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Conflict of interest:

The authors declare no conflict of interest.

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A – Work concept and design, B – Data collection and analysis, C – Responsibility for statistical analysis, D – Writing the article, E – Critical review, F – Final approval of the article

Received 25.03.2023

Accepted 28.08.2023

DOI 10.29254/2077-4214-2023-3-170-354-358

UDC 613.96:796.015.6

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TEACHING OF PREVENTIVE MEDICINE IN HIGHER MEDICAL EDUCATIONAL INSTITUTIONS OF UKRAINE IN MODERN CONDITIONS

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The integration of Ukraine into the unified global educational space is accompanied by the reform of higher education. At the same time, the priority of the system of higher medical education is the training of competent and qualified specialists in medical universities. In connection with the constant increase in the volume of scientific information, the task of the higher school is to find new methodological techniques that provide each student with deep knowledge, abilities and skills, and reveal to them the ways of realizing individual talents and resources.

The purpose of this work was to justify the system of formation of professional competences during the training of Medicine specialists in higher medical educational institutions.

The system of formation of professional competencies in Preventive Medicine is aimed at logistical management of activities in the training process and ensuring the selectivity of health care management in medicine. The main special competencies include mastering the basic methods of protecting doctors from possible adverse working conditions; mastery of the basic methods of environmental protection; mastery of methods of complex formation of health with the help of pharmaceutical support and nutritional support of the body; ensuring the necessary level of individual safety in the event of the occurrence of typical dangerous situations or based on information about the predicted situation; the ability to carry out sanitary and hygienic and preventive measures. In modern military conditions, mastering the tactics of providing emergency medical aid and the ability to carry out medical and evacuation measures are of great importance.

Key words: professional competences, formation, students, preventive medicine.

Introduction.

The integration of the state into a single world educational space is accompanied by the reform of high school. The essence of it is to bring higher education in different countries to unified standards. At the same time, the priority of the system of higher medical education is to train in medical universities the highly competent and qualified specialists [1]. Due to the constant increase of the number of scientific information, the task of the higher school is to find new methodological techniques that provide each student with deep knowledge, skills and abilities, and reveal before them ways to implement individual tasks and resources.

Modern pedagogical paradigm is based on the formation of professional competencies. According to the modern views, professional competencies are an integral characteristic of the business and personal qualities of specialists in the form of knowledge, skills and ability necessary for effective professional activity [1-5]. The

implementation of a competent approach is associated to stimulate the transformation of the educational process and qualitative changes in educational activity. The training of highly competent people comes to the fore specialists who have good health, high performance, and are able to work for a long time to maintain their professional activity at a high level and with good potential health. The concept of health includes the ability to provide optimal life and to perform general and production functions. At the same time, there is sufficient supply health, high levels of mental and physical capacity are the basis of effective mastery of the system of professional knowledge, skills and abilities during studying at the university. The correct assessment of specialist's activity, is the fundamental provisions of its forming. So, first of all, there is a stereotype of activity, habits, inertia of behavior and attitude to their duties formed in the process of vocational education and at the beginning of the work biography. Miscalculations at this stage of for-

