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POSSIBILITIES OF APPLICATION OF TELETHERAPY AND TELEREHABILITATION IN UZBEKISTAN

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Abstract
The article provides an overview of telemedicine research. The concepts of teletherapy, telerehabilitation, telediagnosis and teleconsultations are given. The advantages of information and communication methods in modern medicine are introduced. The necessity of further introduction of telemedicine in Uzbekistan is shown.

Keywords: rehabilitation, telemedicine, teleconsultations, teletherapy.

Today, information technology has become an integral part of temporary society. It is impossible to image areas such as banking, finance and economic without digital methods. In recent years of information and communication technologies began to actively introduce medicine. Telemedicine is an emerging field that becomes a significant segment of the electronic health care [1, p.287–298.]. Advances in this area have made it possible to connect to the Internet, use smart devices (e.g. smartphones, tablets) and related applications (e.g. Skype, Microsoft Teams) possible for a large segment of healthcare workers and patients. Currently, there is experience in applying blockchain technology to create an electronic health record focused on user, and maintaining a single reliable version of user information [2]. Comfortable interface design enables the medical community to personalize care through teletherapy or telerehabilitation combined with conventional "face-to-face" treatment. These possibilities are especially but relevant during the period of incidence of COVID-19 [3, p.45–56; 4, p.7; 5, p.473-475].

In a pandemic of viral infections, when the number of infected people and areas of distribution are growing at an uncontrollable rate, the rapid response of medical workers plays a decisive role. In cases where the only way out is strict self-isolation, telemedicine remains the onlyaffordable healthcare tool. How showed the COVID-19 pandemic, which sent to forced self-isolation of millions of people around the world, telemedicine systems with the video communications have become an indispensable attribute of remote reception, management and treatment of patients [6,p.3; 7.p.1054-1057].

Distance and lack of access is everything only two threats to the quality of medical care, which are currently being eliminated through videoconferencing, information sharing and other telecommunication technologies facilitating television and radio services. During this period, the use of modern technologies and means of telecommunications for remote providing medical and consulting service is significant. Thanks to this, medical workers can not only examine patients remotely, but also to hold consultations, collect anamnesis, request and send information about the course of diseases, prescribe treatment and issue sick leave [8].

According to research, Russell et al. (2007) the nature of rehabilitation services is determined by divides the type of telecommunications technology and informatics infrastructure used for service support. The rehabilitation process, as for a long time, requires constant and frequent monitoring functionality of the patient to test ongoing therapy and/or adaptive adapt it to the progress of the patient. This distinguishes away from a typical telemedicine service that includes a short intensive session with one or more physicians and a patient [9, p.4].

Winters et al. (2002) defined teleconsultation as the standard face-to-face telemedicine model using interactive videoconferencing between patient and remote rehabilitation specialist for access to specialized expertise. As part of the measures taken as a result of the Covid-19 pandemic, telerehabilitation is a process that ensures continuity of care for patients who can recover enjoy remote consultations while providing greater protection for those who refers to vulnerable groups. In addition, at chronic or long-term treatment, where the key what is the key to success is the continuity of treatment, it is a safe way to ensure continuity of treatment [10, p.518-526].

Specific requirements for telerehabilitation not much different from the basic requirements for telemedicine in general. It includes be a strong and secure Internet connection, ideally with the ability to connect and record video; remote access to medical information systems such as medical records patient, as well as software for visualization and remote monitoring of patients; and the ability to write a prescription. Telemedicine technology allows doctors and patients communicate in real time. Sessions can be carried out anywhere. The patient and the specialist call up using specialized video conferencing systems. Wherein they can not only see and hear each other, but also to exchange text and

graphics data. For example, the patient can see his x-ray [11, p.44-47].

Remote monitoring of the patient's condition – a type of telemedicine that can be implemented in Uzbekistan. Often it is necessary to monitor older people who are not able to walk to the nearest clinic or cannot take care of themselves. The service is also reminded about taking medication. In addition, remote monitoring is needed to control the health of patients, who need regular check-ups as well as the condition of workers in hazardous leads [12, p.524-540; 13, p.1-21].

With the help of telemedicine technologies, doctors can urgently consult with each other friend. In serious cases, doctors sometimes we need the help of a more qualified specialist. Despite the fact that in recent years in Uzbekistan in the Republican specialized centers began to provide teleconsultations to specialists of regional medical institutions, district hospitals and rural polyclinics also need to introduce telecommunication services in their institutions [14, p.220-222].

The Republican Specialized Scientific and Practical Medical Center for Cardiology in 2021 launched a pilot project on provision of medical services using telemetry equipment in a number of regions countries. The project started from Tashkent region, cities of Karshi, Jizzakh, as well as from Chilanzar area of the capital. The implementation of this project will allow patients to receive medical care from specialists of the center directly, without leaving your city or village. This will improve the quality of medical services at the level primary health care [14].

Today, a lot is said about telemedicine, its advantages and innovativeness are recognized, however, in order to actually provide advanced medical services anywhere in the country, telemedicine must be practically used. For the practical application of telemedicine be aware of its benefits, such as such as reducing the frequency of hospitalizations and preventing re-hospitalizations, early discharge from rehabilitation departments, reducing the cost of air ambulance and saving time, improving health and quality of life, and an early return to work.

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