

## THE IMPORTANCE OF DIGITAL MEDICINE IN INCREASING THE PROFESSIONAL MOTIVATION OF DOCTORS

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### ABSTRACT

Digital medicine is currently developing rapidly, showing its relevance in the field of education, as well as clinically, it is a new direction in the healthcare system of Uzbekistan.

**The purpose of the study:** to study and analyze the interest of future family doctors in training in telemedicine technologies in the field of medicine, to determine the factors affecting the effectiveness of training and the attitude to the implementation of telemedicine consultations.

**Material and methods:** analysis and generalization of scientific, methodological and foreign literature, test questionnaire for future family doctors and analysis of its results.

**Results.** Prior to the test survey, students completed a 3-day course on the various information technologies used in healthcare today. Among the 30 students surveyed, 6 (17 %) answered correctly for the term telemedicine technology. A positive aspect of increasing students' motivation for education was their desire to learn telemedicine and apply it in their work. The majority of students - future doctors (75 %) want to learn about telemedicine in the future, to improve their skills in legal issues, telemedicine technologies, the basics of the interaction of traditional and telemedicine technologies in diagnosis, treatment and rehabilitation. said.

**Conclusion.** The introduction of telemedicine technologies into the educational process will serve to prepare doctors for effective work in hospitals and polyclinics in the future and provide high-quality medical care to patients. Telemedicine is a very important area in medical education and it is important to include such education in the curricula.

**Key words:** digital medicine, family doctor, medical students.

### INTRODUCTION

The field of education is of strategic importance for any country, therefore the need to organize the educational process with high quality determines the development of the country in all directions without exception . In addition, medical education is in many ways inextricably linked with other most important areas of the health care system.

The problem of strengthening medical education and increasing the motivation of students is more urgent than ever, therefore, in our opinion, it is possible to improve the effectiveness of the quality of education using modern methods , in particular: - the information computer used for health at the current stage by introducing technologies into teaching [1].

The process of training future family physicians includes distance lectures and seminars, as well as practical and self-directed learning, including telemedicine consultations by teachers and leading physicians [2].

As a result, students and doctors get theoretical and practical knowledge in specialized subjects. With the help of telemedicine technologies, students and doctors have the opportunity to see surgical, gynecological and other operations in real time , listen to lectures of doctors of leading scientific medical centers and institutes, participate in remote videoconferencing and online training courses.

In order to realize the real possibilities of education, training and research activities, it is necessary to introduce telemedicine innovations from the very beginning of the training of medical specialists in higher professional institutions [3].

Directions of the development of telemedicine services at the current modern stage are the introduction of specialized information systems for the transfer of medical information between medical organizations and the provision of services such as remote diagnostics, remote education, management, organizational and preventive services [4, 5 ].

In addition, diagnosis, treatment and prevention of diseases and injuries, conducting research and evaluating results using telemedicine exchange of information, as well as continuous training of medical personnel to improve human health. [6].

The word "telemedicine" literally translates to "remote treatment" and often refers to the provision of health services in addition to other activities such as education, science and health care. is used as a general term for [7].

Health workers rarely use high-tech tools is the lack of relevant specialists, which is related to the lack of sufficient information about the possibilities of telemedicine [8].

The main positive aspect of telemedicine is the ability to transmit medical information remotely. The first mentions of telemedicine were found in the first half of the 20th century, when information was published about the possibility of transmitting ECG results over telephone lines. Inventions such as the electric telegraph and the telephone played an important role in the emergence of modern telemedicine. Patient education with images and videos , transmission of medical

images such as X-rays and scans, and online audio and video consultations have become a reality [9].

the last 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 [10].

According to foreign scientific literature, telemedicine uses ICT to overcome various geographical barriers and help expand access to medical services.

The experience of European countries shows the success of this technology. At the federal level in the United States, physician-patient telemedicine can be used to provide patients with specialized care (primary and secondary screening, chronic disease monitoring, remote diagnosis, treatment adjustment, follow-up) as an alternative to expensive face - to-face appointments. . Telemedicine is also used for emergency medical care. However, each country has its own restrictions and characteristics. As of January 2019, Arizona expanded its parity law to include telemedicine services for substance use disorder treatment. Effective July 1, 2019, the state of Kentucky passed a law that allows home telemedicine services and allows psychologists and other non-medical providers to be billed for telemedicine services.

