9th Baltic Family Medicine Conference 2015

27th of March, 2015
in National Open Access Scholarly Communication and Information Centre, Vilnius, Lithuania.

ABSTRACT BOOK
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ABSTRACT BOOK
Scientific committee:

Prof. dr. Arnoldas Jurgutis, Klaipėda University
Prof. dr. Vytautas Kasiulevičius, Vilnius University
Prof. dr. Leonas Valius, Lithuanian University of Health Sciences
Dear Colleagues,

Lithuanian Society of General Practitioners is pleased to welcome you in the 9th Baltic Family Medicine Conference, which is held together with Vilnius University Faculty of Medicine, Lithuanian University of Health Sciences and Klaipėda University.

Three speakers from Estonia, Latvia and Lithuania will present family medicine situation in their countries. Latvian and Lithuanian professors of family medicine will continue our day with attractive review of current medical subjects, which are essential to our practice. Few smart and brave our young colleagues will present their strong steps in family medicine science. And finally all of us will be invited to face clinical challenge by guidance real expert in family medicine teaching.

In the abstract book you will find more information about all presentations, abstracts, posters.

Between the lectures you will find plenty of time and opportunities to meet old and new friends from Baltic countries.

It is known, that the most efficient method for continuing professional development is discussing and learning from each other.

I hope that many of us after this conference in Vilnius will be inspired to look for more opportunities to visit excellent Baltic Family Medicine Conferences in Tallinn 2015 September and in Riga 2017.

Sincerely yours,

On behalf of the Lithuanian Society of General Practitioners,

Dr. Sonata Varvuolytė
## Opening ceremony

**Family medicine practice in Baltic countries.**

**FAMILY MEDICINE PRACTICE IN LITHUANIA.**
Dr. Sonata Varvuolytė, Lithuanian Society of General Practitioners, president

**REALITY IN PRIMARY HEALTH CARE IN LATVIA.**
Dr. Valerijs Valdmanis, Latvian Rural Family Medicine Association, member of the board

**HOT TOPICS IN 2015 AND NEAR FUTURE.**
Dr. Elle-Mall Keevallik, Estonian Society of Family Doctors (ESFD), member of the board

### Discussions

### Coffee break

### Posters exhibition and presentation

## Family medicine for better health

**WHY CARDIOVASCULAR DISEASES ARE SO PREVALENT IN LITHUANIA?**
Dr. Neringa Burokienė, Vilnius University, Faculty of Medicine

**GENDER EQUALITY AND ADOLESCENT SEXUAL HEALTH.**
Prof. dr. Lina Jaruševičienė, Lithuanian University of Health Sciences

**REMOTE SESSION WITH BELARUS: INTERCHANGEABILITY PROBLEMS IN SPECIAL PATIENTS’ GROUPS.**
Dr. Sonata Varvuolytė, Lithuanian Society of General Practitioners, president

### Discussions

### Lunch

### Posters exhibition and presentation

## Empowering patients in primary care. Teaching of family medicine

**LATE-ONSET HYPOGONADISM IN GP PRACTICE.**
Assoc. Prof. dr. Anatolijis Požarskis, Latvian Family Physicians’ Association, member of the board

**MULTIMORBIDITY AND NEEDS FOR INTEGRATED, PATIENT CENTRED CARE.**
Prof. dr. Arnolds Jurgitis, Klaipėda University, Center of Health Research and Innovations, Northern Dimension Partnership in Public Health and Social Wellbeing, Expert Group of Primary Health Care and Prison Health Care Systems

**CARDIOVASCULAR DISEASE IN LITHUANIAN FAMILY MEDICINE. JA-CHRODIS AND LITHIR DATE.**
Prof. dr. Vytautas Kasulevičius, Vilnius University, Faculty of Medicine

### Discussions

### Coffee break

### Posters exhibition and presentation

## Special session

**ATTITUDES TOWARD SEASONAL INFLUENZA VACCINE AMONG LITHUANIAN HEALTHCARE WORKERS**
Saulius A. Andriušis and Laura Šiaučiūnienė, Family medicine residents, Vilnius University, Faculty of Medicine and Lithuanian University of Health Sciences

**POLIMORBIDITY RELATED PROBLEMS IN PRIMARY CARE: POLYPHARMACY AND DRUG INTERACTIONS**
Ida Liseckienė, Viktorija Gedeikytė, Karolis Bernotas, Ignas Germanavičius, Assoc. Prof. MD PhD. dr. Ida Liseckienė Lithuanian University of Health Sciences (LUHS), Family medicine department

**CASE STUDY: PATIENT WITH DIABETES MELLITUS AND FEVER.**
Dr. Daiva Makaravičienė, Vilnius University, Faculty of Medicine

### Discussions

### Awards. Closing ceremony.
Opening Ceremony

J. Naujalis “Svajonė”

W. A. Mozart “Allegro di molto” of divertimento no.2

G. Kuprevičius 3 Lithuanian folk songs for string quartet

Ch. Gluck “Allegretto”

Performing:

Elena Mantvilė Kirdaitė (1st violin)

Jokūbas Švambaris (2nd violin)

Skaistė Žižytė (viola)

Julius Jonušas (violoncello)

Instructor:

Irma Bakševičienė
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Lectures and oral presentations
Family Medicine Practice in Lithuania

MD PhD Sonata Varvuolytė

Lithuanian Society of General Practitioners, president
Vilnius University, Faculty of Medicine, Department of Nursing and Fundamentals of Internal Medicine, lecturer

Presentation summary. In 1996 family medicine was legitimated in Lithuania. There were renamed general practitioners to family physicians on 2004 in Lithuania.

