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## EXPERIENCE OF TELEMEDICAL CONSULTING IN CLINICAL PSYCHIATRY OF THE REPUBLIC OF KAZAKHSTAN

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### **Abstract**

**Introduction.** Telemedicine is a type of use of telecommunication technologies to provide remote medical advice. The most intensive development of teleconsultations began during the COVID-19 pandemic, when face-to-face consultations became difficult. Previously, the experience of teleconsultation in psychiatric practice has not been analyzed on the territory of the Republic of Kazakhstan.

**Aims.** For the first time, a study of the experience of telemedicine consultation was conducted at the “Republican Scientific and Practical Center for Mental Health” of the Ministry of Health of the Republic of Kazakhstan (RNPCPZ MOH RK), to improve the treatment and diagnostic service of a psychiatric profile.

**Materials and Methods.** 53 protocols of telemedicine calls from 13 regions of the country were studied. The socio-demographic and clinical indicators of patients who underwent telemedicine consultation were studied. Absolute numbers and percentages are given, average values and deviations are calculated using the Student's method.

**Results.** It was found that the number of online consultations increased annually and the vast majority of which were initial requests (n=48 - 90.6%). The age range of consulted patients ranged from 3 to 74 years, with a mean age of 26±3.6. The vast majority of those consulted were adolescents and young adults aged from 13 to 28 years with an average age of 19±3.4. The range of established diagnoses was quite wide and corresponded to mental disorders from the neurotic to the endogenous level. Along with this, the most common reason for contact was the question of verification of diagnosis and correction of therapy (n=39 - 73.6%).

**Conclusion.** A growing need for the development of remote consultation and the interest of regional doctors in telemedicine technologies have been identified.

**Key words:** telemedicine, telepsychiatry, digitalization in psychiatry.

**Introduction.** The rapid development of digital technologies is bringing significant changes to medical practice, increasing the accessibility and effectiveness of healthcare. Remote consultation and monitoring of patients using telemedicine (TM) optimizes workflow processes, reducing temporal and spatial barriers, improving the coordination of care. This is an important step towards a more accessible and flexible healthcare system. Globally, psychiatrists remain a scarce resource, with an average of approximately 1 in 100,000 people (ranging from 0.1 in low-income countries to 13 in high-income countries) [1]. According to

WHO, universal health coverage cannot be achieved without the support of e-health, as digitalization makes it possible to provide scalable solutions to many people, even in remote areas of the country [2].

In the context of the COVID-19 pandemic, the psychiatric service of the Republic of Kazakhstan was also faced with the need to quickly introduce teleconsultation into clinical practice for patients from remote regions of the country. Currently, TM is a worldwide trend with increasing relevance. Thus, for the first time in the Kazakhstan throughout, telemedicine consultations in clinical psychiatry began to be carried out. The purpose of our research is to study the experience of telemedicine consultation of the RNPCPZ, to improve the diagnostic and treatment services of a psychiatric profile.

**Materials and methods.** Video consultations (using the Zoom platform) were conducted on the basis of requests received by RNPCPZ from April 2021 to December 2023. Over the past period, a total of 53 meetings of the council were held with the participation of leading experts in the field of psychiatry of RNPCPZ, together with employees of the departments of medical universities in Almaty. Clinical and socio-demographic data of patients (age, region, reason and frequency of treatment, diagnosis) were studied. Due to strict adherence to medical ethics and protection of the rights of mentally ill patients, video consultations were carried out only after obtaining the informed voluntary written consent of the patient or his representatives to provide this type of assistance. Teleconsultations were carried out in real time, providing the opportunity for a full examination of the patient, with the participation of his attending physician, which is of great value for psychiatric practice.

**Results.** The analysis of telemedicine consultations distribution over the years is presented in Table 1.

**Table 1.** Distribution of the number of teleconsultations conducted per year over time

Year	Number of teleconsultations	Percentage ratio of the total number of teleconsultations over three years
2021	12	22,7%
2022	18	34%
2023	23	43,3%

As shown in Table 1, there is a clear trend of increasing the number of teleconsultations with each subsequent year, reaching 43.3% by 2023.