Medical organizations can provide the following main types of telemedicine services:

1. In the "doctor-patient" system, real-time and delayed telemedicine consultations are often used. telemedicine consultations (consultations of doctors) can be carried out by remote interaction of medical personnel with each other in the provision of medical care in a planned form 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-hardware devices that can be used in home telemedicine, disaster medicine, emergency and military medicine, as well as in emergency and ambulatory care and patient rehabilitation. Adequate training of medical personnel is important in solving the problems of digitization of medicine and implementation of telemedicine.

**The purpose of the study:** to study and analyze the interest of students in telemedicine technologies in the field of medicine, to determine the factors affecting the effectiveness of teaching and the attitude to the implementation of telemedicine consultations.

**Material and methods:** analysis and generalization of scientific, methodological and foreign literature, test questionnaire for future general

practitioners (graduates of the 6th year of medical faculty of Tashkent Medical Academy) and analysis of its results. The test was conducted on the basis of the questions on the topic "telemedicine in the work of a primary care physician" of the additional professional education program for doctors in the specialties of "therapy" on 31.08.54 "General practice (family medicine)", 31.08.49. The research analysis included and analyzed about 20 foreign articles and manuals on the experience of using telemedicine services. 32 undergraduate students of the 6th stage in the field of "General medicine" who have a doctor's diploma in the specialty of "general practitioner" of the faculty of "Treatment" took part in the survey.

**Results.** Prior to the test survey, students completed a 3-day course on the various information technologies used in health care today. Among the 30 students asked, 5 people (17%) gave the correct answer to the term telemedicine technologies, 8 people (23 %) answered correctly. 7 people (22%) about the procedure for organizing and providing medical care using telemedicine technologies that can be used in the provision of primary medical and sanitary care , and 4 people (22%) about digital photos ( 10%) graduates answered correctly. "What is the main purpose of telemedicine consultation?" - 8 out of 30 students (27%) answered this question correctly. Students showed the lowest level of knowledge on the issue of preparing the technical process for conducting telemedicine consultation, the next question was related to the participants of telemedicine consultation and made 0% regarding the knowledge of the telemonitoring system.

A positive aspect of increasing student's motivation for education was their desire to learn telemedicine and apply it in their work. The majority of students - future doctors (75%) expressed a desire to learn about telemedicine in the future, to improve their skills in legal issues, telemedicine technologies, the basics of the interaction of traditional and telemedicine technologies in diagnosis, treatment and rehabilitation. About 43% of respondents stated that the main source of information about telemedicine is online education and the Internet. For 52% of students, it was found that the need to undergo special training at the department in learning telemedicine is very relevant, in this regard online education was 26% and Internet resources were 22%, students- future family doctors (61%), special software, trained personnel and stable communication are necessary for the effective implementation of telemedicine services. The analysis of the use of information and digital technologies in the daily practice of the studied contingent showed that about 80% of the students of the Faculty of Medicine who took part in the survey regularly work in the Internet search system, and 38% use e-mail in

their work. However, medical students' understanding of telemedicine and its application areas are insufficient (42%). It should be said that 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 will serve to prepare doctors for effective work in hospitals and polyclinics in the future and provide high-quality medical care to patients. Telemedicine is a very important area of medical education, and it is important to include such education in the curricula. Medical students and doctors note that telemedicine contributes to the development of basic competencies in the field of medical knowledge and practical work with patients. Telemedicine technologies lead to the achievement of educational goals, and the teacher's role is to effectively use these new technologies to transform learning into a collaborative, individualized, and empowering process.

Thus, based on the analysis of the results of the survey, in order to ensure the development of telemedicine at the university level, we offer the following: - development of educational programs for students - future family doctors on the theoretical and practical basis of using medical technologies. telemedicine services (medical consultation, monitoring, etc.); - extensive use of all forms and methods of group training to improve computer literacy and acquire skills for working with telemedicine technologies.

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