

## РЕЗЮМЕТА НА НАУЧНИТЕ ТРУДОВЕ

на старши преподавател Павлина Тенева, доз  
представени в конкурс за заемане на академична длъжност „Доцент“ по  
„Управление на здравните грижи“ в област на висше образование 7.  
Здравеопазване и спорт, професионално направление 7.4 обявен в  
ДВ бр. 26/21.03.2023г.

1. *Hristova, P., Tolekova, A., Teneva, P., Platikanova, M., Milkov, M., & Kalfin, R., 2022 HORMONAL ASPECTS OF SLEEP REGULATION., Journal of Hygienic Engineering and Design, UDC 612.821.7.018, ISSN: 18578489 , <http://www.scopus.com/inward/record.url?eid=2s2.085129351615&partnerID=MN8TOARS>*

**Abstract:** The good quality of sleep is known to be strongly related with life quality and mental and physical health. Sleep regulation results from very complex interplay between many neural and humoral factors. The purpose of our study is to classify some main systems of hormones, that influence sleep. A key player in sleep regulation is melatonin. At night there is a peak of melatonin secretion in both dark and light active species. It is referred to as a substance that keeps “dark appropriate” behavior. It is related with sleep promotion and it may help in sleep disorders. Other very important systems include two different hypothalamic-pituitary axes with reciprocal interactions - hypothalamic-pituitary-somatotropic (HPS) and hypothalamic-pituitary-adrenocortical (HPA) systems. The final effect on the sleep regulation depends on the ratio between growth hormone-releasing hormone (GHRH) and corticotropin-releasing hormone (CRH). The change in GHRH : CRH in favor of CRH has a role in the sleep-endocrine alterations during depression and aging. Enhanced activity of the hormones of HPA-system is thought to contribute to the downregulated melatonin levels and higher leptin levels in depression. Also, melatonin levels get lower after repetitive administration of CRH (the HPA - system inhibits melatonin effects). In literature there are very interesting data about separate regulation of the two type of sleep - slow wave sleep (SWS) and rapid eye movement sleep (REMS). GHRH promotes NREMS (in males) and CRH has the opposite effect - it promotes wakefulness. Some studies suggest that CRH promotes REMS. Also, it is suggested that GHRH has a role sleep promotion after sleep deprivation (SD). There are other neuropeptides (except those produced by the HSA and HSP systems) that have an effect on sleep regulation - galanin and neuropeptide Y that stimulate SWS. Steroid hormones also participate in sleep regulation. The main one is cortisol. It promotes SWS and supresses REMS in humans. We can conclude that there are tree main systems in sleep regulation - melatonin and HPS and HPA system, acting reciprocally and some other accompanying hormones, making a link between them or acting in concert with them to enhance or decrease their effects.

**Key words:** Slow wave sleep, Rapid eye movement sleep, Hypothalamic-pituitary axes, Growth hormone-releasing hormone, Corticotrophin-releasing hormone, Melatonin.

2. *Teneva, P., & Tancheva, P. (2019). LEADING ROLE OF CLINICAL PRACTICE FOR THE FORMING OF PROFESSIONAL SKILLS IN MEDICAL LABORATORY ASSISTANTS. KNOWLEDGE-International Journal, 30(4), 953-958.*

**Abstract:** Medical laboratory assistants are among the most needed medical specialists who provide the health care necessary for the prevention, diagnosis, treatment, rehabilitation and restoration of public health. Student preparation is in line with European and national standards, the latest advances in science and information technology, and the needs of business. An essential factor for the formation of professional competences in the training of medical technicians is practical training, which is just over half of the total hours of study in the specialty curriculum. The improvement of the professional qualities and competencies of the students is carried out in a real working environment in the clinical practice facilities. The awareness that medical technicians are active participants in the process of diagnostic and healing activity motivates students to develop autonomy, creative thinking in modern conditions. Forms and builds a new professional model for the healthcare professional to compete on the national and international markets. The elements in the practical training are related to the knowledge of the theoretical foundations of the basic clinical disciplines, as well as the automatization and the modernization in the laboratory tests. Apply new approaches to performing laboratory analyzes and interpreting them in the light of pathological changes occurring in a number of diseases. Purpose: The aim of the present study is to establish the opinion of the students of the second and the third specialty "Medical laboratory assistants" on the place and the role of the practical training, to build lasting practical skills and habits for the exercise of their professional duties. Materials and Methods: A statistical survey was conducted among 45 students from the second and third year specialty "Medical laboratory assistant" by Medical College -Stara Zagora at the Trakia University with a method applied -a direct group survey. The principles of voluntariness and anonymity are strictly observed. Mathematical and statistical methods are used to process the data, enabling a real evaluation of the data obtained. The results show that over 50% of respondents give a good and very good assessment of the organization of the practical training. Participants in the survey evaluate the clinical bases they visit as "very good", 94% of them are satisfied with the attitude of the working staff in them. Among the respondents from the second course students there are answers that they are only included in the activity of the laboratory, while in the case of the third-year students the majority indicate an answer "to be active". Approximately 90% of survey respondents have identified learning practice as useful and believe that it would help them in their future specialization. The majority of respondents state that the hours provided for clinical practice are sufficient, but more practical activities are required during the course.

