

Session:

# PUBLIC HEALTH I

MedIQ 2017

**TITLE: THE COGNITION OF KNOWLEDGE OF NON MEDICAL STUDENTS ABOUT  
HYPERTHYROIDISM.**

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**Introduction:** Hyperthyroidism is a pathological syndrome resulting from excessive production of thyroid hormones. Characteristic symptoms include tachycardia, diarrhea, weight loss, and exophthalmos. Furthermore, the most common cause of hyperthyroidism is Graves' disease and it relates primarily to women.

**Aim of study:** Our objective was to show the level of knowledge of hyperthyroidism among students from non-medical studies.

**Material and methods:** We carried out an anonymous questionnaire via Internet. The students of the Technical University of Lublin aged 19-21 was participated in this survey.

**Results:** We received 100 responses to our survey (76 from men). 26% of respondents did not know where the thyroid gland is located. Most often marked symptoms of hyperthyroidism were asthenia (43%) and constipation (29%). 78% of respondents indicated that an element necessary for proper thyroid function is iodine. 44% of respondents marked that products affecting on the thyroid are tangerine and strawberries.

**Conclusions:** As shown by this survey the knowledge about hyperthyroidism in the group of non-medical students is insufficient. We can conclude that most of respondents will not be able to recognize the early symptoms of hyperthyroidism. There is a strong need to improve all the surveyed areas of knowledge about the condition among students during their education.

**TITLE: EVALUATION OF AWARENESS OF SAFE ANTIBIOTICS USE AMONG YOUNG PEOPLE.**

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**Introduction:** Antibiotics are one of the most commonly used drugs. Due to this fact it is necessary not to forget about their side effects, interactions with other medications and alcohol. Also taking probiotics improves the safety of antibiotic therapy.

**Aim of study:** The primary aim of this survey was to evaluate the awareness of safe antibiotics use among young people.

**Material and methods:** The study involved a group of 854 people at the age range of 15 to 30 years including 262 men and 592 women. Most of the respondents were high school students or students. In order to conduct an analysis, the authorial questionnaire consisted of 31 questions was used. Questions about basic personal information as well as those about use of antibiotics occurred.

**Results:** The average age of the respondents was 21,9 years. 77,2% of the respondents use probiotics during course of antibiotics and 57,3% of them do this properly. Most of the respondents (74,6%) read the whole leaflet before starting antibiotic therapy. The great majority of interviewees (94,6%) are aware that drinking alcohol is not allowed while taking most of antibiotics. Despite of this fact almost 24% of them consume alcohol during course of antibiotics. Over 69% of respondents take other drugs with antibiotics. Most people (86,8%) who take medication permanently inform about that doctor before choosing antibiotic. 79,5% of people declare knowledge about interactions between drugs and 83% of them are aware of the problems connected with it. One third of the respondents admit to have antibiotics side effects. Most frequently mentioned are diarrhea (24,5%) and rashes (23,8%). Less than 15% of interviewees declare that doctor had to change primary antibiotic because of antibiotics side effects affecting their health condition.

**Conclusions:** Awareness of the danger of drinking alcohol during the course of antibiotics is very high among young people but almost one quarter of them decide to consume it while they are taking antibiotics. Also interactions between drugs are considered as a serious matter. Most respondents take probiotics during course of antibiotics.

**TITLE: WHAT DO NON MEDICAL STUDENTS KNOW ABOUT THE HYPOTHYROIDISM QUESTIONNAIRE STUDY.**

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**Introduction:** Hypothyroidism is a chronic disease in which there is a slowing down of metabolic processes. Characteristic symptoms are constipation, anemia, bradycardia. The most common cause of hypothyroidism is Hashimoto's disease.

**Aim of study:** The aim of our study was to assess the level of awareness concerning hypothyroidism among students aged 19-25 years.

**Material and methods:** We have conducted a survey among students of Faculty of Technical Science in Lublin. The participation was voluntary and anonymous. They were sent a research questionnaire via Internet. Then, we performed a statistical analysis of the acquired material.