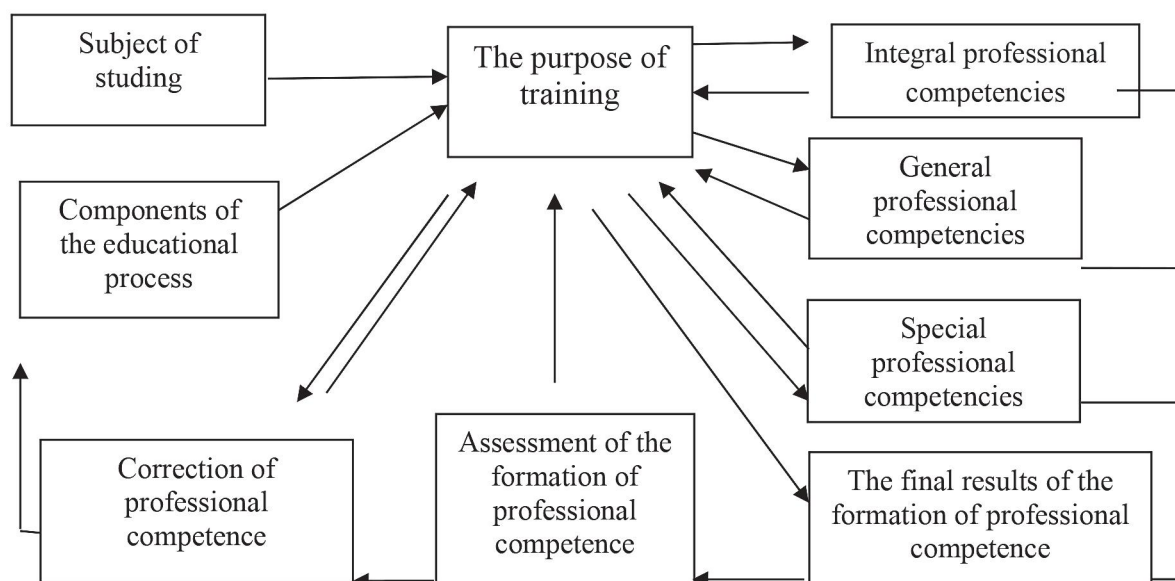


Figure – The system of formation of professional competencies in students.

mation the professional competence and social adaptation can leave your mark on the whole future. In this regard, on the first plan of educating doctors obtained the specialists who wield with new approaches in theory and practice health care, and able to independently solve professional and life problems.

The aim of the study.

To substantiate the approaches to the formation of professional competencies in preventive medicine during the preparation of specialists from Medicine.

Object and research methods.

There are such materials for study as: the regulatory framework of the educational process for the training of doctors, documents of reforming healthcare, international experience of healthcare. Used content analysis, system analysis, logical generalization medical-statistical and Delphic methods. The essence of the Delphic method was that the experts expressed their opinion in the questionnaires, without informing other experts about it. 12 highly qualified specialists with more than 10 years of experience took part as experts. After the first stage, the opinions of the experts were summarized, and each of them got acquainted with the results. If necessary, he could change his mind to reach a consensus [6, 7]. Statistical processing was performed using the STATISTICA 6 analysis software.

Research results and their discussion.

In the training of qualified specialists, the leading place belongs to a systematic approach to the formation and development of professional competence of doctors. The essence of the approach is that all educational activities for the formation of professional competencies in students are considered as a holistic education with a complex structure (cognitive process, vocational training, industrial practice and professional self-determination against the background of a personal lifestyle). The system of formation the professional skills in the discipline «Hygiene and Ecology» consists of 9 blocks (fig.).

The subject of study is public and individual human health in relation with environmental factors and preventive measures for health and the environment.

The educational process is based on 4 components: motivational (the need and desire to master general educational and professional components), cognitivation (mastering the system of definitions and concepts), activation (practical application of knowledge, skills and abilities to perform professional tasks), personalization (the importance of personal and self-improvement in order to form professional skills and abilities).

The objective system-forming factor of education is the formation the necessary knowledge, skills, and readiness for students to take preventive measures to improve human health and protect the environment from pollution. The base of the preventive component of the professional worldview of specialists is the discipline «Hygiene».

In ensuring effective professional activity, an important role belongs to the following competencies: integral, general and special / subject competences.

Integral competences provide the following opportunities: critical analysis and assessment of modern scientific achievements in solving search and practical problems of ensuring favorable working conditions; solving typical and complex specialized tasks and practical problems in professional activity and healthcare; design and implementation of comprehensive research; introduction of innovations characterized by insufficient information and uncertainty of conditions and requirements; environmental protection.