**Keywords:** medical laboratory assistant, practical training, professional skills

3. *Dobreva, I., Teneva, P., & Trencheva, V. (2019). INFLUENCE OF SUNSHINE ON THE SERUM LEVELS OF VITAMIN D. KNOWLEDGE-International Journal, 31(4), 1081-1085.*

**Abstract:** Vitamin D-anti-rheumatic vitamin -directly related to calcium and phosphate metabolism and bone formation. In recent years, it has been proven to be much more important because it also has an impact on cells of the immune system, heart, endocrine and muscle cells. Vitamin deficiency also involves mental illness such as depression and schizophrenia. For the synthesis of enough vitamin D it is necessary to have a daily, all year round direct exposure to

direct sunlight for at least 20-30 minutes a day. The geographic location of Republic of Bulgaria provides the average annual sunshine duration around 2150 hours and it is about 49% of the maximum possible sunshine. However, the majority (58.33%) of the study participants had a "deficiency" in serum levels of vitamin D, and there is also a large percentage of those who are less often outdoors.

**Keywords:** vitamin D, sunshine

4. *Dobrev, I., Teneva, P., & Bojkova, T. (2019). INCREASED MEASLES MORBIDITY AND PUBLIC AWARENESS OF THE RISKS OF REFUSING IMMUNIZATION FOR THIS DISEASE. KNOWLEDGE-International Journal, 31(4), 981-984.*

**Abstract:** WHO warns of global revival of measles. In the Ministry of Health in Bulgaria have been reported and confirmed 223 cases of measles by 03.04.2019. Measles is an acute infectious disease characterized by common intoxication, inflammation of the upper respiratory tract mucosa, specific maculopapular rash on the skin and respiratory complications. The causative agent of measles belongs to Paramyxoviridae family, Paramyxovirus genera. Live vaccines are most widely used for active prophylaxis, derived from attenuated measles virus. In Bulgaria, it is given to children aged 13 months and reimmunization at 12 years of age. The vaccine is also used in combination with a mumps and rubella vaccine. Vaccinated individuals acquire lifetime immunity. Mass administration of the vaccine leads to a reduction in measles morbidity to single cases. Despite the increase in measles prevalence and morbidity, young people are unaware of this disease and the possible complications after illness. There is a positive attitude to vaccines, despite growing global anti-vaccination.

**Keywords:** measles, morbidity, epidemic, vaccines

5. *Teneva, P., Mollova, K., & Milcheva, H. (2018). STUDENT ASSESSMENT OF THE QUALITY OF TRAINING IN MEDICAL COLLEGE STARA ZAGORA. KNOWLEDGE-International Journal, 23(2), 685-690.*

**Abstract:** The issue of quality of education in health care is particularly relevant in the context of ongoing healthcare reforms. The new realities and needs in the rapidly developing medical science and practice, and in the context of health reform, continually increase the requirements for the training of these specialists. The main goal of Medical College - Stara Zagora, which is training students on "regulated specialties" is the application and control of procedures and mechanisms for ensuring and maintaining quality professional training. Student assessment of the quality of training and the organization of the learning process is a complex pedagogical phenomenon and useful feedback in the training process. Objective: To study the students' opinion as part of the learning process concerning the quality of education at Medical College. Taking corrective actions that will lead to increasing the competency and build lasting practical skills and habits for students to pursue their professional duties. Materials and Methods: The study covered 80 students of the second and third course of specialty Rehabilitation therapist and Medical laboratory assistant during 2017/2018 academic year, polled by direct anonymous survey. The results show that the majority of the students gave a very good assessment of the training and the conditions at the college. The majority of respondents approve of the contemporary interactive methods of visualization and teaching used and believe that the existing library fund is up-to-date. Practical training is one of the main highlights of the study.

The share of respondents, which give an excellent assessment of the organization and the conduct of practical training is high.

**Keywords:** training, quality, assessment, students, health care

6. *Yordanova, R., Teneva, P., & Dobрева, I. (2018). STUDY AWARENESS OF THE OPINION OF THE STARA ZAGORA CITY POPULATION ABOUT THE USE OF ANTIBIOTICS AND THEIR RESISTANCE. KNOWLEDGE-International Journal, 23(2), 691-695.*

**Abstract:** Introduction: Resistance to antibiotics is one of the greatest threats to global health today. The consequences of it can affect everyone, regardless of gender, age and nationality. The number of increasingly difficult to treat bacterial infections is increasing as antibiotics used for treatment lose their effectiveness against their causative agents. Antibiotic resistance leads to a longer hospital stay, higher costs of medical care and increased lethality. It occurs naturally, but the excessive use of antibiotics in humans, animals and agriculture accelerate the process. The purpose of this study is to provide information on the awareness of the population in Stara Zagora city about the use of antibiotics, the diseases that can be treated with antibiotics and the antibiotic resistance. Materials and methods: analysis of questionnaires consisting of 10 questions formulated in order to obtain a clear and objective view of the current awareness of the population of Stara Zagora city about the use of antibiotics and the knowledge of concepts such as "antibiotic resistance", "drug resistance", "superbugs". Results and discussion: On the basis of the results obtained and the conclusions drawn, recommendations can be formulated to conduct awareness-raising campaigns about the understanding of antibiotic resistance among the population, to take steps at all levels of society to limit and control the spread of antibiotic resistance.