**Results:** We have gathered 100 answers to our survey, 24 of them were from women and 76 from men. Only 9% of people answered that the hormone secreted by the thyroid is thyroxine, 23% answered that this hormone is cortisol. The majority of respondents (56%) answered that the doctor dealing with thyroid disease is an endocrinologist. Moreover, many answers also show that almost half of students (57%) were interested in the topic and prone to improve their knowledge about hypothyroidism.

**Conclusions:** The survey revealed inefficient awareness concerning hypothyroidism, which demonstrates the need of public education on this issue. Furthermore, young people seem to be aware of how important it is to recognize the symptoms of hypothyroidism.

**TITLE: SCALE OF A SLEEP PROBLEMS AMONG YOUNG PEOPLE.**

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**Introduction:** Sleep is basic biological need. Without proper sleep our body can not function. It is the most important for central nerve system, but also for other systems. Proper sleep hygiene consists of 7-9 hours of sleep per day and regular sleep time, frequent physical activity, no contact with electronical devices hour before sleep, no alcohol, caffeine, nicotine use before sleep. Sleep disorders such as insomnia, snoring, sleep apnea, nightmares, difficulties with falling to sleep etc. can lead or be a symptom of health complications. It is very important for young people to care for good sleep and for older to detect and treat sleep disorders.

**Aim of study:** The aim of the study was to estimate the problem of sleep disorder among young people and also awareness of this problem during contact with patients.

**Material and methods:** Materials were gathered through the internet questionnaire. The participation was anonymous and voluntary. It consisted of 14 questions about Their sleep hygiene, existent sleep problems, awareness of possible complications connected with sleep disorders and also for medical students only questions about Their awareness during the contact with the patients.

**Results:** In this survey took part 120 respondents. Among them 67% women and 33% men. The average age was 23 years. 90% of respondents were students of medicine. Only 50% of respondents sleeps for recommended 7 to 9 hours per day and 49% is having not enough sleep. 92% is having constant contact with electronical devices before going to sleep. Only 24% do physical activity for few days per week and only 31% never use nicotine, alcohol or caffeine before sleep. 90% of respondents report sleep disorders, however only 10% look for medical help. 60% is aware of possible complications connected with sleep disorders but They admit to neglect it. Only 16% of medical students believe it is important to ask and educate patients about sleep hygiene and possible disorders.

**Conclusions:** Most of young people suffer from lack of sleep and disorders which may be connected with bad sleep habits, but also high level of stress, which may lead to future health complications. It is concerning that youth neglect or are not aware of possible complications connected with Their sleep habits and in case of patients contact do not pay enough attention to this problem. It is very important to educate people about good sleep hygiene and put more attention to patients sleep problems during medical practice.

**TITLE: DIET SUPPLEMENTS AND HERBAL PREPARATION CONSUMPTION AMONG YOUNG PEOPLE.**

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**Introduction:** Nowadays, diet supplements and herbal preparations are very popular among society. Due to high availability in many cases it is not controlled. That is why it is so important to pay attention to possible interactions between those supplements and prescribed drugs not only among young but what is the most important older patients who very often take many medications at once. Possible interactions can occur especially between cardiological medications for example aspirin, digoxin, warfarin, insulin. The most common was change of pharmacokinetics, but also many cases of adverse reactions from digestive, nerve and urinary system.

**Aim of study:** The aim of the study was to estimate the level of consumption of supplements and herbal preparation among young people and awareness of possible interactions between other drugs (also during the contact with patients).

**Material and methods:** Materials were gathered through the internet questionnaire. The participation was anonymous and voluntary. It consisted of 17 questions about consumption of diet supplement and herbal preparations, awareness of possible interactions of those with other drugs and also for medical students only questions about their awareness during the contact with the patients.