General competencies are differentiated into research, project, and documentary, social and personal, communication, organizational. Research competencies include: organizing research; methodological support of research; analysis of the information received; using a systematic approach to solving problems; strategic planning of activities; finding non-standard solutions in activities; presentation of the results of activities, publications; ability for abstract thinking, analysis and synthesis; the ability to learn and be modernly trained. In the project, professional competencies consist of the following skills: substantiation of new technologies; design and modeling of technological processes; circuit design; development of technical design tasks. Documentary

competencies include: record keeping; development of technical documentation; possession of regulatory legal acts on labor protection and safety; preparation and examination of documentation.

Social and personal competencies consist of the ability to act in a socially responsible and conscious manner; the desire to protect the environment and act on the basis of moral motives; the ability to plan and solve problems of their own professional development; the ability to adapt and act in a new situation. Communicative competencies include the ability to: communicate in the state language, as well as in a foreign language; skills of using information and communication technologies, listening and taking into account the views of other people, discussing and defending their views on problems; tolerance and positive consensus with an individual or a collective. Organizational competencies consist of the ability to use knowledge in practical situations, the ability to work in a team; transfer knowledge to others in their professional field; organization of cooperation and commonwealth in a team.

The main special competencies in preventive medicine are: having the basic methods of protection against possible adverse working conditions; having the basic methods of environmental protection; possessing the methods of complex formation of health with the help of pharmaceutical support and nutritional support of the body; the ability of carrying out sanitary and preventive measures. Special competencies are designed in the form of a matrix, which indicates specific knowledge, skills, communication and autonomy and responsibility.

The efficiency of the educational process is determined by the final results of the formation the professional competence. The main ones are the identification of future professional activity as socially significant for the health of the population; knowing the methods of hygienic assessment of factors of working conditions and environment and their impact on human health; determination of risk factors for health, compliance with sanitary and hygienic standards in professional activities; substantiation of measures to improve working conditions and prevention of non-infectious and infectious diseases.

Assessment of the formation of professional competence should be carried out at three levels. High – knowledge of basic laws and definitions in the field of hygiene and medical ecology, the ability to solve problems in unusual situations. High motivation for professional development. Medium – knowing of most

basic laws and definitions of hygiene and medical ecology, with minor errors in their formulation. Performing work of reproductive type or by the algorithm. Motivation for professional activity is unstable. Low – superficial and fragmentary nature of knowledge in hygiene and medical ecology. Quite significant difficulties in their application to solve practical professional problems. Skills are poorly developed, there is no need to solve professional problems on a practical level.

Standardized forms of assessment of professional competence include test tasks of A-5 format. The complexity index and the discrimination index are analyzed. The complexity index determines the complexity of specific test tasks for students. Its value characterizes the proportion of students who correctly answered a particular test. The most informative for assessing students are test tasks with a complexity index of 0,36 – 0,84. The discrimination index determines the resolution of test tasks on strong and weak students. The values of the discrimination index in the range from 0,20 to 0,90 are optimal.

Thus, the proposed system of forming the professional competencies in students in the field of preventive medicine allows to reveal the essence more deeply in social and hygienic optimization of public health on the basis of determinants of education and work. From a practical point of view, it is aimed at systematizing the management of numerous activities in the process of training and employment and to ensure the selectivity of corrective measures for health care.

Conclusions.

Optimization of professional development of students in the process of educational activities in preventive medicine is based on the formation of professional competencies that aimed at improving personal health potential and conducting selective activities to protect the industrial and environmental environment.

The system of forming the professional competencies in preventive medicine for students consists of 9 blocks: «The purpose of training», «Subject of study», «Components of the educational process», «Integral professional competencies», «General professional competencies», «Special professional competencies», «Correction of professional competence», «Assessment of the formation of professional competence», «Final results of the formation of professional competence».

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ВИКЛАДАННЯ ПРОФІЛАКТИЧНОЇ МЕДИЦИНИ В ВИЩИХ МЕДИЧНИХ НАВЧАЛЬНИХ ЗАКЛАДАХ УКРАЇНИ В СУЧАСНИХ УМОВАХ

Кірсанова О. В.

