STUDYING THE AWARENESS AND MOTIVATION OF FUTURE FAMILY DOCTORS IN THE FIELD OF DIGITAL MEDICINE

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Abstract

The purpose of the study: to study the awareness of students about information and communication technologies in the field of medicine, to identify factors affecting the effectiveness of training for the implementation of telemedicine counseling.

Material and methods: analysis and generalization of scientific, methodological and foreign literature, a test questionnaire for future general practitioners (graduates of the 6th year of the medical faculty of the Tashkent Medical Academy) and analysis of its results. The test was conducted on the basis of questions from the program of additional professional education of doctors in the specialties of "family medicine". 32 undergraduate students of the 6th year of the Faculty of Medicine took part in the survey.

Results. According to a survey of students of future family doctors (61%), special software, trained staff and stable communication are necessary for the effective implementation of telemedicine services in practice. An analysis of the use of information and digital technologies in the daily practice of the studied contingent showed that about 80% of the surveyed students of medical faculties regularly work in an Internet search engine, and 38% use email in their activities. However, for medical students, there is not enough understanding of telemedicine and orientation to its fields of application (42%).

Conclusion. The introduction of telemedicine technologies into the educational process serves to prepare doctors for further effective work in hospitals and polyclinics and to provide high-quality medical care to patients.

Keywords: telemedicine, medical education, family doctors.

Introduction

The problem of strengthening educational activities and increasing student motivation is more relevant than ever, therefore, in our opinion, modern methods can improve the effectiveness of the quality of education using available resources, in particular: - by introducing information computer technologies used in healthcare at the present stage into training (1). The process of training medical students and doctors includes remote lectures and seminars, as well as practical and independent training, including telemedicine consultations with teachers and leading doctors (2). To realize the real potential of educational, training and research activities,

it is necessary to introduce telemedicine innovations from the very beginning of training medical specialists in higher professional institutions (3).

The main directions of development of telemedicine services at the present stage are the introduction of specialized information systems for the transmission of medical information between medical organizations and the provision of services such as remote diagnostics, distance learning, management, organizational and preventive services (4, 5). Telemedicine allows providing medical services in remote areas with the involvement of medical specialists using information and communication technologies technology. In addition, telemedicine can be used for the diagnosis, treatment and prevention of diseases and injuries, the exchange of information for research and evaluation of results, as well as for continuous training of medical personnel on the way to improving human health.[6]. One of the main reasons why medical professionals rarely use high-tech tools is the lack of appropriate specialists, which is due to insufficient information about the possibilities of telemedicine [7].

Over the past few decades, the use of wireless broadband technologies has become more advanced, and the use of mobile phones and the Internet has become almost ubiquitous [9]. According to foreign scientific literature, telemedicine uses digital technologies to overcome various geographical barriers and helps to expand access to medical services [10]. The experience of European countries shows the success of this technology. In the United States, at the federal level, physician-patient telemedicine can be used to provide patients with specialized care (primary and secondary screening, monitoring of chronic diseases, remote diagnosis, treatment correction, monitoring) as an alternative to expensive personal patient admission. Telemedicine is also used for emergency care. However, each State has its own limitations and its own characteristics. Since January 2019, Arizona has expanded the parity law to include telemedicine services for the treatment of substance use disorders. Kentucky passed a law, effective July 1, 2019, that authorizes the provision of telemedicine services at home and allows psychologists and other non-medical providers to pay for telemedicine services [9]. Medical organizations can provide the following main types of telemedicine services [8]: 1. Telemedicine consultations in real time and with delay are often used in the doctor-patient system. Telemedicine consultations (consultations of doctors) can be carried out with the remote interaction of medical workers with each other when providing planned medical care using telemedicine technologies. 2. Remote monitoring of the patient's health (biomonitoring) and rehabilitation. 3. Telemedicine complexes are a set of various mobile and portable software and hardware devices that can be used in home telemedicine, disaster medicine, emergency and military medicine, as well as in emergency and outpatient care and rehabilitation of patients. Adequate training of medical personnel is becoming important in solving the problems of digitization of medicine and the introduction of telemedicine into practice.

The purpose of the study:

To study and analyze students' awareness of information and communication technologies in the field of medicine, to identify factors affecting the effectiveness of training and attitude to the implementation of telemedicine counseling;

Material and methods:

Analysis and generalization of scientific, methodological and foreign literature, a test questionnaire for future general practitioners (graduates of the 6th year of the medical faculty of the Tashkent Medical Academy) and analysis of its results. The test was conducted on the basis of questions from the program of additional professional education of doctors in the specialties "general practice (family medicine)", "therapy" on the topic "telemedicine in the activities of a primary care physician". The analysis of the study included and analyzed about 20 foreign articles and manuals on the experience of using telemedicine services. The survey was attended by 32 6th-year bachelor's degree students in the field of General Medical Medicine who have a doctor's degree in the specialty "general practitioner" of the Faculty of Medicine.

Results.

Before the test survey, the students completed a 3-day course to familiarize themselves with various information technologies used in healthcare today. Among 32 respondents, 6 people (18.8%) correctly answered the question about the term telemedicine technologies, 7 people (21.8%) correctly answered the question about the system of identification and authentication of participants in remote interaction in the provision of medical care using telemedicine technologies. 8 (25%) correctly answered about the organization and procedure for providing medical care using telemedicine technologies that can be used in the provision of primary health care, and 3 (9.4%) graduates answered correctly from digital photographs. "What is the main purpose of telemedicine counseling?"- 9 out of 32 respondents (28.1%) answered this question correctly. The students showed the lowest level of knowledge on the preparation of the technical process of conducting a telemedicine consultation, the next question concerned the participants of the telemedicine consultation and amounted to 0% in relation to the knowledge of the telemonitoring system.

The positive side of increasing the motivation of students to study turned out to be their desire to study telemedicine and its application in their activities. Students-the majority of future doctors (74.0%) expressed a desire to receive education in the field of telemedicine in the future, improve their skills in the field of legal issues, telemedicine technologies, the basics of interaction between traditional and telemedicine technologies in diagnosis, treatment and rehabilitation. And about 43% of respondents said that the main source of information about telemedicine is online education and the Internet. So it turned out that the need for special training at the department in the study of medicine is very relevant for 52% of students, respectively, online education amounted to 26%, and Internet resources-22%. According to a survey of students of future family doctors (61%), special software, trained staff and stable communication are necessary for the effective implementation of telemedicine services in practice. An analysis of the use of information and digital technologies in the daily practice of the studied contingent showed that about 80% of the surveyed students of medical faculties regularly work in an Internet search engine, and 38% use email in their activities. However, for medical students, there is not enough understanding of telemedicine and orientation to its fields

of application (42%). At the same time, the majority of medical students (67%) believe that the use of telemedicine technologies is effective and necessary.

Conclusion

The introduction of telemedicine technologies into the educational process serves to prepare doctors for further effective work in hospitals and polyclinics and to provide high-quality medical care to patients. Telemedicine is a very important field in medical education, and it is important to include such education in curricula. Medical students and doctors note that telemedicine contributes to the development of core competencies in the field of medical knowledge and practical work with patients. Telemedicine technologies lead to the achievement of educational goals, while the teacher's mission is to transform learning into a collaborative, individualized and empowering process with effective use of these new technologies.

Thus, in order to ensure the development of telemedicine at the university scale, based on the analysis of the survey results, we propose: - to develop training programs on the theoretical and practical basics of using medical technologies for students – future family doctors. telemedicine services (medical counseling, monitoring, etc.); - widespread use of all forms and methods of group education in order to improve computer literacy and acquire skills in working with telemedicine technologies.

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