**Results:** In this survey took part 120 respondents. Among them 67% women and 33% men. The average age was 23 years. 90% of respondents were students of medicine. 47% of respondent is taking supplements/preparations at present and 43% used to intake in the past. In case of 53% respondents it's more than one type of supplement and 10% are also taking other drugs. Most of them are aware of possible interactions (76%), however they state to neglect it. Only 9% of respondents always reports taking supplement during doctor's appointment. During contact with the patient 20% asks patients whether they are taking any supplements/herbal preparations and also 50% of students believe it is not their role to educate patients about possible interactions.

**Conclusions:** The survey shows that not only many young people are chronically taking more than one supplement/herbal preparation, but also neglect possible interactions with prescribed drugs, which lead to not paying enough attention to this fact during patients' contact. We know those interactions might be quite serious and are easily to prevent just by educating patients. We should never forget to ask patients about supplement taking during physical examination.

**TITLE: CORRELATION OF LIFESTYLES AND DISEASES OF AFFLUENCE IN LUBLIN COUNTY POPULATION.**

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**Introduction:** The lifestyle is the scope and forms of everyday behavior of individuals or groups. The concept include not only human behavior, but also psychophysical mechanisms underlying these behaviors: human motivations, needs, values accepted. Lifestyle can have a huge impact on the pro- and anti-health behavior and thus cause admissions diseases in particular social group.

**Aim of study:** The aim of the study was to estimate the dependence of lifestyles and prevalence of disease of affluence in Lublin county population.

**Material and methods:** Examinations were performed during prophylactic actions runned in Lublin county from in 2016 and 2017 arranged by The Young Medics' Organization. The research methods were anonymous questionnaire, blood pressure test measured in upright sitting position after 5 minute rest and glucose measurement. Aneroid sphygmomanometer with standard arm cuff size and glucometer strip were used. Participation in the study was voluntary.

**Results:** The survey was conducted among a group of 101 people aged 17-78. The average age was 46,9 years. Among all examined 55% had blood pressure exceeding 140/90 mmHg, 42% had abnormal glucose and 4% of them suffered from coronary artery disease. 41% of patient who declare smoking have high blood pressure and 43% of them have hyperglycemia. Among all examined 11% had drink alcohol occasionally and had hypertension. 60% of drinking alcohol several times a week had high blood pressure and also 47% of them had abnormal glucose level. 15% of examined are overweight and have hypertension at the same time. 18 % of examined occasionally play sports and had hyperglycemia.

**Conclusions:** Near half of examined was overweight, two in five of them occasionally play sports, Only one in four do it regularly, 22% smoke and 15% drink alcohol at least once a week. These results can be correlated with prevalence of disease of affluence in study population.

**TITLE: CORRELATION OF BODY COMPOSITION AND HYPERTENSION IN LUBLIN COUNTY POPULATION.**

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**Introduction:** Body composition is used to describe BMI and the percentages of fat, bone, water and muscle in human bodies. Hypertension is a long term medical condition in which the blood pressure in the arteries is persistently elevated.

**Aim of study:** The aim of the study was to estimate the dependence of body composition and hypertension in Lublin county population.

**Material and methods:** Examinations were performed during prophylactic actions runned in Lublin county from in 2016 and 2017 arranged by The Young Medics' Organization. The research methods were anonymous questionnaire, test using a body composition analyzer and blood pressure test measured in upright sitting position after 5 minute rest . Aneroid sphygmomanometer with standard arm cuff size was used. Participation in the study was voluntary.

**Results:** In the study took part 101 citizens of Lublin, aged 20-78, average 45,6 years. 15% of examined patients had BMI over 25. 5% of patients had coexisting hypertension. We were able to measure body composition among 30% of examined patients. Average age of those patients was 54,6 years. 42 % of examined were overweight. High blood pressure was presented in 31 % of patients with BMI  $\geq 25$ . 50 % patients with an abnormal content of water in the body and 19 % of patients with abnormal amount of body fat suffered from hypertension.

**Conclusions:** 42 % of examined was overweight, 58% had too high percentage of body fat, 32 % had incorrect percentage of water in the body. Only 10 % of patients with high blood pressure took blood pressure medications regular.