Table 2: Analysis of the distribution of telemedicine consultation requests by regions of the Republic of Kazakhstan

**Table 2.** Distribution of telemedicine consultation requests by regions of the Republic of Kazakhstan

The name of the region	Number of teleconsultations	The percentage ratio of the number to the total quantity of teleconsultations

Akmola region	11	20,7%
Aktobe region	3	5,7%
Atyrau region	2	3,8%
East Kazakhstan region	4	7,5%
Jambyl Region	1	1,9%
West-Kazakhstan region	5	9,4%
Karaganda region	2	3,8%
Kostanay region	6	11,3%
Kyzylorda Region	8	15,1%
Mangistau region	3	5,7%
Pavlodar region	2	3,8%
North-Kazakhstan region	2	3,8%
Turkestan region	4	7,5%

The data provided in Table 2 indicate that teleconsultations involve 13 regions, with the highest number of requests coming from Akmola region (11 - 20.7%), which can be explained by repeat consultations to assess the dynamics of clinical cases in that area. The lowest number of requests came from Jambyl region (1 - 1.9%). The majority of teleconsultations corresponded to primary consultations, accounting for 48 - 90.6%, while the proportion of repeat consultations was 5 - 9.4%.

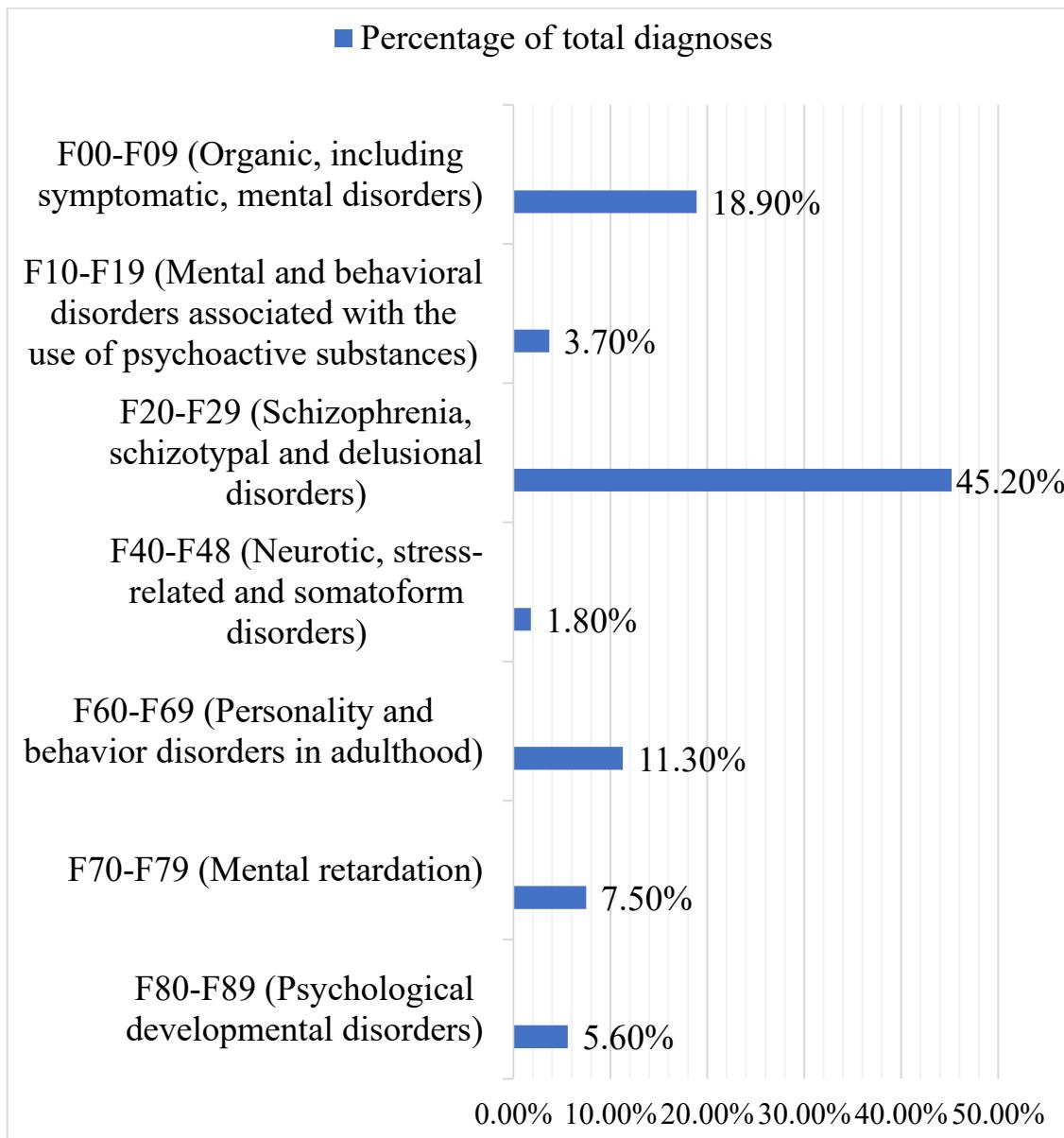
The age distribution of patients consulted in the teleconsultation format is presented in Table 3.

