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**DUNYODA TELETIBBIYOTNING HOZIRGI HOLATI VA
RIVOJLANISH ISTIQBOLLARI**

Abdujabbarova Umida Mashrukova, Rahimov Bobur Turg'unovich

TMA biotibbiyot muhandisligi, informatika va biofizika kafedrasi assistentlari.

Annotatsiya. Telemeditsina shifokor va bemor o'rtasidagi o'zaro munosabatlar nuqtai nazaridan yangi istiqbollarni ochadi. Bugungi kunda bemorlarning aksariyati professional maslahatga muhtoj va shifokorlar bilan muloqot qilishning muqobil usullarini tanlashni boshlaydilar. Masofaviy monitoring - bu noyob texnologiya, reaktiv tibbiyotdan profilaktik tibbiyotga o'tishni ta'minlaydigan bo'g'in. Maqolada telemeditsina tibbiy amaliyotda muhim va muqarrar vosita sifatida qaraladi, bu bir qator afzalliklarga ega va tibbiy yordamning mavjudligi va sifatini sezilarli darajada oshiradi.

Kalit so'zlar: tibbiyot, telemeditsina, konsultatsiya, konsilium, masofaviy ta'lim.

СОВРЕМЕННОЕ СОСТОЯНИЕ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ТЕЛЕМЕДИЦИНЫ В МИРЕ

Абдужаббарова Умида Машруковна, Рахимов Бабур Тургунович
Ассистенты кафедры «Биомедицинской инженерии, информатики и
биофизики»ТМА.

Аннотация. Телемедицина открывает новые перспективы в плане взаимодействия между врачом и пациентом. Сегодня большинство пациентов нуждаются в профессиональном консультировании и начинают выбирать альтернативные способы взаимодействия с врачами. Дистанционный мониторинг — это та уникальная технология, связующее звено, которое обеспечивает переход от реактивной медицины к профилактической. В статье рассматривается телемедицина, как важный и неизбежный инструмент в медицинской практике, обладающий целым рядом преимуществ и существенно повышающий доступность и качество медицинской помощи.

Ключевые слова: медицина, телемедицина, консультация, консилиум, дистанционное обучение.

THE CURRENT STATE AND PROSPECTS FOR THE DEVELOPMENT OF TELEMEDICINE IN THE WORLD

Abdujabbarova Umida Mashrukovna, Rakhimov Babur Turgunovich
Assistants of the Department of Biomedical Engineering, Informatics and
Biophysics, TMA.

Annotation. Telemedicine opens up new perspectives in terms of interaction between doctor and patient. Today, most patients are in need of professional counseling and are beginning to choose alternative ways to interact with doctors. Remote monitoring is that unique technology, the link that ensures the transition from reactive to preventive medicine. The article considers telemedicine as an important and inevitable tool in medical practice, which has a number of advantages and significantly increases the availability and quality of medical care.
Key words: medicine, telemedicine, consultation, consilium, distance learning.

Recently, the activity of medical organizations in organizing the provision of medical care using telemedicine technologies has significantly increased in the world.

Experts believe that, first of all, telemedicine technologies within the framework of compulsory health insurance will develop where medical care is less accessible - in geographically remote areas [1,2]. The most important areas of telemedicine can be considered teleconsultations in the "doctor-doctor" format, carried out for the implementation of high-tech methods of treatment for selected patients under the policy of compulsory medical insurance; as well as remote monitoring of the health status of patients. It becomes possible to provide patients with consultations of highly qualified specialists without imposing additional

financial costs on patients. This approach makes medical care more accessible, especially in remote regions, and better.

At present, telemedicine departments have been established and are functioning in almost all major medical institutions and leading medical universities of our republic in the country.

The use of telemedicine allows specialists to exchange the necessary information about the patient as part of the treatment process, quickly identify complex clinical cases and organize consultations. This makes it possible to determine the tactics of treatment and routing of patients in a short time. Thanks to the interactive dialogue between the dispensary service and inpatient departments, doctors develop a unified strategy for managing patients during the transition from inpatient to outpatient.

Telemedicine should be considered as an important and inevitable tool in medical practice, which has a number of advantages and significantly increases the availability and quality of medical care. The undoubted advantages of teleconsultations include, for example, saving time, saving significant financial resources on bringing the consultant closer to the patient, bringing qualified medical care closer to the medical institution, and directly to the patient, the possible concilium-dialogue nature of the consultation, the “presence effect”, the ability to discuss video images (X-ray, ultrasound, computer, magnetic-nuclear and positron emission tomography, ECG and others), the possibility of the presence of other medical specialists, residents and graduate students at the consultation, which gives teleconsultation an educational, methodological and scientific character, and also generally improves the quality ongoing consultation.

Of course, today it is no longer necessary to agitate anyone for the introduction of telemedicine technologies: from the press, from TV screens, from the Internet and from special literature, you can get an idea of their effectiveness, both when consulting severe patients, and when conducting educational events for doctors from distant regions. . However, the use of these technologies should be preceded by work on laying broadband telecommunication channels to medical institutions, equipping these institutions with videoconferencing terminals and additional equipment, and training personnel to work on it.