**TITLE: MOTHERS PERCEPTION OF RECOMMENDED VACCINES FOR CHILDREN: THE FREQUENCY OF ITS USE AND MOTHERS OPINIONS ABOUT CHILDREN IMMUNIZATION.**

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**Introduction:** The rules of children immunization in Poland are described in Immunization Program. It is a yearly updated document containing a list of mandatory and recommended vaccines as well as immunization schedules for them. In contrary to mandatory vaccines which are free, recommended vaccines are not obligatory for polish children and parents must pay if they want to immunize their child with recommended vaccine.

**Aim of study:** To define prevalence of use of recommended vaccines among polish children population. To get to know mothers' opinions on children vaccination.

**Material and methods:** 275 mothers participated in the survey. 109 of them have ever immunized their children with recommended vaccines. Participation was voluntary and anonymous. An own questionnaire was used. Obtained data was analyzed.

**Results:** Among respondents 40% of mothers have ever used at least one of recommended vaccines. Most widely used were pneumococcal vaccine (81% of the group that have ever immunized a child with nonobligatory vaccine), rotavirus vaccine (53%) and meningococcal vaccine (31%). 70% of mothers who have used recommended vaccines, agreed with a statement that use of vaccines may almost completely eliminate some infection diseases. Also 70% agreed with a statement that immunization protect not only children but also people who have frequent contact with them. At the same time even 38% of participants believe that vaccines may cause adverse effects such as autism, autoimmune diseases and allergies. 42% doubted in vaccines safety because of the fact that thiomersal is the ingredient of some of them.

**Conclusions:** Polish children are often immunized with nonobligatory vaccines. Most popular are pneumococcal, rotavirus and meningococcal vaccines. The majority of mothers believe in vaccines effectiveness. However, at the same time many parents doubt in safety of immunization. In our opinion extensive actions are needed to inform parents about benefits of children immunization and to clarify their concerns about vaccines safety.

**TITLE: MARIJUANA AS A POPULAR DRUG AMONG POLISH STUDENTS.**

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**Introduction:** Marijuana is probably the most popular narcotic in Poland. It is especially popular among young people including students from various Universities and subjects. Cannabis is commonly regarded as a “soft drug” and significant percentage of people doesn’t find marijuana as more dangerous than tobacco. In recent years we can observe more and more discussion about a need of changing a legal status of marijuana.

**Aim of study:** The aim of the study is to investigate the knowledge about risk and negative side effects of using marijuana among Polish students of various universities. We examined the popularity of recreational use of this substance and recognize respondents’ experiences connected with it.

**Material and methods:** The study was conducted in March 2017 using a standardized interview. It involved 132 students between 19 and 29 years of age interviewed with the author's questionnaire. The obtained results were statistical analyzed.

**Results:** Distinctly more than half (64%) of respondents have used marijuana at least once. Among separated subgroups, the biggest one (21% of all respondents) contains people, who used marijuana less than 3 times in their lives. The most common effect caused by using cannabis was elevated mood (76%) and increased appetite (67%). More than half experienced conjunctival hyperemia (58%). Interesting observation was that 2 respondents reported loss of consciousness. The most of examined students consider marijuana as a soft drug (53%) and stands for at least partial legalization of it (57%). Nevertheless 67% of respondents think that marijuana is addictive.

**Conclusions:** Marijuana is a popular drug among Polish students. Despite of awareness of its addictive potential, majority support the legalization of it. In view of unknown source and composition of marijuana which is available in Poland, it signalize a need of discussion about change of marijuana’s legal status, taking into account positive and negative effects of such a change. There is a necessity to improve drug education for adolescent people.

**TITLE: FUTILE TROUBLES OF FUTILE THERAPY? THE PERCEPTION OF THE PROBLEM OF FUTILE THERAPY BY SILESIAN ANESTHESIOLOGISTS.**

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**Introduction:** ICU doctors are often facing a question if their patient still can be cured or the therapy became futile.