**Table 3.** Distribution of patients of telemedicine consultations by age groups

Patient age group	Quantity	Percentage of number of total number of teleconsultations
3-18 years old (under 18 years old)	20	37,7%
19-44 years old	21	39,7%
45-59 years old	7	13,2%
60 years and older	5	9,4%

As can be seen from Table 3, the age range of patients was quite wide, ranging from 3 to 74 years ( $26 \pm 3.6$ ). The largest number of patients consulted via telemedicine were in the age group of 19-44 years (21 – 39.7%), and the smallest number of patients were 60 years and older

(5 – 9.4%). Analysis of the reasons for teleconsultations showed that they were mainly related to clarifying the diagnosis and adjusting treatment, accounting for 39 - 73.6%. To a lesser extent, the reason was resolving disputed and conflict issues 14 - 26.4%. The distribution of patients by diagnosis according to ICD-10 is presented in Figure 1.



**Figure 1.** Distribution of diagnoses according to ICD-10 established in the result of teleconsultations to examined patients (%).

As shown in Figure 1, the most difficult category for physicians in diagnosing and selecting treatment is ICD-10 category F20 – F29 (schizophrenia, schizotypal and delusional disorders) - 25 – 45.2%.

Following the consultation, consultant physicians compile a consilium protocol and provide a conclusion to specialized regional healthcare institutions, indicating the established diagnosis and further recommendations for treatment and management of patients. In some cases, hospitalization at a specialized psychiatric hospital was recommended for further diagnostic and therapeutic interventions.

**Discussion.** The experience of using telemedicine technologies in other countries confirms that advisory work using TM significantly increases the possibility of early detection of mental disorders and individualization of diagnosis, and also ensures continuous medical support for patients. [3;4;5]. In addition, the use of TM in psychiatric practice can reduce the number of cases when patients require emergency care. In Ontario (Canada) from March 14, 2020 to September 30, 2020. A study was conducted in which 36,666 patients with chronic mental disorders (schizophrenia, schizoaffective disorder, psychotic disorder, etc.) took part. Participants were divided into two groups: telepsychiatry group and standard treatment group. The telemedicine group had a significantly greater reduction in emergency department visits compared with the standard care group (odds ratio = 0.98, 95% confidence interval = 0.98–0.99) [6].

An example of successful practical telemedicine activities is the project started in 2018 by the federal advisory center, organized on the basis of the Federal State Budgetary Institution "Federal State Budgetary Institution 'NMITS PN named after V.M. Bekhterev" of the Ministry of Health of Russia, providing online consultations in the profiles of "psychiatry" and "psychiatry-narcology". Doctors in remote regions of the country have a unique opportunity to quickly obtain a "second opinion" from a specialist working in a consultation center [7].

The results obtained in this study confirm existing literature data that teleconsultations are economically advantageous, as patients receive qualified assistance while remaining in their local areas, without the additional financial costs of transporting them to specialized centers. Additionally, expert specialists from the country can be involved in online consultation, making the conclusions reliable and valid, ultimately increasing the quality of psychiatric care provided with the selection of appropriate pathogenetic therapy in difficult, contentious clinical cases for the benefit of the patient.