The family physicians are the largest doctors’ specialists’ group in Lithuania. During 22 years period a impressive number of family physicians was prepared. This year we expected about seventy graduating family residents from Lithuanian University of Health Sciences and Vilnius University. There are 2111 licensed family physicians in Lithuania now. According Lithuanian Institute of Hygiene Health Information Centre statistic data there were approximately 6.53 family physicians per 10 000 inhabitants in 2013. There were accounted about 3.48 visits to family doctor per one patient at the same year.

What do family doctors do and in Lithuania? Licensed family physician takes care of the inhabitants registered at the primary healthcare facility (out-patient clinics, family doctor centers). Usually family physicians have about 1200 – 1600 patients on their lists, 7 % have more than 2000 patients on their list. The health care reform statement is suggested that an appropriate average should be of 1600 patients per one family physician. But now it appears that for full family physician work performance the smaller amount of patients on doctor list should be. Family physicians should maintain not only direct care activities of all different age groups patients like diagnosing and treating, but also target the health preservation and diseases’ prevention functions.

Primary health care resources in Lithuania: there are more than three hundreds state and about two hundreds private institutions, in which
family practice could be provided. State institutions may be centers, general practitioners’ offices, ambulatory clinics and polyclinics – general or specialized. Ambulatory clinics are usually in the smaller towns, while polyclinics are situated in bigger cities, providing more complex services such as outpatient surgery. The publicly owned primary health care facilities part gradually decreasing by spreading private primary care. For the most part private primary care takes the form of solo or small group physician-owned practices.

During few last years period some parts of e-Health system were implemented in family doctors work environment. Now we use e-systems for patients’ visits registration, storage of patients’ diagnosing and referring information. Family doctors are responsible of patients’ evaluation and providing sick leaves - this process only electronically. In some systems it is possible create referrals to specialists on basis of patient health status description. There are plans that in few months e-prescription will be introduced in all family physicians’ working places.
Reality in Primary Health care in Latvia

Valērijs Valdmanis
Family doctor (GP), Ķekava, Riga district. Latvia

Presentation summary. During last 6 Years Primary Health care (PHC) in Latvia lost several important options or instruments, to provide service more efficient and patient oriented (impossible sent patient to hospital for planned treatment, low efficiency of prophylaxis etc.)

Percentage for Health care In Latvia from GNP is only 3.9 %. In many cases this is key factor for high level of untreated patients or treatment provided very late. Low money given for Health care, links to high level of co-payments for patients. This co-payment is highest in Baltics one of highest in EU. Some hospitals are close to bankruptcy due to patient unpaid money. For example one of biggest Riga’s clinic lost near 10 mio euros on patient debts.

Many times patients avoid treatment even in emergency cases, due to lack of money for co-payment.

Long queue are reality for patients. This links to full payment to have tests in time, especially closer to end of Year.

Reimbursement system is diagnosis oriented and still keeping high level of co-payment in some several diagnoses, like hepatitis C.

Health Insurance system is only as an idea on paper, due to Government tactic use this system against part of inhabitants. GP was against such in-human practice and new version still is not available.
Hot Topics in 2015

Elle-Mall Keevallik
Estonian Society of Family Doctors, Board member

Presentation summary. Estonia, population of 1,312,300 people. Since 1992 Tartu University has prepared family practitioners. A 3-year residency programme has now lived its life and starting from 2015/2016 we are moving towards UEMS (European Union of medical specialists) standards and adopting 4-year residency programme, adding 1 month to ER, Internal medicine, dermatology, ENT; 2 months for family medicine; 3 months for general surgery and 3 months for trainee to choose.

Possibility to take part in the Vasco da Gama Movement (VdGM) is creating more opportunities for future doctors, to present their research work for bigger audience; change to learn from other colleagues from other countries during the conferences and Forums is priceless.

Downside for other countries along with Estonia is the lack of rural doctors. Trainees who finish their program prefer to work with colleagues in cities. National decision makers need to start to think how to get GP’s to rural areas considering that our population is ageing, and so are our family doctors. In Estonia we have total of 781 family doctors, but only 8% (60) of them are younger than 40 years.

The big question is how to popularize family medicine and how to get doctors to work in rural areas.
Why cardiovascular diseases are so prevalent in Lithuania

Neringa Burokiene
Clinics of Internal Diseases, Family Medicine and Oncology, Faculty of Medicine, Vilnius University, Vilnius, Lithuania

Objective. Cardiovascular disease (CVD) mortality accounts for 54% of all deaths in Lithuania, making it the highest among all of the European Union countries. We evaluated the prevalence of several CVD risk factors, including lifestyle, blood biochemistry and genetic predisposition to determine the reasons behind significantly increased CVD prevalence in Lithuania.

Methods. In total 435 volunteers of Lithuanian ethnicity and stable geographic settlement for 3 generations, had their anthropometric, biochemical and behavioural risk factors measured. A randomly selected sample of 166 volunteers had their 60 CVD risk alleles genotyped. The prevalence of risk alleles and cumulative CVD genetic risk score were compared with population of North-West European origin (CEU) using data from the phase 3 HapMap project.

Results. CVD was present in 33.8% of study volunteers, 84% of participants consumed alcohol, 21% were current smokers and only 30% of participants engaged in higher levels of physical activity. Also, the average BMI (males 28.3±4.3kg/m2, females 27.3±5.0kg/m2), total cholesterol (males 6.1±1.2 mmol/L, females 6.2±1.0 mmol/L) and LDL-cholesterol (males 4.1±1.1 mmol/L, females 4.1±1.0 mmol/L) were above the normal values. The cumulative genetic susceptibility to develop CVD in Lithuanians was only 1.4% higher than in CEU population.