**Aim of study:** To investigate attitudes and experience of Silesian anesthesiologists towards futile therapy protocol.

**Material and methods:** E-mail invitation was sent twice to 377 doctors in 02.2017. The study group comprised 39 subjects (20M/19F), including 33 consultants and 6 residents. A 36-item questionnaire was based on the PTaIT guidelines regarding the ineffective maintenance of organ functions.

**Results:** The protocol was known by 35/39 responders, among which 23/35 implemented it in the past. 22 people participated in the decision-making process as part of a team. Decision about deploying the protocol was made taking into account other specialists' (17/23) or nurses' (14/23) opinions. Respondents believed that deploying the protocol should be guided by ethical (25/39), social (14/39) and religious (2/39) beliefs. 32/36 decided that there is no time standards when therapy begins futile. 35/36 persons declared that the protocol was useful, although 20/36 suggested that current document was insufficient in regulating legal aspects of futile therapy and should be included on a higher level of legislation. Doctors prolonged therapy, being aware it was futile, due to fear of legal consequences (20/35) or family will (12/35). 29% respondents claimed that once implemented protocol cannot be withdrawn.

**Conclusions:** The protocol is as an important document, but requires important modifications to be commonly accepted and deployed by Silesian anesthesiologists. Those changes include increase in the procedures' transparency and recognition of the guidelines as the act.

**TITLE: OBJECTIVE STRUCTURED CLINICAL EVALUATION AS AN ASSESSMENT METHOD FOR UNDERGRADUATE PHYSICAL THERAPY STUDENTS.**

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**Introduction:** Physical Therapy education programs employ a variety of forms of clinical skill assessments through different teaching strategies and evaluation methods. The Objective Structured Clinical Examinations (OSCEs) have been considered a reliable method for the evaluation of students clinical skills in health sciences, but it have been rarely applied in the teaching of physical therapy. OSCE evaluation methods vary broadly across programs, and in general remain underused. Some institutions have incorporated the OSCE method into their physiotherapy curricula, however many Polish educational facilities providing a physiotherapy degree program do not include any OSCE assessment method.

**Aim of study:** The main aim of the research was to assess the use of the OSCE as a tool to evaluate the abilities to perform basic clinical skills of undergraduate physical therapy students.

**Material and methods:** In this study 53 students from department of physiotherapy of the Medical University of Lublin were enrolled. Students were part of the Physical Therapy Basic Clinical Skills course based on high-fidelity medical simulation methods. In each student group we conducted four high-fidelity simulation scenarios. In each scenario students must apply basic clinical skills from the scope of procedures practiced in the first part of the course. In the OSCE evaluation we utilized standardized checklists which were designed so that a student receives marks for successfully performing the task related to the item on the checklist in each selected clinical skill procedure. To determine the usefulness, and students approach to the simulation techniques and OSCE examination on different levels such as knowledge, skill performance, learning satisfaction, critical thinking, and self-confidence, we conducted an anonymous questionnaire before and after classes and analyzed the OSCE exam results. The data obtained was analyzed by Wilcoxon test.

**Results:**

**Conclusions:** The spectrum of simulated learning is diverse and directly applicable to physiotherapy learning and teaching strategies. Simulation techniques can provide a controlled, secure learning environment and are able to increase student clinical skills. Our results indicate that OSCE exams can be successfully used in physiotherapy education programs. The OSCE exam had good internal consistency and is able to evaluate aspects that the traditional exam fails to evaluate.

**TITLE: CONSCIOUSNESS OF THE CONSEQUENCES OF SMOKING CIGARETTES AND THE PREVALENCE OF CIGARETTE SMOKING AMONG MEDICAL STUDENTS.**

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**Introduction:** Cigarettes are composed of many carcinogens, especially nicotine, and are therefore a risk factor for many cancers. Cigarette smoking results in the development of COPD as well as many cardiovascular and vascular diseases, like coronary heart disease or stroke. Among the billions of smokers in the world are doctors, medical students, people who realize the importance of complications of this addiction.