As the results of our research have shown, psychiatrists in remote regional medical facilities require support in making clinical decisions regarding the diagnosis and treatment of patients with various diagnoses ranging from endogenous and organic spectrum disorders to substance use-related behavioral disorders.

It is important to understand that the correct diagnosis of mental disorders from the outset is the key to success in selecting further therapy, which, in turn, contributes to achieving sustained remission and improving the quality of life of the patient. However, the specifics of diagnosing psychiatric disorders and the lack of biological markers that accurately help establish a correct diagnosis should be taken into account. Thanks to the implementation of telemedicine technologies, treating physicians have a new possibility in verifying the diagnosis of complex cases - they have the opportunity to discuss with colleagues the patient management strategy and promptly receive additional opinions.

For many healthcare workers, teleconsultation in psychiatry represents a new way of interacting with patients and their families. It is necessary to further develop the technical base in remote regions and to develop the relevant skills and competences of psychiatrists to conduct online consultations [8].

Psychiatrists have the opportunity to consult with patients across the country, promoting fast and equal access to all parts of the republic. It was proven that telepsychiatry has the same level of effectiveness and results as face-to-face consultation and treatment, therefore, some experts point out that the improvement of telepsychiatry will be crucial in the future [9].

Thus, telepsychiatry expands access to high-quality medical care, despite the distance from specialized medical organizations, reducing hospitalization times and financial expenses for patient transportation [10].

Despite the fact that the study covers a short period of time and only considers cases from the Republican Scientific and Practical Center for Mental Health, this work has demonstrated

the relevance and success of implementing digital technologies in psychiatric practice. Additionally, the originality of the article lies in the fact that similar studies have not been previously conducted in the Republic of Kazakhstan. Given the trend toward increased use of digital technologies and telepsychiatry in particular, this study could serve as a starting point for research covering future time periods, compiling statistics on regional requests for teleconsultations, monitoring changes, expanding the implementation of telemedicine, and increasing access to psychiatric care while simultaneously improving its quality.

### **Conclusion**

1. Since 2021, the Republic of Kazakhstan has been successfully implementing a telemedicine consulting program in the field of psychiatry. During the conducted research, an increasing demand and interest of regional psychiatric services in conducting telemedicine-based consultations have been identified, which determines the need for further improvement of the methods of implementing modern information technologies in the clinical practice of the republic's psychiatric service.

2. The implementation of telemedicine consulting in the clinical practice of psychiatric services in the Republic of Kazakhstan significantly expands the opportunities for psychiatrists from remote regions of the country to seek assistance from leading experts in the field of psychiatry in solving complex diagnostic and controversial issues, thereby not only improving the quality of psychiatric care but also allowing psychiatrists to enhance their professional level without interrupting their main place of work.

### **Conflict of interest**

No conflicts of interest have been declared.

### **Authors' contributions**

Concept development - Yeshimbetova S.Z., Raspopova N.I., Sarsembayev K.T., Logacheva N.N., Kokshinova O.Y., Struchkova D.Y., Zapunidi K.S., Zimukova R.I., Serikova E.Z.

Execution - Struchkova D.Y., Zapunidi K.S., Zimukova R.I., Serikova E.Z.

Processing of results - Struchkova D.Y., Zapunidi K.S.

Scientific interpretation of the results - Yeshimbetova S.Z., Raspopova N.I., Struchkova D.Y., Zapunidi K.S.

Article writing - Yeshimbetova S.Z., Raspopova N.I., Struchkova D.Y., Zapunidi K.S.

This material has not been previously submitted for publication in other publications and is not under consideration by other publishers

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### **REFERENCES**

1. Carl B Roth , Andreas Papassotiropoulos , Annette B Brühl , Undine E Lang , Christian G Huber. Psychiatry in the Digital Age: A Blessing or a Curse? // Int J Environ Res Public Health. 2021 Aug 5;18(16):8302. DOI: 10.3390/ijerph18168302
2. World Health Organization. Global Diffusion of eHealth: Making Universal Health Coverage Achievable, Report of the Third Global Survey on eHealth // World Health Organization: Geneva, Switzerland, 2016.
3. Aboujaoude E., Salame W., Naim L. Telemental health: A status update // World Psychiatry. 2015. Vol. 14(2). P. 223–230.
4. Bobrov A.E. The outlook for psychiatry in the age of informatization // Int. J. Culture Mental Health. 2018. Vol. 11. N 1. P. 17–26.
5. Hubley S., Lynch S., Schneck C., Thomas M., Shore J. Review of key telepsychiatry outcomes // World J. Psychiatry. 2016. Vol. 6 (2). P. 269–282.