**Keywords:** antibiotic use, antibiotic resistance, awareness

7. *Teneva, P., Dobрева, I., & Sherletova, R. (2018). PRACTICAL TRAINING OF MEDICAL LABORATORY ASSISTANT IN MEDICAL COLLEGE FOR FUTURE PROFESSIONAL REALIZATION. KNOWLEDGE-International Journal, 22(5), 1309-1313.*

**Abstract:** Practical training of students in medical colleges has a number of specific features and advantages, the use of which leads to the creating important professional skills and techniques. Through their practical work, students have to gradually, consistently and accessible to form professional skills and customs, engagement with the profession and responsibility for human health. The profession of "medical laboratory assistant" is practical and the acquisition of general and special skills is a guarantee for the quality of the professional training of the students. The modern training of medical laboratory assistant involves mandatory acquisition of a number of practical activities, basic skills for work in various diagnostic laboratories in the healthcare system and basic social competencies. This is done through practical training sessions, teaching practice and pre-graduate practice. Improving the professional qualities and competencies of the students takes place in a real working environment in the practical institutions.

**Keywords:** medical laboratory assistant, practical training, professional skills

8. *Teneva, P., Mollova, K., & Milcheva, H. (2018). MOTIVATION AND SATISFACTION OF THE TRAINING OF STUDENTS OF PROFESSIONAL DIRECTION HEALTH CARE. KNOWLEDGE-International Journal, 26(4), 1091-1096.*

**Abstract:** Training in the sphere of health care is a particularly pressing issue in the context of ongoing healthcare reforms and puts new requirements on education institutions. Student satisfaction with the learning process is an important indicator that influences the expectations and perceptions of students. The degree of satisfaction depends on a number of factors. It is influenced by preliminary attitudes, the methods and approaches by which they are trained, as well as the application of theoretical knowledge obtained in practice. Once measured, it serves as an indicator of future sustainable development and has a significant impact on both student success during the course and the improvement of teaching practice. The purpose of this report is to investigate the motivation for training students from the professional field of Health Care at Trakia University and to establish the level of satisfaction with the methods, tools and approaches of teaching. Materials and methods. The comments and analyzes are from a freely structured anonymous questionnaire, held among the 148 students of the first, second and third year specialty "Rehabilitator", "Medical laboratory assistant", "Geriatric specialist" and "Nurse" during the summer semester of the school year 2017/18. MSExcel and StatGrafics were used to process the data. The results indicate that one of the leading motivational factors in choosing a specialty for training in the professional field of Health Care for a large part of the students is "the ability to help people". Student satisfaction in learning is determined by a number of elements. The majority of respondents are fully satisfied with applied teaching methods and approaches and prefer the lectures of the theoretical material most often, and for practical training the most preferred method is to work with mock - ups and mock - ups. As the most important qualities that the teacher has to have and apply to the training according to the students are his competence and his attitude towards them.

**Keywords:** Motivation, Satisfaction, Education, Health Care

9. *Milcheva, H., Mollova, K., & Teneva, P. (2018). STUDENTS' OPPINION ON THEIR ROLE IN PUBLIC HEALTH AND THE PREVENTION OF RISK FACTORS. Trakia Journal of Sciences, 16(1), 241-246.*

**Abstract:** The adopted National Concept "Health Objectives 2014-2020" sets out the main public health priorities that are aimed at improving the health of the population, including vulnerable groups exposed to risk factors. The most recent publications of our authors (V. Borisov, T. Vodenicharov, 2017) address key issues in public health and offer innovative approaches and strategies to actively involve the responsible institutions in the implementation of modern health policy. They determine the risk factor as "such a sign or element of a person's living environment (climate, season, residence, diet, stress, harmful habits, etc.) that creates a probable chance of one or another disease occurring. The scientific literature describes the following behavioral risk factors: Smoking; Alcoholism; Drug addictions; Motor inactivation; Irrational eating; Stress; Risky sexual behavior; Drug dependence. Under Bulgarian law, health professionals have the right to work independently or in a team and to carry out the preventive activities, the regulations for which are published by Ordinance 1 of 2011. The aim of this report is to present the opinion of modern health professionals (rehabilitation students and medical laboratory assistants) about their competences and autonomous role in public health and on the prevention of behavioral risk factors. Material and methods: survey studies, analysis of educational and normative documentation, review of scientific literature. Results and Discussion: Analyzes of the conducted studies show that future healthcare professionals are aware of behavioral risk factors and have competence to carry out a range of activities (on prescription, team and self) focused on curative, prophylactic, promotional and rehabilitation care and events for the

patient, regulated by Legislative 1 Professional Activities from 2011. A high proportion of those surveyed determined stress as the most hazardous daily risk factor. Researchers offer different strategies with more than 2 stress-management activities. More than half of them are clearly aware of their role in public health. Conclusions and conclusion. Healthcare professionals are a major resource for the implementation of preventive activities in the field of public health. In the current conditions, the emergence of integrated professional fields requires improvement of health promotion competencies in areas such as health tourism, management, care for the elderly and others.