Conclusion. High BMI and poor population plasma lipid profile are the major contributing factors to high CVD mortality and morbidity in Lithuania. Smoking, alcohol consumption and the genetic predisposition do not explain the difference in CVD mortality between the Lithuanian and wider European populations. CVD prevention programmes in Lithuania should primarily focus on weight loss and improving blood lipid control.

LITGEN project (VP1-3.1-ŠMM-07-K-01-013) is funded by the European Social Fund under the Global Grant measure.
Gender equality and adolescent sexual health

PhD Lina Jaruševičienė
Department of Family medicine, Lithuanian University of Health Sciences, prof.

Presentation summary. Referring to sexual economics theory Boumeister and Mendoza (2011) raised a hypothesis that gender equality is related to less restrictive sexual norms and practices. The aim of this survey was to assess the relationship between gender attitudes and adolescents’ sexual behavior.

Methods. A cross-sectional survey was performed among 12-18 years old adolescents in Cochabamba (Bolivia) and Cuenca (Ecuador) in 2011, 3519 and 3263 adolescents completed a questionnaire respectively. The Women Scale for adolescents (AWSA, Galambos and Petersen, 1985) consisting of 12 items was used as an indicator for the gender attitude. This study was approved by the bioethics committees.

Results. A factorial analysis of AWSA resulted in three factors: Power dimension (PD), Equality dimension (ED) and Behavioral dimension (BD). The ED factor correlated with adolescent sexual behavior.

Girls having an egalitarian gender attitude were more often sexually active (OR 1.26). Similarly, adolescents having an egalitarian gender attitude reported more often being satisfied about their sexual relationship (OR 1.52 among boys and 1.81 among girls) and using a modern contraception method (OR 1.44 among boys and 1.82 among girls).

Conclusion. Our data are consistent with Boumeister’s and Mendoza’s insights that gender equality is related to a decrease of sexual restrictions. Higher gender equality also is related with more positive perception on sexual relationships and more safe sexual behavior among both males and females.

This document is an output from the project “Community-embedded reproductive health care for adolescents in Latin America”, funded by the European Commission FP7 Programme.
Late - onset hypogonadism in GP practice. Pilot research.

Assoc. Prof. Anatolijs Pozarskis
Daugavpils University, department of Anatomy and Physiology, Assoc. Professor, Latvian Family Physicians’ Association, member of the board, GP private practice, Daugavpils.

The aim. The aim of this study was to examine how common is Late-onset hypogonadism (LOH) in Latvian men and to determine the target audience that needs screening for LOH. 134 men of 40 years old or older were asked to check the level of testosterone in the blood serum.

Results. 29% of men appeared to have hypogonadism. 38% of them appeared to have adiposity, 77% - hypertension, 18% - diabetes, 51% - dyslipidaemia, 66% - erectile dysfunction. Among men with normal testosterone level adiposity was found in 29%, hypertension - in 56%, diabetes - in 5%, dyslipidaemia - in 39%, erectile dysfunction - in 61%.

Conclusion. 1/3 of men aged 40 and older have diagnosis of LOH in the groups under research. We can think about control of testosterone and free testosterone level: in all men 50-59 years old with arterial hypertension; in all men over the age of 40 with diabetes.
**Multimorbidity and Need for Integrated, Patient Centered Care**

**PhD Arnoldas Jurgutis**  
Klaipeda University, Center of Health Research and Innovations. Northern Dimension Partnership in Public Health and Social Wellbeing, Expert Group of Primary Health Care and Prison Health Care Systems

**Presentation summary.** An increase in the prevalence of non-communicable diseases (NCD) and increased need for health care services, especially for the ageing population, is a challenge for all European Countries. Health care expenditures are increasing rapidly, and countries have difficulties to afford to meet the increasing needs and guarantee the accessibility to high quality health services in compliance with the population needs and expectations. An important challenge for health systems is the increasing number of patients with high co-morbidity, i.e. having several chronic diseases at the same time. Such patients consume the main part of health care resources. Studies in Klaipeda region confirm increasing prevalence of population with high and very high comorbidity with more significant changes for rural population. Patients with very high comorbidity ranged from 0.11% to 3.05% when compare population listed to different PHC clinics. Increasing morbidity burden and spread of prevalence of patients with very high comorbidity should be addressed through more appropriate health and social care at the community level and introduction of more efficient, person-centered, integrated care models. Primary health care professionals should be trained to work with more comprehensive, holistic modelling through continuous care, to learn to understand social and environmental determinants of health and to work within multi-professional teams. It is important recognize that integration of specialized services with diagnosis-oriented approach are inappropriate and inefficient without having well-coordinated, continuous and patient-centered care provided by family doctor/ general practitioner and nurse as an appreciated care partner.
Cardiovascular Disease in Lithuanian Family Medicine.
JA-Chrodis and Lithir Date.

PhD, professor Vytautas Kasiulevičius
Faculty of medicine, Vilnius University, professor

Presentation summary. In JA-Chrodis project we analysed multimorbidity in the Lithuanian population and have identified the 10 most common chronic conditions in the diseased group. The most frequent chronic condition was hypertension, affecting more than 85% of the patients followed by ischaemic heart disease, heart failure and arrhythmias. It partly explains the reason why Lithuania is still considered a country having very high cardiovascular risk, although the LitHiR preventive program has been started in 2006 with the intention of lowering the prevalence of risk factors and protecting against CVD. Although there is a permanent tendency of decrease in cardiovascular mortality in the middle-aged persons, the profile of risk factors is still unfavourable.
Attitudes Toward Seasonal Influenza Vaccine among Lithuanian Healthcare Workers

Saulius A. Andriušis¹, Laura Šiaučiūnienė²
¹Vilnius University. Faculty of Medicine. Clinic of Internal Diseases, Family Medicine and Oncology. ²Lithuanian University of Health Sciences, Family medicine department.