6. Shakeri A., Chu C., Stamenova V., Fang J., Barker L.C., Vigod S.N., Bhatia R.S., Tadrous M. Comparison of Healthcare Utilization Between Telemedicine and Standard Care: A Propensity-Score Matched Cohort Study Among Individuals with Chronic Psychotic Disorders in Ontario Canada // *Schizophrenia bulletin open*. 2022; 3(1).
7. Скрипов В.С., Чехонадский И.И., Кочорова Л.В., Шведова А.А., Семенова Н.В. Результаты взаимодействия с региональными службами в рамках телемедицинских консультаций по психиатрии и наркологии // Обозрение психиатрии и медицинской психологии имени В.М.Бехтерева. 2019. № 3. С. 73–77.  
Skripov V.S., Chehonadskij I.I., Kochorova L.V., Shvedova A.A., Semenova N.V. Rezultaty vzaimodejstviya s regionalnymi sluzhbami v ramkah telemedicinskikh konsultacij po psihiatrii i narkologii // Obozrenie psihiatrii i medicinskoj psihologii imeni V.M.Behtereva. 2019. № 3. S. 73–77.
8. Damodharan Dinakaran, Chethan Basavarajappa, Narayana Manjunatha, Channaveerachari Naveen Kumar, Suresh Bada Math. Telemedicine Practice Guidelines and Telepsychiatry Operational Guidelines, India-A Commentary // Indian J Psychol Med. 2020 Sep 25;42(5 Suppl):1S-3S. doi: 10.1177/0253717620958382
9. Luis Gutiérrez-Rojas, Miguel A Alvarez-Mon, Álvaro Andreu-Bernabeu, Luis Capitán, Carlos de Las Cuevas, Juan Carlos Gómez, Iria Grande, Diego Hidalgo-Mazzei, Raimundo Mateos, Pedro Moreno-Gea, Tomás De Vicente-Muñoz, Francisco Ferre. Telepsychiatry: The future is already present // Span J Psychiatry Ment Health. 2023 Jan-Mar;16(1):51-57. doi: 10.1016/j.rpsm.2022.09.001. Epub 2022 Sep 9.
10. Быкова М.А., Барановская С.В., Бойков В.А., Деев И.А., Кобякова О.С., Сиротина А.С., Шибалков И.П. Телемедицина в психиатрии: мировой и отечественный опыт // Социальные аспекты здоровья населения. 2023;69(3). DOI: 10.21045/2071-5021-2023-69-3-1  
Bykova M.A., Baranovskaya S.V., Bojkov V.A., Deev I.A., Kobyakova O.S., Sirotina A.S., Shibalkov I.P. Telemedicina v psihiatrii: mirovoj i otechestvennyj opyt // Socialnye aspekty zdorovya naseleniya. 2023;69(3). DOI: 10.21045/2071-5021-2023-69-3-1

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## **ОПЫТ ТЕЛЕМЕДИЦИНСКОГО КОНСУЛЬТИРОВАНИЯ В КЛИНИЧЕСКОЙ ПСИХИАТРИИ РЕСПУБЛИКИ КАЗАХСТАН**

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### **Аннотация**

**Введение.** Телемедицина – это вид использования телекоммуникационных технологий для оказания дистанционной консультативной медицинской помощи. (В Казахстане?) интенсивное развитие началось в период пандемии COVID-19, когда очное консультирование стало затруднительным. Раннее на территории Республики Казахстан не был проанализирован опыт телеконсультирования в психиатрической практике.