**Key words:** health, risk factors, competencies, prevention, role

10. *Yordanova, R., & Teneva, P. (2018). OPINION OF THE STUDENTS OF THE MEDICAL COLLEGE, THE OLD TOWN OF ZAGORA FOR THE WIDE USE OF ANTIBIOTICS. KNOWLEDGE-International Journal, 26(4), 1039-1043.*

**Abstract:** Antibiotics are at risk of losing their effectiveness due to incorrect and excessive use. Their rational use can prevent the emergence and selection of resistant bacteria. Resistance to antibiotics is one of the greatest threats to global health today. The consequences of it can affect everyone, regardless of gender and age. Antibiotic resistance results in longer hospital stays, higher medical expenses and increased lethality. It occurs naturally, but the excessive and free use of antibiotics in humans, animals and agriculture speeds up the process. The purpose of this survey is to provide information about the attitude of students from Medical College, Stara Zagora, regarding the wide use of antibiotics and the consequences of their excessive use. Materials and methods An anonymous questionnaire was done among 50 students first, second and third educational years specialty "Medical Laboratory Assistant" at Medical College, Stara Zagora during the winter semester of the educational year 2017/2018. Statistical and graphical analysis were used to process the data. Results and discussion This study could help prepare the students from specialty "Medical Laboratory Assistant" in order to update their curricula. The results of this study show that there is still much to be done, although students understand to a certain extent the problem and the way they can change their behavior.

**Keywords:** antibiotic use, antibiotic resistance

11. *Mollova K., H. Milcheva, P. Teneva, The Application of the Interactive Methods in Practical Training of Students of Medical College, (2017) Сборник с доклади XII Международен балкански образователен и научен конгрес „Образование за живота, професионалната реализация и благополучието“, online ISSN 2535-1125, Indexing in international databases Scientific Indexing Services (SIS), pp. 441-449*

**Abstract:** In the last decade, the use of interactive methods has been widely used in the higher education system. They form a global resource of facts, opinions and conclusions in the learning environment that involves many individuals. The application of interactive methods leads to the creation of an interactive educational space that requires partnership relationships, creates a dialogue type of communication and helps to overcome phenomena such as the incomprehensibility of the learning idea or the mechanical memorization of the material, the ambiguity in its essence, and subsequently its poor practical application. The purpose of the present study is to study the opinion of the students of the Medical college Stara Zagora, about the influence of the interactive methods and tools used in the practical and practical lessons and the degree of acquisition of new knowledge and skills to be successfully applied in clinical

practice. Material and Methods: The study was conducted among 70 students by specialists "Rehabilitation therapist" and "Medical Laboratory assistant", in 2016/17 at Medical college Stara Zagora. Data from the anonymous survey was processed by mathematical and graphical methods. Results and Discussion: Students express their preference for the different interactive methods and tools used in their training during the practical and practical sessions that support the learning content and facilitate the transition from theory to practice. Conclusion: The application of the interactive methods in the students' practical and practical classes has the important property to create conditions of motivation and activity. Visualizing the learning content makes students more proactive on the learning tasks. They are actors in the class and everyone can find their active role. They are actors in the class and everyone can find their active role. Moreover, the application of these methods makes it possible to acquire knowledge in a model that meets their style and understanding

**Keywords:** training, theory, practice, interactive methods, motivation, educational and practical occupation.

12. *Teneva, P., Dobрева, I., & Staneva, M. (2017). INTERACTIVE TEACHING METHODS-NECESSITY IN THE PROFESSIONAL TRAINING OF THE" MEDICAL LABORATORY ASSISTANT" AND" REHABILITATION THERAPIST". KNOWLEDGE-International Journal, 19(4), 1761-1764.*

**Abstract:** Modern informative and communication technologies offer universities a wide range of opportunities for visualization and interactivity in the learning process that fully correspond to the perception, thinking and learning characteristic of the digital generation of students. Current research shows unequivocally that interactive tools improve students' academic achievement, motivation, engagement and learning of the scientific content. For medical education, practical training is an important part of the preparation of the students and the formation of their professional appearance. The aim of the present study is to present the most frequently used interactive methods in the professional training of the students of the medical laboratory assistant and rehabilitation therapist students who are studying at Stara Zagora Medical College, and their role in shaping the future professional appearance. Any interactive method may be more effective if presented through appropriate technical, digital tools and technologies. The Medical College has modern information and communication tools for training - multimedia, specialized equipment tailored to the specifics of each specialty, modern mucus and mock-ups, microscopic camera and others. Learning and practical classes provide the opportunity to apply different interactive learning methods that stimulate communication, interaction and collaboration, but also the development of personal qualities, such as tolerance, responsibility to yourself and others. Students learn to think professionally, make the best decisions in a particular situation, and take responsibility. An interactive learning environment complements traditional learning. The application of innovative approaches, methods and forms in the practical training of students contributes to raising the interest, motivation and quality of learning. On the other hand, it also contributes to improving the quality of teaching, as innovative approaches are also a tool for training and management.