Presentation summary. In Lithuania Healthcare workers (HCW) influenza vaccination rate reaches only 13%. It is important to find out factors increasing influenza vaccination among HCW. Our study aim was to identify HCW attitudes to vaccination against influenza and the factors influencing it. An anonymous two phase survey was conducted at Lithuanian university of health science hospital, Family Medicine Clinic (FMC). First phase included 97 HCW - vaccinated on FMC in 2013/2014 flu season. According to the first group - randomly selected relevant unvaccinated HCW group of 106 members. 91.8 % of vaccinated group were vaccinated on their own initiative. 8.2 % were encouraged by doctors or family members. Vaccinated HCW (97.9 %) more often than unvaccinated (72.6 %) agreed that the seasonal influenza vaccine is safe (p = 0.001). Unvaccinated HCW (58.5 %) less often than vaccinated (92.8 %) agreed that seasonal influenza vaccine is effective (p = 0.001) Most HCW were vaccinated on their own initiative; the greater number of HCW did not doubt of vaccine safety. Unvaccinated HCW more often were unsure of vaccine efficacy; unvaccinated HCW most frequently mentioned family medicine doctors and other specialists, as persons who could encourage vaccination. Workplace policy may also increase seasonal influenza vaccination rate.
Polimorbidity Related Problems in Primary Care: Polypharmacy and Drug Interactions

Viktorija Gedeikytė Ida Liseckienė, Viktorija Gedeikytė, Karolis Bernotas,* Ignas Germanavičius**
Assoc. Prof. MD PhD. dr. Ida Liseckienė Lithuanian University of Health Sciences (LUHS), Family medicine department
** Resident- doctors Lithuanian University of Health Sciences (LUHS), Family medicine department

Introduction. As society is aging, we encounter new challenges, and the ones that are the most important are polimorbidity (i.e. a person with two or more chronic diseases) and polypharmacy (the use of five or more prescription or non-prescription medicines). The phenomenon of polypharmacy aggravates treatment due to complex interaction of medicines. In Lithuania this topic is novel and little analysed.

Aim. To identify polypharmacy in patients with polimorbidity and to define the most common drug interactions.

Methodology. A retrospective data analysis was performed. Randomly selected 356 patients’ records aged 65 and above in the Clinic of Family Medicine of LUHS Kaunas Clinics. The data was analysed for the year 2012 OCT-DEC (patient’s age, sex, chronic diseases and number thereof, prescribed medicines, their doses and the total number). The interactions of medicines were verified using website http://www.drugs.com/drug_interactions.php.

Results. The prevalence of polimorbidity was 85,4%, and polypharmacy frequency was 25,3% of studied population. Analysis of prescribed medicines combinations to patients showed that the group of possibly most dangerous interactions included 5,6%. This group included combinations: Warfarin and NSAID (1,3 proc.), ACE inhibitor and ARB (1,3%), Spironolactone and ARB (1,3 proc.), ACE inhibitor and Allopurinol (1,0%), CCB and BAB (0,7%). The group of average risks combinations of medicines was dominated by the combination of ACE inhibitors and anxiolytics (9,27%).

Conclusions. 1. The amount of prescribed drugs is significantly related to the number of chronic diseases: and growing number of chronic conditions leads to increased number of medicines. 2. The most commonly prescribed
were following medications: ACE inhibitors (18.8%), BAB (14.2%), centrally acting antihypertensive drugs (6.7%), diuretics (6.3%), glaucoma medications (5.9%). 3. The possibly most dangerous interactions included 5.6%. The average risk was dominated by the combination of ACE inhibitors and anxiolytics 9.27%.
Patient with Diabetes Mellitus and fever

Assoc. prof. Violeta Ozeraitienė, Daiva Makaravičienė
Antakalnis Outpatient Department, Vilnius University, GP department

Presentation summary. Patient. 45 y.o. man was brought to the department of Internal Medicine of Vilnius City Clinical hospital. He complained about fever with chills, headache, weakness, joint pain and myalgia.

History. Diabetes mellitus and hydronephrosis II of left kidney was diagnosed 9 years ago. He was treated with Lantus and Apidra. He denied recent foreign trips, diarrhea, food allergy. He is a manager in a financial firm, works without vacations, he is smoking, drinking alcohol every weekend, his hobby is hunting.

3 weeks ago he went to policlinics because of fever and sore throat. The X-ray of chest was normal, blood test: leucocytosis, CRP > 160 mg/l, the urine test: white cells - 500, proteins 0,25 g/l. He was sent to urology department with diagnosis acute pyelonephritis. He got ofloxacin i/v 4 days. 3 days after discharging he had fever again, pain in the right knee, weakness, sweating and return to hospital.

Physical examination. Temperature - 39 °C, heart rate - 110/min, blood pressure - 130/80 mm Hg, breath sounds - normal, holosystolic murmur at the apex of heart.

Laboratory tests - anemia, hyperglycemia, hyperbilirubinemia, CRP (mg/l) - 240, antistreptolisin O (IU/ml) - 305, urine test - proteinuria, erythrocyturia, glucosuria.

Ultrasonography - hepatosplenomegaly, stasis in the left kidney. ECG - tachycardia, disorders of repolarization of myocardium. Transthoracic echo-cardiogram - IF 50%, changers of mitral valve, mitral regurgitation, left atrial enlargement.

Clinical diagnosis. Infective endocarditis.
Abstracts and Posters
The Influence of Social and Demographic Factors on Patient Satisfaction with Primary Care.