Резюме. Пріоритетом системи вищої медичної освіти є підготовка в медичних університетах висококваліфікованих фахівців. Сучасна педагогічна парадигма базується на формуванні професійних компетенцій. Метою роботи було обґрунтування системи формування професійних компетенцій при підготовці у вищих навчальних закладах фахівців з «Медицини». Матеріалами для дослідження слугували нормативна база навчально-виховного процесу при підготовці студентів-медиків та міжнародний досвід з профілактичної медицини.

У роботі використано методи: контент аналізу, системного аналізу, логічного узагальнення, медико-статистичний, Дельфійський.

Головна мета вищого навчального закладу полягає у підготовці компетентних фахівців, які мають значний потенціал здоров'я та здатні довготривало підтримувати професійну діяльність на високому рівні. Система формування професійних компетенцій з «Профілактичної медицини» спрямована на логістичне управління заходами в процесі навчання та забезпечення селективності управління охорони здоров'я у медицині. До головних спеціальних компетенцій відноситься володіння основними методами захисту лікарів від можливих несприятливих умов праці; володіння основними методами збереження навколишнього середовища; володіння методами комплексного формування здоров'я за допомогою фармацевтичного супроводу і аліментарної підтримки організму; забезпечення необхідного рівня індивідуальної безпеки у разі виникнення типових небезпечних ситуацій або на основі інформації про прогнозовану ситуацію; здатність проведення санітарно-гігієнічних та профілактичних заходів. В сучасних військових умовах велике значення мають володіння тактикою надання екстреної медичної допомоги та здатність до проведення лікувально-евакуаційних заходів.

Оптимізація професійного розвитку студентів-медиків в процесі навчальної діяльності з «Профілактичної медицини» базується на формуванні професійних компетенцій, спрямованих на підвищення особистісного потенціалу здоров'я та проведенні селективних заходів з охорони виробничого та навколишнього середовища. Система формування професійних компетенцій з профілактичної медицини у студентів-медиків складається з 9 блоків: «Мета навчання», «Предмет вивчення», «Компоненти навчального процесу», «Інтегральні професійні компетенції», «Загальні професійні компетенції», «Спеціальні професійні компетентності», «Корекція професійної компетентності», «Оцінка сформування професійної компетентності», «Кінцеві результати формування професійної компетентності».

Ключові слова: професійні компетенції, формування, студенти, профілактична медицина.

TEACHING OF PREVENTIVE MEDICINE IN HIGHER MEDICAL EDUCATIONAL INSTITUTIONS OF UKRAINE IN MODERN CONDITIONS

Kirsanova O. V.

Abstract. The priority of the system of higher medical education is the training of highly competent and highly qualified specialists in medical universities. The modern pedagogical paradigm is based on the formation of professional competencies. The purpose of the work was to substantiate the system of formation of professional competences during the training of «Medicine» specialists in higher educational institutions. The materials for the research were the normative base of the educational process in the training of medical students and international experience in preventive medicine.

The work uses methods: content analysis, system analysis, logical generalization, medical-statistical, Delphi.

The main goal of a higher education institution is to train competent specialists who have significant health potential and are able to maintain professional activity at a high level for a long time. The system of formation of professional competencies in «Preventive Medicine» is aimed at logistical management of activities in the training process and ensuring the selectivity of health care management in medicine. The main special competencies include mastering the basic methods of protecting doctors from possible adverse working conditions; mastery of the basic methods of environmental protection; mastery of methods of complex formation of health with the help of pharmaceutical support and nutritional support of the body; ensuring the necessary level of individual safety in the event of the occurrence of typical dangerous situations or based on information about the predicted situation; the ability to carry out sanitary and hygienic and preventive measures. In modern military conditions, mastering the tactics of providing emergency medical aid and the ability to carry out medical and evacuation measures are of great importance.