**Keywords:** interactive environment, professional training, teaching

13. *Petrova, M., & Teneva, P. (2017). PHYSICAL ACTIVITY-NATURAL NEED FOR ADOLESCENTS. KNOWLEDGE-International Journal, 16(3), 1101-1104.*

**Abstract:** Physical activity of kids and teenagers in Bulgaria is insufficient. Physical activity is one of the main factors for primary health prophylaxis. It counteracts hypodynamia,

which is a risky factor for the occurrence of socially significant diseases. The aim of this review is to raise awareness regarding the provision of conditions for systematic physical activity and sports, contribute to the education of physically strong, healthy and resilient adolescents. There is immobilization of adolescents, both objective and subjective reasons. Hypodynamia compromise the smooth conduct of the processes of growth, maturation and development. This unfavorable situation in health terms contributes to the onset of disease, reduced strength and elasticity of the muscles, forming a motor inactivity, changes in the psycho-emotional sphere, unmotivated fear, tension, anxiety and others. Reasons for this are lack of exercise and lack of systematic quenching procedures combined with poor diet. To overcome the harmful effects of modern civilization on adolescents will have to rely primarily on natural and preformed physical factors. As a result of systematic physical activity achieved positive structural and functional changes in the body. For teenagers it is necessary to provide 1-2 hours of daily outdoor games, walking, hiking, and take place outdoors in the fresh air. Physical activity, healthy eating and healthy sleep are the most important factors in achieving full health. Addiction of adolescents to active physical activity leads to a sense of confidence in our own strength, improves self-esteem and self-awareness leads to a Owned importance and value to society Physical activity is a vital necessity for protecting and enhancing the physical and mental health of adolescents.

**Keywords:** physical activity, adolescents hipodinamiya, natural and preformed factors sport

14. *Teneva, P., Milcheva, H., & Petrova, M. (2017). A BACHELOR TRAINING "MEDICAL LABORATORY ASSISTANT" AND "REHABILITATION THERAPIST" MOTIVATION AND EXPECTATIONS OF STUDENTS. KNOWLEDGE-International Journal, 16(3), 1135-1138.*

**Abstract:** In recent decades specialties "Medical laboratory assistant" and "Rehabilitation therapist" established themselves as traditional and popular majors for the needs of regional and national health. Preparation of students is in line with European and national standards, the latest achievements in science and information technology, and business needs. The prospect of their development is very good, with a view to continuously increasing deficit of health professionals including Medical laboratory assistant and Rehabilitation therapist The purpose of this paper is to explore the views of the students first course for their motivation to study in specialty "Medical laboratory assistant " and "Rehabilitation therapist" to questions about the learning process and future development. Materials and Methods: An opinion poll among students "Medical laboratory assistant " and "Rehabilitation therapist " with direct application method group inquiry, it was observed the principle of voluntary and anonymous. The study covered the first year of the two majors at Medical College of Stara Zagora. Results: From the data it is clear that interest to both disciplines is high, more than half of students have applied at first desire, characteristics that have attracted their attention is a prestigious profession, favorable working conditions, job opportunities abroad. Most of the students studying in "Medical laboratory assistant" and "Rehabilitation therapist" have received information about them mostly from the internet and secondly, as a source of information cited friends and relatives. The main issues you would like to receive additional information refer to the European system of accumulation and transfer of credits in high schools, opportunities for student mobility, inclusion in Student projects and continuing their education in graduate programs. The assessment can be made several complexes conclusion that: • The desire and motivation of students to learn the specialties in the medical college; • Their desire



to realize the specialty after graduation; • The opportunities for continuing education in graduate programs; • ECTS and student mobility;

**Keywords:** medical laboratory assistant, rehabilitation therapist, training, motivation

15. Lokova, R., Teneva, P., & Halacheva, K. (2016). *TRAINING IN CLINICAL IMMUNOLOGY AS A NECESSITY IN BACHELOR CURRICULUM OF MEDICAL LABORATORY ASSISTANT. KNOWLEDGE-International Journal*, 15(1), 349-352.

**Abstract:**In the process of learning, students need to acquire not only knowledge and skills but also to form certain qualities, important for the professional activities. In various diagnostic laboratories, one of which is the Laboratory of Clinical Immunology are created conditions for a proper model and style of work. Work in immunological laboratory requires specific knowledge and practical skills that are acquired through specialized theoretical and practical training of students only in the course of Clinical Immunology. Aims: opinion survey of students in "Medical laboratory" about the need of training in Clinical Immunology. Materials and Methods: An opinion poll among students of specialty "Medical laboratory" with applied method -Direct group inquiry in strict compliance with the principles of voluntary and anonymity. Results: The results show that students appreciate and find the knowledge gained from free electives Clinical Immunology useful, but insufficient because of the short duration of training. The majority of students recommended improving training to increase the number of hours of Clinical Immunology. Conclusions: It is appropriate that the opening of the discussion adjustment of curriculum for the specialty "Medical laboratory" with a view to introduce the discipline immunology in the unified state requirements.

**Keywords:** immunology, curriculum, laboratory technicians

16. Staneva, M., Teneva, P., Mollova, K., Uzunova, A. (2016) *INTERACTIVE ENVIRONMENT IN EDUCATIONAL - WORKSHOPS – A PREREQUISITE FOR THE INCREASING COGNITIVE ACTIVITY OF STUDENTS, Knowledge International Journal*, 15(3), 1295 - 1298.