**Цель исследования.** Впервые проведено изучение опыта телемедицинского консультирования в «Республиканском научно-практическом центре психического здоровья» Министерства Здравоохранения Республики Казахстан (РНПЦПЗ МЗ РК), для совершенствования лечебно-диагностической службы психиатрического профиля.

**Материалы и методы.** Исследовано 53 протокола телемедицинских обращений из 13 областей страны. Изучению подвергнуты клинические и социально-демографические показатели пациентов, прошедших телемедицинское консультирование. Статистический

анализ проведен сплошным методом, рассчитаны экстенсивные и интенсивные показатели, средние величины по методике Стюдента

**Результаты.** Установлено, что количество онлайн консультаций ежегодно возрастало и подавляющее большинство которых составили первичные обращения (n=48 - 90,6%). Возрастной диапазон консультированных пациентов варьировал от 3-х до 74 лет, со средним возрастом  $26\pm3,6$ . Превалирующее большинство консультированных лиц соответствовали подростковому и молодому возрасту от 13 до 28 лет со средним возрастом  $19\pm3,4$ . Диапазон установленных диагнозов был достаточно широк и соответствовал расстройствам психической сферы от невротического до эндогенного уровня. Наряду с этим наиболее частым поводом для обращения являлся вопрос о верификации диагноза и коррекции терапии (n=39 - 73,6%).

**Выводы.** Выявлена нарастающая потребность в развитии дистанционного консультирования и заинтересованность региональных врачей к телемедицинским технологиям.

**Ключевые слова:** телемедицина, телепсихиатрия, цифровизация в психиатрии.

## ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ КЛИНИКАЛЫҚ ПСИХИАТРИЯДА ТЕЛЕМЕДИЦИНАЛЫҚ КОНСУЛЬТАЦИЯЛАР ТӘЖІРИБЕСІ

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### Түйіндеме

**Кіріспе.** Телемедицина – бұл телекоммуникациялық технологияларды пайдалану арқылы қашықтықтан медициналық кеңес беру түрі. Қазақстанда телемедицина пандемия кезіндегі COVID-19 кезінде қарқынды дамыды, себебі бетпе-бет кеңес беру қыындық туғызды. Республика аумағында психиатриялық практикада телекеңес беру тәжірибесі бұрын-соңды зерттелмеген.

**Зерттеу мақсаты.** Қазақстан Республикасы Денсаулық сақтау министрлігінің «Республикалық ғылыми-практикалық психикалық денсаулық орталығында» (РҒППДО) телемедициналық кеңес беру тәжірибесін алғаш рет зерттеу арқылы психиатриялық бағыттағы емдеу-диагностикалық қызметті жетілдіру.

**Материалдар мен әдістер.** Зерттеу барысында 13 облыстан 53 телемедициналық өтініштің хаттамалары қарастырылды. Телемедициналық кеңес алған пациенттердің клиникалық және әлеуметтік-демографиялық көрсеткіштері зерттелді. Статистикалық талдау толық әдіс бойынша жүргізілді, экстенсивті және интенсивті көрсеткіштер, сондай-ақ Стюдент әдістемесі бойынша орташа мәндер есептелді.

**Нәтижелер.** Онлайн консультациялардың саны жыл сайын өсіп отырды, және олардың басым көпшілігі бастапқы өтініштерді құрады (n=48 - 90,6%). Кеңес алған пациенттердің жасы 3-тен 74 жасқа дейін өзгеріп отырды, орташа жасы  $26\pm3,6$ . Кеңес алғандардың басым бөлігі 13-тен 28 жасқа дейінгі жасөспірімдер мен жастар болды,

ортаса жасы  $19\pm3,4$ . Қойылған диагноздардың диапазоны кең болды және невротикалықтан эндогенді деңгейге дейінгі психикалық ауытқуларды қамтыды. Сонымен қатар, ең жиі кездескен себеп – диагнозды тексеру және терапияны түзету сұрағы болды ( $n=39$  - 73,6%).

**Корытындылар.** Қашықтықтан кеңес беруді дамытуға және аймақтық дәрігерлердің телемедицина технологияларына деген қызығушылығын арттыру қажеттілігі анықталды.

**Түйінді сөздер:** телемедицина, телепсихиатрия, психиатриядағы цифrlандыру.