

IMPROVING THE METHODOLOGICAL SYSTEM OF USING INFORMATION TECHNOLOGIES IN PREPARING STUDENTS OF MEDICAL HIGHER EDUCATION INSTITUTIONS FOR PROFESSIONAL ACTIVITIES

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ANNOTATION

Training students of medical specialties in the use of information systems in their professional activities will be effective if the content of training in the field of information systems is brought into line with the needs of their use in certain types of professional activities of doctors.

Keywords: healthcare informatization, components of the system for ensuring the development of informatization, information and analytical support for healthcare authorities and institutions.

The modern stage of development of society is characterized by the informatization of all spheres of human life and activity. The rapid development and implementation of information technologies and, in particular, information systems for various purposes provided effective access to huge information resources, as well as the ability to store, process and exchange a large amount of information. Information system - an organizationally ordered set of documents and information technologies, including the use of computer technology and communications that implement information processes.

Training in the use and development of information systems is an important part of the information training of many professionals, including engineers, economists, lawyers, teachers, doctors and others. The informatization of society, the introduction and development of the latest information and telecommunication technologies, the training of personnel in new specialties have led to significant changes in the field of education. Formation of a high level of information culture of future specialists is the most important task facing the system of higher professional education. The discrepancy between the established practice of using modern information technologies, the study of disciplines in the field of informatics and information technology by students of medical universities and the emerging need to use the means and methods of informatics and information technology in the professional activities of specialists is one of the main reasons that do not allow achieving high results in the informatization of medical education and requiring additional research in this area. In this regard, the interest of medical specialists in the use of information technologies is increasing and manifests itself from the standpoint of familiarization with information resources, the implementation of intercultural communications, world cultural values, the individual's need for continuous self-education, and adaptation in the information society. Therefore, research related to the informatization of medical education is becoming increasingly relevant.

Training in the field of information systems, as a rule, includes invariant and variable parts. The invariant part is related to the main issues necessary for the development of general cultural literacy and relevant information education. Our study was carried out on the example of information training of students of medical specialties. The emergence and development of various medical information systems provided doctors with additional opportunities in their professional activities in the form of the following advantages: reducing the time spent on maintaining current documentation, compiling reports, using mechanisms to

support medical decisions; facilitating adherence to standard treatment and examination protocols; providing instant access to archived case histories; reducing the time spent on contacts with the laboratory diagnostic service, etc. Information training of medical students has a two-component structure: in the 1st year, questions of general, basic informatics are studied, in 2-3 courses - medical informatics, which has the role of preparing future doctors for the use of medical information systems in their professional activities.

As a result of the analysis of scientific and methodological literature in the field of medical informatics (V.K. Gasnikov, V.Ya. Gelman, A.A. Demidova, T.V. Zarubina, V.G. Kudrin, V.P. Omelchenko, V. I. Chernov et al.) it was found that when studying information systems, the authors prefer the theoretical foundations of the application of medical information systems and most often focus on studying their potential, and do not pay enough attention to issues of pedagogy and methods of professional education. Dissertation research by A.N. Aleksakhina, L.V. Akulshina, A.V. Gavrilova, N.G. Shilina and others. So, N.G. Shilina in her study suggests ways to improve the methodological system of training in informatics based on the characteristics of the doctor's activities and develops on its basis a methodology for continuous training in information and communication technologies in the block of natural science disciplines of the medical education system.

In the dissertation research A.N. Aleksakhin presented a holistic system of electronic laboratory work in the framework of the educational method. In connection with the improvement of the educational process in medical universities in the context of informatization, research is being intensified in the development and implementation of new forms and methods of teaching. Today, active learning methods are becoming increasingly important, which encourage students to independently find ways to solve the problems that arise before them. In the training of a generalist in the specialty "General Medicine", the emphasis is more often shifted to solving only a particular problem - the training of specialists in the medical field. In this regard, the contradiction between the social order for professional doctors with modern information technologies in medicine and the quality of their training in the system of higher professional education is aggravated. Information technology as an integrated learning tool can have a profound impact on the way knowledge is acquired, the content of training and the relationship between disciplines, on the functions of the teacher and the organization of the work of a higher educational institution.

The use of professional and pedagogical opportunities for the introduction of information technologies in the process of training medical workers in medical universities will ensure the effective formation of the foundations of the professional skills of the future medical worker, accelerate and improve the process of obtaining knowledge, skills and professional skills. After analyzing the possibilities of using a computer in the educational process, as well as the psychological and pedagogical aspects of using a computer in teaching information technology, we will be able to identify the requirements for the professional training of future medical workers in the context of informatization of education and healthcare, and on their basis develop methodological approaches to improve the training of future medical workers in a multi-level structure of higher education. It is necessary to integrate the methods of informatics and disciplines of medical orientation, since at the same time it is realized; the principle of professional and pedagogical orientation in the teaching of special disciplines, which is an important point in improving the training: students.

It is also important to solve the problem of increasing the efficiency of training future medical workers through the use of information technology in the educational process. There is a need for methodological recommendations for the use of a computer not only in the study of medical informatics, but also in medical specialties in the context of profile integration of education in a higher educational institution. In addition,

pedagogical software tools have not been developed that can be used both to improve the methodological system of training future medical workers and teachers in their professional work. Future medical workers in the course of information training will receive professional skills in using a computer, while the methodological aspects of use will be emphasized in the process of medical training of students.

With a multi-level structure of higher education, the basic training of medical workers in the conditions of informatization of education should ensure the achievement of a high level of professional knowledge, skills and abilities necessary for using a computer in the educational process, the possibility of continuing education at the next levels of higher education, independent mastery of professional knowledge and skills necessary for the application of new information technologies in work. The formulated statements can be further implemented in new curricula for; the most efficient execution; educational programs and in improving the methodological system of training future medical workers.

In conclusion, it can be said that, the content of training on information systems for students of medical specialties should be adequate to the needs of their use in the main activities of a doctor. Training in the use of information systems should be carried out in the context of the future doctor's professional activity based on interactive teaching methods. The teaching of medical students according to the proposed methodology should be based on the principle of sequential implementation of four stages: preparatory, modular, complex, constructive, each of which uses educational tasks, taking into account their typology and functions in the educational process: propaedeutic tasks, typical tasks, complex tasks, situational or problem tasks.

Training in the use of information systems should be carried out in an information and educational environment corresponding to professional activities. At the same time, it is advisable to focus on the use of information systems that meet modern requirements for information systems that are widely used at the present time and have prospects for further development. Improving the efficiency of health and healthcare management is impossible without the use of modern information technologies. On the one hand, there is a significant increase in attention to this issue, an increase in the equipment of healthcare bodies and institutions with computing, communication and software tools. On the other hand, the final effectiveness of the measures taken cannot be considered satisfactory, since the health of the population is improving slowly, health care reforms have been stalling for almost two decades, and the satisfaction of the country's residents with the quality and organization of medical care remains at a low level.

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