**Abstract:** The application of innovative approaches, methods and forms in educational practice session at training students to help shaping the interactive educational environment. This in turn helps to activate the creative thinking and motivation for learning. Practical training formed the professional appearance of future medical professionals. Students have an active part in academic activities during training and practical training. Their activity provoke increases and develops into a conditional created a real environment. They learn to think critically and develop communication skills. Practical- Educational sessions provide an opportunity for the implementation of various interactive teaching methods that stimulate communication, interaction and cooperation, but also the development of personal qualities such as tolerance, responsibility to themselves and others. Interactive educational environment complements traditional training. Implementation of innovative approaches, methods and forms in the practical training of students contributes to increased interest, motivation and quality of learning. On the other hand contributes to increasing the quality of teaching as innovative approaches and means of training and management. The purpose of this work is to investigate the students' opinion on the application of innovative methods in practical training through which ensure conditions for approval of an interactive learning environment to enhance the cognitive activity of students. Conclusion: The application of interactive teaching methods in Medical College may be regarded as an aspect of innovation teaching in the professional

training of future specialists. Educational and practical occupation is a friendly interactive environment for the formation of professional competence of students in the course of their studies.

**Keywords:** innovative approaches, educational and practical training, interactive learning environment, student

17. *Кичукова, К., Славова, В., Иванов, В., Славов, С., Тенева, П., (2016) ПРОУЧВАНЕ НА ОСНОВНИ АСПЕКТИ В ОТНОШЕНИЕТО НА СТУДЕНТИ ОТ ТРАКИЙСКИ УНИВЕРСИТЕТ КЪМ НАРКОТИЧНИ ВЕЩЕСТВА Юбилейна научна конференция „ 10 години специалност Медицински лаборант в Медицински колеж Стара Загора“ с международно участие ISBN 978-954-305-372-8*

**Abstract:** Globality of the problem of inappropriate use of drugs is confirmed by a number of European institutions. According to Eurobarometer surveys from 2014, experimenting with drugs often begins at school. Drug use now covers a wider range of substances than in the past, and the combined acceptance of several types of substances is common among drug users. The easiest way to access drugs is Internet marketing, providing anonymity and safety of participants . The aim of the study was to determine the attitude of students of medical specialties to drug use and ways of distribution. Materials and Methods: An anonymous survey among 107 students from different medical specialties in the Faculty of Medicine and Medical College - Stara Zagora. The statistical processing was carried out using a statistical analysis package SPSS Analysis and discussion: it's been studied the opinion of students of the main sources of information about drugs, how many people among them are there who have used or use drugs. It was also found what are the most commonly used drugs, the main places where they come from and which key groups of people. There are also major psychosocial aspects of taking drugs, according to respondents.

**Keywords:** drugs, psychoactive substances

18. *Кичукова, К., Тенева П. (2016) ПРОУЧВАНЕ МНЕНИЕТО НА РАБОТОДАТЕЛИ ЗА ОСНОВНИ УМЕНИЯ И КОМПЕТЕНТНОСТИ НА ЗАВЪРШИЛИ В МЕДИЦИНСКИ КОЛЕЖ – СТАРА ЗАГОРА МЕДИЦИНСКИ ЛАБОРАНТИ Юбилейна научна конференция „ 10 години специалност Медицински лаборант в Медицински колеж Стара Загора“ с международно участие ISBN 978-954-305-372-8*

**Abstract:** The working team of the specialty “medical laboratory assistant“ is making regular surveys among the users of footage , whose opinions, in a certain extent, serve as a corrective in their job, because the aims of the preparation of the students are not limited to their education for working with laboratory facilities and following specific procedures. Their wide-rofiled program aims their preparation for fast and adequately entry into actual practice and successful career. AIM: To investigate the views of the users of staff in medical laboratories, in which have started work graduates from Medical College Stara Zagora in specialty "Medical laboratory" for the past four years. Materials and methods: A study has been conducted among employers from different cities in the country and have been handled their opinions to 62.3% graduates from Medical College - Stara Zagora and have started work medical laboratory. The Statistical processing of empirical data was performed using the package for statistical analysis, intended for research in the social sciences SPSS. Analysis and discussion: All of the following: practical training, skills, team work,

communication with patients of the graduates from the Medical College of Stara Zagora, are assessed really good from all the employers and line managers.

**Keywords:** medical technicians, users of staff training

19. Монева Д., Д. Петров, П. Тенева, К. Кичукова, И. Младенова-Христова *ПРОУЧВАНЕ НА ИНФОРМИРАНОСТА НА СТУДЕНТИ ОТ МЕДИЦИНСКИ КОЛЕЖ СТАРА ЗАГОРА ОТНОСНО ВАКСИНАТА СРЕЩУ ЧОВЕШКИ ПАПИЛОМА ВИРУС (HPV), (2015) стр84 Четвърта научна сесия за преподаватели и студенти Медицински университет «Проф. д-р. Параскев Стоянов» - Варна Медицински, Варненски медицински форум, том I*

