors should be inform about possibility of prenatal diagnosis, in order for early diagnosis and treatment.

## P11.19

## Home Care Services in Turkey

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"Home Care Services" purpose to improve health status of the patients who have chronic diseases, disabilities or the patients in the terminal phase of chronic disease. Also patients can be protected against complications by home care services after discharge from the hospital. Home care service can be also defined as a combination of heath care service and social service. According to data from the year 2010, 7.2 % of the population is at the age of 65 and older. This ratio is estimated to be 16 % in 2025. Increased life expectancy and chronic diseases and rising expectations of patients require a new model in health care system. Of course individuals were getting health care services in the past but it is a new development to be provided these services in the body of Ministry of Health and in systematically way in Turkey.

In Turkey, home care services has been started by Ministry of Health in February 2010. Those who need home care service can get in contact with on their own family physicians. Also family physicians can provide this service if it is required. "Home Care

Service Units" were established in state hospitals and training and research hospitals for the patients who need comprehensive care. They can reach these units by calling 444 38 33 [444 ev de-at home (in English)] from all over Turkey. They are directed to the nearest hospital by the operators. "Home care service" team includes usually at least a physician, a nurse and a secretary. Home care services provided by hospitals is being carried out in working hours and by appointment.

#### P11.20

Quality improvement interventions came across system obstacles and did not change hospitalization rate and ambulance calls of hypertensive patients in Kazakhstan

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Kazakhstan Association of Family Physicians is implementing in 2010-2011 a Project «Empowering the Community to Reduce and Manage Hypertension in Atyrau Oblast» with Tengizchevroil LLP grant support. Interventions included direct and distance trainings of the PHC workers, continuous quality improvement (CQI) activities, and limited equipment supply in pilot facilities. To increase awareness among patients with of arterial hypertension (AH) and general population of Atyrau Oblast the health promotion cartoons in both Kazakh and Russian languages were developed and broadcasted on TV channel; 20,000 leaflets and brochures printed and distributed. Two AH schools were organized and maintained. Monitoring of the internal and external indicators and follow-up visits were provided.

Results. There was an increase in hospitalization rates and ambulance calls from population enrolled to pilot PHC facilities in 2010 and 2011. Total number of ambulance calls in 2010 increased from 1177 to 1382. Analysis of the patients' data showed that only 86 of those patients (6.2%) were in dispancerizaciya list ("D" list). Total number of hospitalizations in 2010 increased to from 307 to 418 with only 39 patients (9.4%) registered in "D" list. Control (no interventions) facilities data have shown the same trends. Hospitalization of enrolled population has increased from 300 to 539 patients; and ambulance calls increased from 1192 to 1290. Same trend was in the groups of patients from "D" list in both study and control facilities, but less significant. With introduction of new "Unified National System" hospitalization rate was increased considerably throughout Kazakhstan in 2010. Easy access and self selection of any hospital in the country were granted to all. CONCLUSION: Most of hospitalized and ambulance treated hypertensive patients (about 70%) were not registered in dispancerizaciya list. Not registered patients bypass PHC, and don't get appropriate care. Consequently, they represent the most vulnerable and premature death causing group of patients. Such external CQI indicator as hospitalization rate could not be used in Kazakhstan because of national health system changes.

## P11.21

Breast and Cervical Cancer Morbidity and Mortality in Tbilisi during 1998-2007

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Georgian National Center for Disease Control reported 12,913 registered cases of Breast and 2,685 cases of Cervical Cancer in Tbilisi during 1998-2007. In 1998-2007 the annual age standardized rate (ASR) of breast cancer was 121.9 per 100,000 female population and age adjusted rate (AAR) was 154.8 cases per 100,000 female population in Tbilisi; while, 34.4 ASR and 42.9 AAR was for cervical cancer respectively. In 2003-2007 the age

adjusted rate was 293.6 of breast cancer cases per 100,000 females aged 30-69 and 72.8 cervical cancer cases per 100,000 females aged 25-64. The comparison analysis of the two five year periods (1998-2002 vs 2003-2007) showed increasing trend in breast and cervical cancer rates: 1.2 fold increase based on SRR and 21% increase based on SIR for breast cancer and 1.3 fold increase based on SRR and 28% increase based in SIR for Cervical cancer.

Based on Tbilisi Population Registry data, 845 deaths due to breast cancer and 168 deaths due to cervical cancer was detected in 2002-2004. Deaths due to breast cancer ranks first (ASR=33.2) among female deaths caused due to cancer, while cervical cancer ranks fifth (ASR=6.5). Also, breast cancer ranks fourth among 10 basic reasons of overall female deaths in Tbilisi, with proportionate mortality rate equal to 5% for all ages of Tbilisi female population. Breast Cancer is major reason of death due to cancer in females aged 35-59 in Tbilisi. Cervical cancer ranks second for age groups 30-44 and 50-54 among female deaths caused due to cancer and ranks also second for age group 40-44 among deaths caused due to any cause, with age adjusted rate of 15.5%.

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