Optimizing the professional development of medical students in the process of educational activities in «Preventive Medicine» is based on the formation of professional competencies aimed at increasing the personal health potential and carrying out selective measures for the protection of the industrial and environmental environment. The system of formation of professional competencies in preventive medicine for medical students consists of 9 blocks: «Purpose of learning», «Subject of study», «Components of the educational process», «Integral professional competencies», «General professional competencies», «Special professional competencies», «Correction of professional competence», «Assessment of the formation of professional competence», «Final results of the formation of professional competence».

Key words: professional competences, formation, students, preventive medicine.

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A – Work concept and design, B – Data collection and analysis, C – Responsibility for statistical analysis, D – Writing the article, E – Critical review, F – Final approval of the article

Received 20.03.2023**Accepted 28.08.2023**

DOI 10.29254/2077-4214-2023-3-170-358-364

UDC 378.14:616.31

Tsentilo V. G., Udod O. A., Dramaretska S. I., Voronina G. S.**EXPERIENCE IN ORGANIZING DISTANCE EDUCATIONAL PROCESS AND ATTESTATION OF STUDENTS OF HIGHER EDUCATION BY SPECIALTY OF DENTISTRY****Donetsk National Medical University (Kropyvnytskyi, Ukraine)****s.i.dramaretska@dnmu.edu.ua**

As a result of quarantine restrictions during the COVID-19 pandemic in 2020, students in all higher education institutions in the field of healthcare were forced to switch to distance learning. At the clinical departments of Donetsk National Medical University, the theoretical training of students in the speciality of Dentistry and control of their knowledge was carried out through improved clinical case studies with additional photo and video materials, while practical training was somewhat affected. The certification of applicants for the educational qualification level of "specialist" that year was also conducted remotely in the form of a practice-oriented exam, the methodological support for which was developed in a short time. After the imposition of martial law in the country, the educational process at Donetsk National Medical University was interrupted and resumed in April 2022 in a remote mode after the university moved to the city of Kropyvnytskyi. With the test exam temporarily cancelled in that year, Step 2 and certification of applicants for the second (master's) level was carried out in a remote format based on the results of a comprehensive practice-oriented qualification exam, which was conducted taking into account the experience gained during the quarantine. The distance learning format, with its advantages and disadvantages, which primarily relate to the practical training of future dentists, requires further improvement, but this format, with appropriate methodological approaches, allows students and teachers to continue educational activities under the conditions of insurmountable martial law circumstances and the need to comply with security requirements.

Key words: field of knowledge Healthcare, speciality Dentistry, educational process, certification, distance format.

Introduction.

In recent years, the higher education system in Ukraine has suffered from the permanent impact of several insurmountable factors that significantly affect the content and organisation of the educational process and force it to search for new approaches. The first test came during the strict quarantine imposed due to the global pandemic caused by the COVID-19 virus, which forced the country's higher education institutions to switch from full-time to distance learning in the shortest possible time [1, 2, 3]. The easiest transition to this form was made by those institutions that had previously used it in full or in part in various versions, at least for training in certain specialities. It is clear that the educational process in part-time education has also undergone minimal changes due to the short duration of the all-Ukrainian quarantine.

In general, higher education students and academic staff teaching in classical universities, in the presence of a reasonably strong material and technical base, electronic repositories, a developed computer network and a stable Internet connection, appropriate

methodological support, skills in working with electronic sources of information, some experience and developments in this area, adapted to the covid restrictions without much difficulty [4, 5]. At the same time, transitioning to distance education, especially in a very short time, in higher education institutions that train future healthcare professionals exclusively in full-time education, looked much more difficult.

The aim of the study.

To summarise and analyse the experience of organising the educational process and conducting certification of higher education students in the speciality Dentistry in a distance format.

The main part.

In higher education institutions in healthcare, the educational process at clinical departments has been the most vulnerable to quarantine restrictions. While the teaching of humanitarian and medical-biological disciplines at the relevant departments, albeit with some difficulty, was quickly adjusted to meet the requirements of the distance format, it was not so easy to transfer the disciplines taught in the face-to-face