Rima Gaidamovic¹, Vytautas Kasiulevicius¹, Virginijus Sapoka¹, Ausra Deksnyte², Ramunas Aranauskas²

¹ Clinic of internal medicine, oncology and family medicine, Vilnius University, Vilnius, Lithuania. ² Psychiatric clinic, Vilnius University, Vilnius, Lithuania

Background & Aim. Patient’s characteristics affect formation of his view on satisfaction and expectations of primary health care (PHC) services. One of the most important modern health care strategic objectives is to activate individuals, groups and organizations in the implementation of various health improvement programs, and to promote dialogue between health care providers and patients. The aim of our study was to identify and analyse the factors, that influence patient’s satisfaction with PHC and find out whether it is possible to predict the patients’ satisfaction with PHC in accordance with the basic socio-demographic factors and assess the tendencies of this impact.

Methods. The study surveyed 444 patients using self-addressed Patient satisfaction Questionnaire Short-Form (PSQ-18). Cronbach’s alpha statistics were used for the validation of the questionnaire. The patients’ data included age, gender, nationality, education and place of residence as well as the registration with the certain PHC service.

Results. The place of living, patient’s age and PHC centre’s reputation had significant influence on the patient’s satisfaction with PHC. Patients from cities assessed almost all aspects of the service better, than the patients from regional centres and villages. Patients with basic and tertiary education level assessed PHC significantly better than patients with lower or upper secondary education. We founded only a tendency, that women evaluated PHC better than men. The oldest patients were satisfied with their PHC most, and the middle age patients were satisfied at least. Also patients, who attend more prestigious PHC centres, were satisfied with their health care more.
Conclusions. The patients’ satisfaction was more dependent on the social (registration with the prestigious family health care centre, education) rather than on the demographic factors (gender and age). Further studies should include more PHC centres from different regions of country, also to include more factors characterizing patient’s social status.

Keywords: patient satisfaction, primary health care.
Study of Informational Awareness of Patients Before Planned Surgical Intervention

Audronė Fabijanskienė, Ernesta Statkuvienė, Simona Vainorienė, Ligita Šiaurytė - Skiparienė, Violeta Simatonienė, Lina Jarusevičienė
Lithuanian University of Health Sciences

Introduction. Patient informing before surgical intervention strengthens patients motivation to take an active role in the treatment process, increases his health care satisfaction and consolidate the social support from patient environment.

The objective of the study. To explore patients’ informational awareness on future planned surgical procedure and to identify factors related to better patients’ preoperative awareness.

Methodology. The survey of patients’ hospitalized to the Hospital of Lithuanian University of Health Sciences and Siauliai Republican hospital. The study participants: 191 patients from the surgical units, 189 - from the ophthalmology units, 199 – from orthopedics and traumatology units. The instrument: 102-item questionnaire that consisted from sociodemographic questions, questions concerning the patients’ anxiety before surgical intervention, patients’ informational awareness and their expectations for preoperative counseling.

Results. 37.5% of men and 62.5% of women participated in this cross-sectional survey. The highest informational awareness (more than 80% of patients) was found on the issues related to the admission to the hospital and current health status. More than 50% of patients were aware of the aspects related to the future surgery. Less than 50% of study participants knew about the potential consequences of the surgery and the possibilities for social assistance. Younger age, male gender lacks of previous experience of hospitalisation and surgeries, the preoperative community nurse counselling was related to better informational awareness of the patients.

Conclusion. Aiming to improve informational awareness of patients before surgical procedure special attention should be paid to the involvement of community nurses in this process, issues related to the potential consequences of the surgery, wound care options, social assistance opportunities should also be included in the agenda of preoperative counseling.
Keywords: planned surgery, preoperative patient counseling, community nurse.
Prevalence and Risk Factors of Woman Urinary Incontinence

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Introduction. Urinary Incontinence (UI) is a common problem and is thought to affect millions of people worldwide. Bladder symptoms affect women of all ages. However, UI are most prevalent among older women. Lithuania is moving towards an elderly society. The study was undertaken to determine the prevalence of UI and analyse which risk factors might be related with it.

Methods. An anonymous questionnaire, which included 56 questions, has been used among women older than 18. The questionnaire had a block of questions, which were taken from King’s Health Questionnaire. Quantitative analysis was made by using SPSS 20.0 and MS Excel 2007. The study was taken in Vilnius Antakalnis policlinics in 2014 years.

Objectives. 1. To estimate the Prevalence of women UI of Vilnius Antakalnis Policlinics. 2. To compare types of UI. 3. To estimate risk factors of UI among women.

Results. 29.1% out of 289 women, who were selected by chance, had UI. The most common type was mixed UI, which had 50% of all women who had UI problems. Retrospectively, it was found that 20.2% had stress incontinence and 3.6% had urge incontinence. Also, results showed that 16.1% of women did not noted that they have UI problems, but they could be attributed to UI. Among studied risk factors it was found that urinary incontinent women tend to be slightly older than the healthy ones (p<0.05), also heredity (p<0.0001), higher number of given complex births (p<0.05), gynaecological and pelvis surgery operations (p<0.05) were found as important factors for UI.

Conclusions. One third of women have UI problems. It is important to notice that quite big part of woman do not admit to have this problem, but they actually might have it. Several risk factors are statistically significant and may induce the UI.

Keywords: urinary incontinence, women, prevalence, King’s Health Questionnaire.
Infections in postmenopausal women with diabetes mellitus type 2 in general practice

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Introduction. Diabetes mellitus is one of the most common conditions in the elderly. In 2014 the global prevalence of diabetes was 9% among adults aged older than 18 years. More than 90% is formed by type 2. The World Health Organization (WHO) predicts that by 2030 diabetes is the seventh common cause of death.

Diabetes mellitus is associated not only with glucose metabolism disorders, but also with different types of microvascular and macrovascular complications.

Infectious diseases are not listed among the most frequent complications in diabetic patients, but their development significantly affects patients’ quality of life and survival.

Aim. Study the characteristic and frequency of infections in post-menopausal diabetes patients. Compare results with control group.