Telemedicine consultation (consilium) allows you to bring together specialists from various medical institutions located at distances of hundreds and thousands of kilometers from each other, while saving not only the cost of travel and accommodation, but also the working time of consultants.

Timely consultation in most cases reduces the total time of treatment, which reduces the period of incapacity for work of patients and increases the turnover of hospital beds. The use of tele-education tools using video conferencing and remote access to information sources (including medical image storage) reduces the costs of medical institutions for staff travel for advanced training [10].

Because consultants tend to be medical professionals of the highest calibre, their working time represents the most scarce resource in medicine. Under normal

conditions, the consultant often has to interact directly with the patient, who is not always able to clearly and consistently present the necessary information on his own disease. This leads to unproductive losses of consultants' time. In the case of telemedicine consultation, a specific clinical case is presented to the consultant by the attending physician (in the presence of the patient or without it), however, objective information in a unified structured form is sent to the consultant in advance for review via communication channels. Due to this, the average teleconsultation time is 2-3 times less than the face-to-face consultation (which is equivalent to a 2-3-fold increase in the number of highly qualified specialists). The availability of telemedicine consulting facilities in most cases reduces such costs many times over. Reducing the duration of the disease and reducing the risk of disability due to the timeliness of advisory assistance using telemedicine technologies also reduces the amount of insurance payments. It is assumed that the size of the global telemedicine market by 2021 will be \$44 billion [4]. According to the National Health Service of England, the transfer of only 1% of face-to-face medical consultations to correspondence will save the budget about 250 million pounds a year. In the US, telemedicine pre-approval alone has reduced ER travel from 2.2 million to 1.4 million, saving about \$500 million annually. The future of telemedicine lies in the creation of a modern telecommunications training infrastructure of a medical university, which will allow organizing a common information space in the field of continuing professional education for a large number of geographically remote medical specialists. Distance educational technologies based on modern telecommunications have the following advantages over the traditional system of advanced training for doctors:

- more complete satisfaction of the needs of a practical doctor in educational services;
- ensuring the possibility of attracting not only leading specialists from one medical university, but also other major domestic and foreign specialists as teachers and lecturers;
- use of interactive means of communication with teachers and testing at scientific and practical seminars for the rapid exchange of information about new methods of diagnosis and treatment;
- ensuring almost equal access to educational materials, regardless of the location of the trainees;
- ensuring the possibility of studying educational materials directly at the workplace of a medical worker;
- expansion of opportunities for training correspondence postgraduate students;
- reduction of training costs (transportation, travel expenses, living expenses during training), etc.
- Consultations of the patient or his legal representative by a medical worker using telemedicine technologies are carried out in order to:

- prevention, collection, analysis of patient complaints and anamnesis data, evaluation of the effectiveness of treatment and diagnostic measures, medical monitoring of the patient's health status;
- making a decision on the need for a face-to-face appointment (examination, consultation).

When conducting consultations using telemedicine technologies, the attending physician may correct the previously prescribed treatment, provided that he establishes a diagnosis and prescribes treatment at an in-person appointment (examination, consultation).

Telemedicine technologies can be used in the provision of the following types of medical care [5]:

- primary health care;
- specialized, including high-tech, medical care;
- ambulance, including specialized ambulance, medical care;
- palliative care;
- remote monitoring.

Medical assistance using telemedicine technologies can be provided in any conditions: outside a medical organization, outpatient, day hospital, inpatient. The conditions for providing assistance are determined by the actual location of the patient.

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TIBBIYOTDA AXBOROT TEXNOLOGIYALARINING O'RNI, SOHAGA KIRITILAYOTGAN YANGILIKLAR

Abdukadirova Barno¹, Raxmatov Izzat²

¹Toshkent tibbiyot akademiyasi "Biotibbiyot muxandisligi, informatika va biofizika" kafedrasida assistenti

E-mail:abdukadirovabarno863@gmail.com

²Toshkent tibbiyot akademiyasi "Davolash" fakulteti 1-bosqich talabasi

E-mail:izzatillaraxmatov680@gmail.com

Annotatsiya: Maqolada hozirgi kunda tibbiyot sohasini yanada rivojlantirishda axborot texnologiyalarini o'rni va sohaga kiritilayotgan yangiliklar haqida so'z yuritilgan. Tibbiyot sohasida axborot texnologiyalarini rivojlantirish orqali aholini tibbiy savodxonligini oshirish sohani yanada keng tadbiq etish eng asosiy vazifalardan biri hisoblanadi.

Kalit so'zlar: Axborot texnologiyalari, raqamli texnologiyalar, tibbiyot tizimi, tibbiy yordam kursatish, zamonaviy tajriba usullar.

РОЛЬ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В МЕДИЦИНЕ, ИННОВАЦИИ, ВНЕДРЯЕМЫЕ В СФЕРУ

Абдукадирова Барно Юсуфовна¹, Рахматов Иззат Саматович²

¹Ассистент кафедры "Биомедицинской инженерии, информатики и биофизики" Ташкентской медицинской академии

E-mail:abdukadirovabarno863@gmail.com