**Abstract:** HPV is associated with cervical, vulvar, and vaginal cancer in females, penile cancer in males, and anal cancer and oropharyngeal cancer in both females and males. HPV vaccine is recommended for routine vaccination at age 11 or 12 years. Advisory Committee on Immunization Practices in USA (ACIP) also recommend vaccination for females aged 13 through 26 years and males aged 13 through 21 years who have not been vaccinated previously. The American Society of Clinical Oncology has recently determined HPV vaccines for preventing cervical cancer as one of the five top advances in modern oncology. The aim of this descriptive Varna Medical Forum, Volume 4, 2015, Supplement 2 MU-Varna 85 study is to investigate the awareness of students from the Medical College- Stara Zagora of the vaccine against Human papillomavirus (HPV). A questionnaire (26 questions) was completed by 69 students from the Medical College- Stara Zagora. 91.3% of men and 8.7% women participated in the *study*. The question: "Are you aware of the existence of the Human papillomavirus" 66.7% of respondents answered in the affirmative, 26.4% - in the negative; 56.2% were aware of the diseases that the HPV causes (the majority of students (47.83%) through the Internet and other media), and 15.94% - were not informed. According to the distribution of the answers to the questions about sexually transmitted diseases- 75.36% have not been tested on this occasion, and 8.7% - have already been treated by some of these diseases.

**Keywords:** Human papillomavirus (HPV), vaccines, cervical cancer, awareness

20. Савакова Р., Тенева, П., И. Попов, И. Добрева *НАСЛЕДСТВЕНИ ХЕМОЛИТИЧНИ АНЕМИИ – ТАЛАСЕМИИ (2014) Юбилейна конференция 20 години специалност „Рехабилитатор“ Тр.У Медицински колеж – Стара Загора Сборник доклади стр. 247*

**Abstract:** Shortened survival of red blood cells (haemolysis syndrome) due to in-erythrocyte defect that is often heritable or external erythrocyte effects that are generally acquired. Hemolytic anemia are the largest and most diverse group of anemia. Among the hemolytic anemias due to a disorder in the synthesis of hemoglobin, most important are the thalassemia syndromes. These are genetically determined heritable diseases caused by abnormalities in the synthesis of the polypeptide chains. Quantitative changes occur in the ratio between different subunits in the hemoglobin molecule. The normal hemoglobin A is a heterogeneous compound built it three main ingredients - hemoglobin A1 ( $\alpha_2, \beta_2$ ) - 96-98%, hemoglobin A2 ( $\alpha_2, \delta_2$ ) - 2-4% and hemoglobin F ( $\alpha_2, \gamma_2$ ) -1-2%. In thalassemia these quantitative ratios are impaired. In  $\beta$  - Thalassemia major there is presence of Hb F and absence of Hb A, presence of target erythrocytes, bazofilnopunktirani erythrocytes, anizomikrotsitoza with hypochromic. In  $\beta$  - Thalassemia minor-sadarzhanietona is increased Hb F and Hb A2, there is hypochromic microcytic anemia, poikilocytosis, basophilic stippled erythrocytes and a small percentage of

target erythrocytes. In  $\beta$  - Thalassaemia minima - increased Hb A2. In  $\alpha$  - Thalassaemia - reduced synthesis of  $\alpha$  chain. Homozygous form is incompatible with life.

**Keywords:** hemolytic anemia, thalassemia, hemoglobin, red blood cells.

21. *Teneva, P., Katya Kichukova, Ivelina Dobрева, Tanya Tacheva, Mariya Yakovlieva, Stanisava Mihaylova, Rositsa Tropcheva, Ana Tolekova, Svetla Danova, Tatyana Vlaykova, (2013), LIPID PROFILE OF RATS AFTER DIET ENRICHED WITH FRUCTOSE AND POTENTIAL PROBIOTIC STRAINS OF THE GENUS LACTOBACILLUS) Science & Technologies, Volume III, Number 1, Medicine p.326-331*

**Abstract:** It has been well documented that gastrointestinal microflora is capable of prominent effect on the absorption, metabolism and storage of nutrients. An important approach for modulating the contents and activity of gut microflora is the admission of probiotics. There are several studies describing the positive influence of probiotic strains belonging to different genera and species to the serum glucose level and lipid profile in experimental animals and disease models and in human. In this respect the aim of the current study was to explore the effect of two new potential probiotic strains of the genus *Lactobacillus* (*Lactobacillus brevis* 15 and *Lactobacillus plantarum* 13) on the lipid profile in rats on short-time fructose-rich diet. We performed an experiment for 8 weeks with 28 two months old Wistar rats which were assigned randomly to receive standard diet (Control group), fructose-rich diet (Fructose group), standard diet with probiotics 2 times per week (Probiotic group) and fructose-rich diet with probiotics 2 times per week (Probiotics+fructose group). Results: The new potential probiotic strains at the applied doses were very well tolerated by the experimental animals independently on the diet regimen. At the end of the experimental period (at the 9th week) we found that animals on fructose + probiotics diet had the highest levels of TAG compared to all other three groups ( $p < 0.05$ ), followed by those on fructose diet. The animals of control and probiotics groups had commensurable levels of TAG. At the 9th week the total cholesterol and HDL-cholesterol of all experimental groups were significantly higher than those of the controls, although none of the values had exceeded the referent levels. Conclusions: Based on the results of our current study we may suggest that strains *Lactobacillus brevis* 15 and *Lactobacillus plantarum* 13 after 8-weeks administration at the particular doses two-times per week are very well tolerated and had some effect on the lipid metabolism. However the results of the current experimental conditions do not provide convincing evidence for beneficial effect of those strains on the lipid profile, possibly due to the relatively short period of the experiment and the rare admission of the probiotics