Material and methods. A retrospective study was conducted in 3 general practices in Latvia, during the period 2012 - 2014. The study included women from the age of 55. Patients were selected in 2 different groups. First group with diabetes mellitus type 2 patients. Control group with postmenopausal woman with primary arterial hypertension and no other chronic diseases. Infectious diseases were grouped into three major groups - skin and soft tissue bacterial and fungal infections, urinary tract infections (UCI) and community - acquired pneumonia (CAP).

Data was analyzed with SPSS 20.0 (Statistical Package for the Social Sciences)

Results. This retrospective study included 102 patients. After data processing the study concerns a total of 94 patients, 44 diabetes and 50 control patients. There were 3 skin and 4 CAP episodes. Total amount in UCI were 52 episodes in 94 patients. Diabetes patients had 37 UCI episodes in 15
patients, control group 15 episodes in 9 patients. These differences are statistically significant (p-0.04) Also there is statistical reliability (p-0.014) in associations with hyperglycemia and UCI incidence.

**Conclusions.** This study shows that UCI incidence is increased in diabetes patients. Also, UCI occurs more often in diabetes patients with hyperglycemia.

**Keywords:** diabetes mellitus type 2, infectious disease, hyperglycemia
Treatment of Vitamin D Deficiency and Rickets in Infants and Children Under 2 Years of Age

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Background. If a newborn is diagnosed with rickets, international organisations recommended 3000-5000 IU/d (less commonly 10000 IU/d) doses of vitamin D until the clinical symptom disappear. Duration of treatment is 40-70 days, rarely longer or shorter. After the treatment 500-600 TV/d of vitamin D is prescribed for 1-2 years.

Aims. Analyze vitamin D deficiency and rickets treatment tactics in children less than 2 years old.

Methods. In the period from May to September of 2013, the health record data of 788 children born in 2010 was retrospectively analysed in Vilnius Centre Out-Patient Clinic.

This constitutes 7.36% of all newborns (10709) born in Vilnius in 2010. Criteria of inclusion: healthy born full-term newborns of normal weight, regularly attending the Clinic. During the research vitamin D deficiency and rickets treatment were analysed. Subjects of the research basing on the health records of the first 2 years were divided into 3 groups: healthy, those with clinical signs of vitamin D deficiency and those with a history of rickets. Statistical analysis was performed using the IBM SPSS.20 statistical program.

Results. Out of 788 children 481 (61.0%) were healthy. Vitamin D hypovitaminosis was diagnosed in 174 children (I gr.), 30 of whom later developed rickets. In all, 144 (18.3%) were diagnosed with signs of vitamin D deficiency only and 163 (20.7%) were diagnosed with rickets (II gr.). Signs of vitamin D hypovitaminosis were mostly found among 2.7±1.3 months old children (signs of rickets were found among the children of 3.5±1.42 months of age, (in both cases min-1, max-10). In most cases, vitamin D deficiency was treated with 800-1500 IU/d vitamin D prescription (51.18%, 71), rickets with 1600-2500 IU/d (59.4%, 97). Fish oil was prescribed to 10.9% of children (19) with vitamin D deficiency, and to 4.9% of children (8) with rickets. Rickets treatment most commonly had a duration of 61-120 days (52.6 %, 86), vitamin D deficiency - 30-90 days (37.36%, 65).
Conclusions. 1. Rickets is treated with vitamin D doses that are lower than recommended. 2. The duration of rickets treatment is shorter than recommended.

Keywords: Vitamin D, deficiency, rickets, treatment, children.
Social services requirement of social exclusion groups based on primary health care team and social workers perspective

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**Background.** Work with the groups of social exclusion is one of the most significant areas of primary health care (PHC) and social care workers. Such groups are in need of integrated social and health care. The world seeks to better the care of vulnerable families, improve quality of services and special attention is paid to the development of the legal framework. Unfortunately, the demand of such services in Lithuania is not widely studied and the primary health care team often perceives social care services as an additional job function.

**Aim of the study.** The aim of our study was to investigate the opinion of family physicians, community nurses and social care workers about the demand for social care services of social exclusion groups. We also aimed to investigate if teamwork, the clarity of roles and sufficient time amount to implement the functions are influential for the identification of the need for social care services.

**Methodology.** The survey took place in Kaunas city and district. There were 164 family physicians, 180 community nurses and 89 social care workers who participated in the investigation. They were from randomly selected 33 primary health care centers (10 big and 23 small). Anonymous questionnaire was used to conduct the survey, which included 108 questions. This survey focused mainly on the opinion of PHC team members and social care workers on the demand for social care services for vulnerable families. Statistical data analysis was performed using data acquisition and analysis package program SPSS (SPSS version 22.0).

**Results.** The analysis of the data showed that family doctors and community nurses deal mainly with the social care service needs of older persons with disabilities and their families and least often they are faced with the need for social care services of children without parental care.
and their families. Role clarity, sufficient time amount to implement the functions and teamwork were related with the more frequent identification of the need for social care services for social exclusion groups. Participants identified that the most common problem for the provision of social care services was the lack of connection between primary health care centers and social care centers.

**Conclusions.** Improving the delivery of social care services for social exclusion groups special emphasis should be paid on institutional level measures such as explicitness of team members’ functions and interinstitutional level measures - strengthening the networking between health and social care institutions.

The study was performed in the frame of the Project „Intersectorial collaboration solving health care problems in social risk families”, financed by Lithuanian Council of Sciences (No.SIN-13/2012).