**The aim of study** is to show how many students of Medical Universities are addicted to tobacco.

**Material and methods:** The method was anonymous questionnaire, which contained 28 original questions and was published on the Internet.

**Results:** In the survey took part 1739 respondents from all Medical Universities in Poland and from different fields of study and various years of studies. 79% of respondents were women and 21% were men. 96.6% of the students who participated in the survey were aged 18-30. 404 women said that they are smoking cigarettes (23.23%), while 963 women said they did not smoke (55.37%). 154 men answered yes to the question: "Are you currently smoking cigarettes?", which is 8.86% and the remaining 218 men said they did not smoke (12.54%). Total of both sexes smoking participants of survey were 32.09% and not smoking were 67.91%. The largest group was people smoking cigarettes from 2 to 5 years (44.82%, so 264 people), then 38.54% of smokers were smoking over 5 years (227 people). 50.8% have started smoking in high school, 20.9% have started smoking during studies, mostly during first year of studies. 43,7% (298 people) of respondents have started smoking because of increased stress. 73.1%(1272) said that medical studies have increased their awareness of the complications of smoking cigarettes. 99.5% of respondents knew what complications of addiction to cigarettes are. 76.95% of respondents have never quitted smoking (611 people); 18.89% have quitted smoking (150 people), while 4.16%, or 33 people, despite the attempts failed to stop smoking. 16.8% of respondents said that they are aware of complications of smoking, but they do not want to quit it, because they like to smoke with friends and 9% of respondents said they are not afraid of those complications.

**Conclusions:** One third of medical students are smoking cigarettes, instead of being aware of complications of that addiction. Students are smoking mostly because of two reasons – stress among studies and because it is the way of spending time with friends.

**TITLE: RELATIONSHIP BETWEEN PM2,5 ,PM10 CONCENTRATION AND LUNG CANCER MORBIDITY IN PODKARPACIE VOIVODESHIP COMPARED TO WHOLE POLAND'S POPULATION.**

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**Introduction:** According to WHO, clean air is considered as one of the basic criterion influencing human health. Concentration of particulate matters(PM2.5 and PM10)is one of the parameters determining the purity of the air. Elevated concentrations of PMs may be among factors leading to the development of lung cancer The aim of study is to show how many students of Medical Universities are addicted to tobacco.

**Material and methods:** The aim of the study was to find out relationship between air pollution(measured with PM2,5 and PM10 concentration)and lung cancer morbidity and show possible differences among Poland's and Podkarpackie voivodeship population

**Results:** In 2011-2015 concetration of PM2.5 and PM10 had decreasing tendency both in Podkarpackie voivodeship and Poland's average. The morbidity of lung cancer in the analyzed period increased both in Podkarpackie voivodeship and Poland's populations. Podkarpackie Voivodeship:

Lung cancer morbidity(ICD10:C33+C34):2011-890;2012-994;2013-941;2014-968

PM2,5µg/m<sup>3</sup>:2011-37,2;2012-32,7;2013-24,4;2014-24,7;2015-26,5 PM10µg/m<sup>3</sup>:2011-

48,5;2012-39,2;2013-27,9;2014-31;2015-31,2 Poland:C33+C34:2011-20837;2012-

21870;2013-21556;2014-22032 PM2,5µg/m<sup>3</sup>:2011-31,7;2012-27,9;2013-26,5;2014-

26,3;2015-24,5 PM10µg/m<sup>3</sup>:2011-36,7;2012-34;2013-32,1;2014-34,5;2015-32,9

WHO Guideline:PM2,5-10;PM10-20(µg/m<sup>3</sup> annual mean)

**Conclusions:** Level of pollution in Podkarpackie voivodeship is surprisingly similar to the national average. This finding seems to be odd considering lack of heavy industry and large urban agglomerations. Explanation of this fact may be close located Lvov-volyn industrial district or poor aeration of assessed areas.