22. *Джасунова, К., Вуцов, К., Добрева, И., Кичукова, К., Тенева, П. (2013): КЛИНИЧНО-ЛАБОРАТОРНИ МАРКЕРИ ПРИ МИОКАРДНО УВРЕЖДАНЕ – СК, СК-МВ, И ТРОПОНИН. Втора научна сесия за преподаватели и студенти МЕДИЦИНСКИ УНИВЕРСИТЕТ «ПРОФ. Д-Р. ПАРАСКЕВ СТОЯНОВ» - ВАРНА МЕДИЦИНСКИ КОЛЕЖ, Варненски медицински форум том 2, 2013, приложение 3 с. 45-47.*

**Abstract:** Ischemic heart disease (IHD) is considered one of the leading causes of death worldwide. It develops when blood cholesterol molecules begin to accumulate on the walls of arteries providing blood to the heart and to form the so-called plaques. They narrow or obturate one or more coronary arteries and can block blood flow. This leads to a reduction of oxygen

supplied in the blood to the heart. Risk factors leading to this condition are arterial hypertension, variation in lipid metabolism, smoking, diabetes mellitus, obesity and hereditary predisposition. This study aims at analyzing the values of troponin, CK and CK-MB in patients with clinical manifestations of acute coronary syndrome in the Specialized Hospital of Cardiology of the town of Yambol, at determining their distribution by gender and age and at assessing the risk factors such as dyslipidemia and tobacco smoking. The scientific literature on the issue was studied. A statistical retrospective study of 39 patients hospitalized in the Specialized Hospital of Cardiology of the town of Yambol was carried out for the period between May 1 and May 31, 2011. The total number of patients hospitalized with IHD was 39 as 26 of them were men and 13 were women. Increased troponin and CK levels in the serum were detected in 62% of the cases at the beginning of the intake and increased enzyme activity of CK-MB - in 72%. When leaving the hospital after the treatment of the patients and stent implantation, the serum levels of troponin, CK and CK-MB show a tendency of decreasing. IHD is a socially significant disease that increasingly affects young people. It can be treated successfully through change in lifestyle, medications and surgical procedures

23. Р., Коева, Тенева, П., И. Добрева, (2013). ЛАБОРАТОРНА ДИАГНОЗА ПРИ ПИЕЛОНЕФРИТ, Втора научна сесия за преподаватели и студенти МЕДИЦИНСКИ УНИВЕРСИТЕТ «ПРОФ. Д-Р. ПАРАСКЕВ СТОЯНОВ» - ВАРНА МЕДИЦИНСКИ КОЛЕЖ. 3-4октомври 2013г. Варненски медицински форум том2, приложение3 с.54-57.

**Abstract:** Pyelonephritis is an infectious-inflammatory disease of the pyelon, small channels and interstitium of the kidney. It is most commonly caused by Gram-negative bacteria inhabiting the colon such as E. coli, Proteus, Klebsiella, Enterobacter, etc. The purpose of this paper is to outline the place of the laboratory examinations in the diagnosis of pyelonephritis. A microbiological examination of urine, routine laboratory blood tests and functional examinations of the kidney are performed. In the presence of a significant bacteriuria one can convincingly speak about infection. An antibiogram is routinely carried out, too. There is leukocytosis with increased number of young cells, accelerated erythrocyte sedimentation rate, low-grade proteinuria, leukocyturia, and hypostenuria. The presence of leukocyte cylinders in the urine is an important criterion for renal parenchyma impairment. There is reduced concentration ability of the kidney. The serum concentrations of urea and creatinine are normal, if there are no complications. The diagnosis of pyelonephritis is complex and based on the clinical symptoms, microbiological and clinical-laboratory examinations. A periodic control of urine and urinary cultures should be recommended in the patients with chronic pyelonephritis, pregnant women and in the patients with predisposing factors such as urinary bladder catheter, nephrolithiasis, etc.

**Keywords:** pyelonephritis, infection, laboratory examination

24. Kichukova, K., & Teneva, P. (2010). INNOVATIONS IN THE ORGANIZATION OF THE PRACTICAL TRAINING IN THE SUBJECT "MEDICAL LABORATORY ASSISTANTS". *Trakia Journal of Sciences*, 8(2), 326-330.

**Abstract:** In this article new approaches to the organization of the practical training in the subject "Medical laboratory assistants" are presented. The new allocation of the students into clinical bases for hospital and outpatients treatment in the public and private sector is examined. The work of the students both individually and in small groups expands their opportunities for development of professional competence, individual and team work. The efficiency of the

organization of the practical training both for the students and the medical teams in the laboratories is analyzed. The students' opinion on the quality of the practical training in their principal area is investigated.

**Keywords:** approach, organization, practical training, medical laboratory, assistant, competence, skills, clinical bases, medical teams.

Изготвил: П.Тенева

A handwritten signature in black ink, appearing to be 'P. Teneva', written in a cursive style.