**Keywords:** Community nurse, family doctor, social worker, social exclusion groups, primary health care.
Adolescents’ concerns in primary health care: expectations of different social groups

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Presentation Summary. Understanding of patients’ concerns and fulfillment of their expectations lies in the background of efficient health care. The goal of this paper is to analyze and evaluate the attitudes of three social groups: adolescents, parents raising adolescent(s) and primary health care physicians towards adolescents’ concerns in health care. In total 21 general practitioners, 23 adolescents and 17 parents raising 16-17 years children took part in the study. Vignettes methodology was applied: two clinical situations were prepared along with certain questions related to the expectations of physician’s approach in each of the situation. The responses were given in a free form and the data were analyzed by employing the thematic analysis. Performing data analysis 23 subcategories were revealed that reflected the opinion of adolescents, parents and physician on the concerns of teenage patients during the discussed consultations. These subcategories were further merged into nine categories on the basis of which the three final themes were formed: argumentation of an active doctor’s approach during the appointment, elements of health care services and orientation on the patient. The study showed that the expectations towards physician’s approach differed among adolescents, parents and physicians. The study data could be applied in preparing health care guidelines for teenagers.

Keywords: Adolescents, health care, adolescents’ concerns, sexual health.
Family doctor’s prescription review for children up to 2 years

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Purpose: To review Family doctor’s (FD) prescriptions for children born since 2010.

Tasks:

1. To investigate the frequency of referral for specialist consultation.
2. To find out the frequency of prescribing vitamin D and fish oil.
3. To find out the frequency of antibiotics prescription.

Method: For retrospective study specific questionnaire was used. Information was gathered from the outpatient forms of the 2 Family Medicine Centers in Vilnius. Sample - 404 charts.

Results:

1. During their first two years 200 (49.5%) children were referred for ophthalmologist consultation while 204 (50.5%) children were not referred at all. 1st month 26 (6.44%) children were referred for ophthalmologist consultation, 2nd – 21 (5.2%), 3rd – 19 (4.7%), 4th – 18 (4.46%), 5th – 25 (6.19%), 6th – 19 (4.7%), 7th – 5 (1.28%), 8th – 6 (1.49%), 9th – 13 (3.22%), 10th – 5 (1.28%), 11th – 8 (1.98%), 12th – 37 (9.16%), 13-18th months – 39 (9.65%), 19-24th – 28 (6.93%) children.

During their first 3 months only 32 (7.92%) children were referred for pediatrician consultation and 372 (92.08%) were not. 1st month 22 (5.45%) children were referred for pediatrician consultation, 2nd – 12 (2.97%), 3rd – 3 (0.74%), 4th – 5 (1.28%), 5th – 20 (4.95%), 6th – 31 (7.67%), 7th – 8 (1.98%), 8th – 5 (1.28%), 9th – 3 (0.74%), 10th – 3 (0.74%), 11th – 0 (0%), 12th – 16 (3.96%), 13-18th months – 13 (3.22%), 19-24th – 3 (0.74%) children.
II. During their first month 383 (94,8%) children got vitamin D, fish oil or both. 2nd month - 377 (93,32%), 3rd – 355 (87,87%), 4th – 370 (91,58%), 5th – 344 (85,15%), 6th – 344 (85,15%) 7th – 239 (59,16%), 8th – 204 (50,5%), 9th – 223 (55,2%), 10th – 157 (38,86 %), 11th – 112 (27,72%), 12th – 241 (59,65%), 13-18th months – 289 (71,53%), 19-24th – 232 (57,43%) children.

III. First month antibiotics were prescribed for 5 (1.24%) children. 2nd month – 0 (0%), 3rd - 11 (2.72%), 4th – 8 (1.98%), 5th – 7 (1.73%), 6th -7 (1.73%), 7th - 12 (2.97%), 8th - 22 (5.45%) children. 9th and 12th months - 13 (3.22%), 10th - 14 (3.47%),11th – 12 (2.97%) children.

Conclusions:

1. Half of the children in their first two years of their lives were referred for ophthalmologist consultation and less than one-tenth were referred for pediatrician consultation within first 3 months period.

2. Vitamin D and/or fish oil were prescribed for the majority of children.

3. Antibiotic prescription frequency is not high.

Keywords: Family doctor, children, prescription, specialist consultation.
Primcareit pilot study of Telemedicine in Lithuania

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Introduction and purpose. “PrimeCareIT” pilot study of tele-consultations and tele-mentoring was started in seven Baltic countries (Finland, Sweden, Germany, Lithuania, Latvia, Estonia and Belorussia) in 2012. The purpose of our pilot was to test acceptance of tele-consulting, level of consultation efficacy and how professional isolation and medical skills of remotely working GP’s could be affected using this service.

Material and methods. A tele-consulting infrastructure was established among Vilnius University Hospital Santariškių Klinikos (VUHSK) and 3 geographically remote primary healthcare centres (PHC): Anykščiai PHC (100 km from Vilnius), Druskininkai PHC (140 km from Vilnius) and Aukštadvaris PHC (50 km from Vilnius).

Participants:

- 4 GPs (consultants) working at Family Medicine Centre of VUHSK;
- 2 dermatologists and 2 ophthalmologists (external experts);
- 37 GPs (mentees) working in geographically remote PHCs.

Tele-consultation sessions included:

- Collecting, sharing and storing of patient medical data (including images),
- Health functions monitoring (e.g. ECG, arterial blood pressure),
- Live video conferences.

The information required was collected with the help of standardized Interview Protocol questionnaire. Most of added-value comments were noted during face-to-face meetings.
**Results.** In a 3-month period 102 tele-consultation sessions (72 cases in cardiology and 30 in dermatology) were carried out. 74 (72.5%) cases were managed by the GP’s on their own; 22 (21.5%) patients needed further diagnostic testing and 6 patients (5.8%) were referred to an emergency department. 33% of respondents (n=12) believe brain drain issue being significant in remote primary health care. 66% of respondents feel isolated working remotely. All respondents think that tele-consultation is useful in their practice as it makes a consultation easily accessible, there is no need for the patient to travel and the contact with the patient is improved. Although this service could be expensive for the healthcare provider to maintain.

**Conclusion.** Tele-consultations were highly accepted. Most of participants identified such services as an opportunity to deepen their knowledge and providing high quality services to their patients. However elderly GP’s preferred traditional consultations, mostly due to lack of computer knowledge. There are some economical benefits for the patients.

Adoption of this service still requires efforts to convince doctors, patients and healthcare providers to use tele-consultations in everyday practice.

**Keywords:** tele-medicine, tele-consultations, brain drain, professional isolation.
Prior fractures and age influence for risk of a new fracture assessment for patients who suffered distal radius low energy fracture

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Background. Survey of medical articles conclude that distal radius low energy fracture (DRLEF) may warn about osteoporosis origin. Risk for new fracture assessment is made by FRAX. According to the National Osteoporosis Foundation Clinician’s Guide patients should be treated when FRAX 10-year risk scores >or= 3% for hip fracture and >or= 20% for major osteoporotic fracture in order to reduce their future fracture risk.

Research questions. What are the spread of osteoporosis among the patients who suffered DRLEF? Is the relation between DRLEF and increased risk of the new fracture measured by FRAX? Does the risk for fracture increases by age? If the bone mineral density (BMD) reduction and a prior skeletal fracture may increase the risk measured by FRAX?

Methods. In the period from October of 2012 to February of 2015, retrospectively analyzed overall 248 patients, men and postmenopausal women, whom have had DRLEF. Their bone mineral density was examined in Vilnius University Hospital Santariskes Clinics. Collected data were evaluated using FRAX tool. Out of 248 investigated patients (Mean age 62,97±8,42) were divided into two groups by risk: in the I group were included patients, whose FRAX 10-year risk for hip fracture score >3%, and the II group - FRAX 10-year risk for major osteoporotic fracture score >20%. It was aimed to determine, if people with DRLEF had high risk for future fractures. Statistical analysis was performed using the IBM SPSS.17.00 statistical program.

Results. Out of 248 investigated patients, 43 (17,34%) were healthy, 109 (43,95%) had osteopenia, 96 (38,71%) were diagnosed by osteoporosis. For 117 (47,18%) of all investigative persons DRLEF was second experienced fracture in their life, and for 131 (52,82%) it was the first. In the Igr.
82 patients was got. Mean age 62,93(±8,42). There was found osteoporosis for 26(10,48%) patients and osteopenia for 56(22,58%) investigative persons. There was 54(21,77%) persons who had prior fractures of skeletal. In the IIgr. was 19 investigated people. Mean age 62,67(±8,42). For 12(4,84%) patients were found osteoporosis and for 7(2,82%) investigative persons were found osteopenia. Prior skeletal fractures had 15(6,05%) investigated persons (p<0,000). There was found correlation between patients age and low BMD after DRLEF (r= 0,262, p<0,000).

**Conclusions.** Major part of all examined patients with DRLEF had osteopenia, the least – were healthy. According to the FRAX for people with DRLEF, risk in the future to have bone fractures (hip or other major fractures) is for every third person. Prior skeletal fractures and low BMD may be considered as a risk for future fractures. There was observed, the higher is the patient age the bigger is a possibility to diagnose low BMD after DRLEF.

**Keywords:** fracture, osteoporosis, FRAX, age.
The relationship between habitual physical activity and physical performance in individuals of mild and moderate Parkinson’s disease

Kęstutis Čapkauskas

Objective. To investigate the relationship between habitual physical activity and physical performance in individuals of mild and moderate Parkinson’s disease (PD).

Material and methods. This cross-sectional study involved subjects with PD, between stages 1 to 3 of the modified scale of Hoehn and Yahr. The subjects were 60 years and older and their Mini-Mental State Examination (MMSE) score was 25 or higher. Habitual physical activity was assessed by Physical Activity Scale for the Elderly (PASE). Physical function was assessed using Timed Up and Go test (TUG) and Short Physical Performance Battery (SPPB). The SPPB consists of standing balance tasks, five repeated chair stand test and the 4-m walking test. Static balance was measured using Multi-directional Reach test (MDRT). Muscle strength was assessed by handgrip strength (HGS). Statistical analysis was carried out using SPSS version 21 for Windows. Mean differences of interval variables were compared using Mann-Whitney U test. Correlations were determined using Spearman correlation coefficient.

Results. The study sample consisted of 41 persons – 21 men (51.2%) and 20 women (48.8%). The youngest participant was 60 years old, the oldest – 83 years old. It was found that PASE score statistically significantly negatively correlated with TUG test ($r = -0.52$, $p < 0.001$). Our findings suggests that PASE score positively moderate correlated with MDRT forward ($r = 0.47$, $p = 0.002$) and MDRT left reach ($r = 0.55$, $p < 0.001$). There was found statistical significant negative moderate correlation between PASE and SPPB total scores ($r = 0.48$, $p = 0.001$) as well as PASE score and SPPB components: five repeated chair stand test ($r = 0.47$, $p = 0.004$) and 4-m walking test ($r = -0.45$, $p = 0.003$). Also it was found positive moderate correlation between PASE score and left HGS ($r = 0.46$, $p = 0.003$).

Conclusion. There is a relationship between habitual physical activity and physical performance in individuals with mild and moderate stage of the Parkinson’s disease. The results suggest that the higher total habitual physical activity score, the better is the left handgrip strength and
greater Multi-directional reach test result of forward and left reach. It also suggests that the higher total habitual physical activity score, the shorter is 4 meter walk test time.

**Keywords:** Parkinson’s disease, Elderly, Habitual physical activity, Physical performance