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International legal regulation of telemedicine services in the context of digital healthcare transformation

The purpose of this study is to provide a comprehensive analysis of international legal mechanisms regulating telemedicine services in the context of the digital transformation of healthcare systems. In recent years, the rapid development of digital technologies, artificial intelligence, cross-border exchange of medical data, and remote healthcare platforms has significantly expanded access to medical services. At the same time, these processes have generated complex legal challenges related to jurisdiction, licensing, liability, cybersecurity, personal data protection, and digital sovereignty. The study employs doctrinal legal analysis, comparative legal analysis, document analysis, and content analysis. International and regional legal frameworks governing telemedicine are examined, including the activities and recommendations of the World Health Organization, international human rights instruments, the legal frameworks of the World Trade Organization, the European Union's General Data Protection Regulation (GDPR), and Convention 108+. The findings demonstrate the fragmented and inconsistent nature of the international legal regulation of telemedicine, significant regulatory asymmetries among states, and legal gaps related to cross-border healthcare services and the protection of medical data. The study concludes that there is a need to establish a coordinated international legal framework for telemedicine regulation capable of ensuring a balance between technological innovation, the protection of patients' rights, and the preservation of states' digital sovereignty.

Keywords: telemedicine, international health law, digital healthcare transformation, cross-border medical services, right to health.

Introduction

The integration of digital technologies into healthcare systems is increasingly reflected in major universal and regional international legal instruments aimed at ensuring and protecting fundamental human rights. The right to health, as enshrined in Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), obliges States to ensure access to quality medical care and to take necessary steps for the development of healthcare systems, including the use of modern health technologies.

The Committee on Economic, Social and Cultural Rights, in its General Comment No. 14 (2000), further clarified that the right to health comprises several interrelated and essential elements, including availability, accessibility, acceptability, and quality of healthcare services. Importantly, accessibility encompasses the right of individuals to seek, receive, and impart information concerning health issues, including through information technologies [1]. At the same time, the Committee emphasized that the exercise of this right must respect the confidentiality of personal health information, thereby linking the right to health with the right to privacy and data protection.

In the era of globalization, the rapid expansion of information and telecommunication technologies has prompted the development and ratification of numerous international instruments regulating their use across various sectors, including healthcare. The World Health Organization (WHO) has repeatedly underlined the importance of establishing an appropriate legal framework for telemedicine, recognizing legal regulation as one of the key factors for its sustainable development. Scholars such as Marinelli, Basile, and Zaami note that WHO consistently stresses that effective normative regulation is essential for the safe and responsible implementation of telemedicine services [2].

At the doctrinal level, legal scholars also emphasize the challenges associated with digital transformation in healthcare. According to N.E. Gafurova, digitalization of medicine implies the systematic introduction of modern information technologies into all areas of healthcare. However, this process is accompanied by significant legal risks, including unlawful dissemination of patients' personal data, violations of fundamental human rights, and insufficient legislative safeguards ensuring confidentiality of medical infor-

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mation. These challenges highlight the necessity of strengthening and modernizing the legal framework governing digital health.

The international recognition of health technologies as a component of human development and security has evolved over decades. The 1986 UN Declaration on the Right to Development emphasized the obligation of states to promote social progress, including the development of healthcare systems, through the effective use of available resources. Subsequently, the 1994 United Nations Development Programme report on New Dimensions of Human Security identified health technologies as an essential element of health and human security. The Millennium Development Goals adopted in 2000 further reinforced the importance of technological advancement in achieving global health objectives [3].

Historically, international cooperation in health regulation predates the establishment of WHO. In 1923, the Health Organization of the League of Nations was created, laying the institutional foundation for modern international health governance. This organization contributed to the development of statistical methods for disease monitoring and advanced international public health practices, thereby influencing subsequent global health institutions.

Today, alongside WHO, numerous international non-governmental organizations play a significant role in shaping medical law and digital health governance. Among them are the World Medical Association (1947), the World Association of Medical Law (1967), and the International Association of Bioethics (1992). These organizations facilitate international congresses and conferences addressing legislative development, ethical standards, digitalization of healthcare, and the regulation of emerging medical technologies [4].

At the normative level, the World Health Assembly adopted Resolution WHA58.28 (2005) on eHealth, calling upon Member States to develop long-term strategies for the digitalization of healthcare systems and the implementation of e-medicine. Later, Resolution WHA66.24 (2013) emphasized the need for interoperability standards, technical harmonization, and the establishment of legislative and regulatory mechanisms to ensure effective governance of eHealth systems [5].

The purpose of this research is to analyze the international legal regulation of telemedicine services in the context of digital healthcare transformation and to identify the main legal challenges associated with cross-border digital medical services.

The objectives of the research are:

- to examine international legal instruments regulating telemedicine services;
- to analyze the role of international organizations and regional legal frameworks in digital health governance;
- to identify legal problems related to jurisdiction, liability, data protection and cybersecurity in telemedicine;
- to conduct a comparative legal analysis of foreign approaches to telemedicine regulation;
- to develop proposals aimed at improving international legal mechanisms governing telemedicine services.

Methods and Materials

The research is based on a comprehensive methodological approach that integrates doctrinal legal analysis, comparative legal analysis, document analysis, and content analysis. The doctrinal analysis focuses on examining international legal instruments regulating the right to health, digital healthcare, and telemedicine services. In particular, the study analyzes the provisions of the International Covenant on Economic, Social and Cultural Rights, relevant General Comments of the UN Committee on Economic, Social and Cultural Rights, World Health Organization (WHO) resolutions on eHealth, and other universal and regional normative documents governing digital health and cross-border medical services. Special attention is given to international data protection frameworks, including regional legal regimes such as the European Union's GDPR and Convention 108+. Comparative legal analysis is conducted to evaluate different regulatory approaches to telemedicine in selected jurisdictions, including the European Union, the United States, and other states with advanced digital healthcare systems [6]. This method allows for the identification of regulatory divergences, best practices, and mechanisms of harmonization in cross-border telemedicine governance. Document analysis includes the examination of academic publications, reports of international organizations (WHO, UN bodies, OECD), policy documents, strategic digital health programs, and materials from international conferences addressing telemedicine and digital health transformation. Content analysis is applied to study expert discussions, policy statements, and analytical materials concerning digital healthcare transformation, telemedicine regulation, and cross-border medical data protection. This approach enables the identification of prevailing trends, legal gaps, and emerging regulatory challenges. The research materials consist

of international legal acts, regional regulations, national legislation, academic literature, institutional reports, and analytical publications. The integrated use of these methods ensures an objective and systematic assessment of the international legal regulation of telemedicine services and allows for the formulation of evidence-based recommendations aimed at improving regulatory coherence, strengthening patient rights protection, and enhancing legal mechanisms in the context of digital healthcare transformation.

Results

The analysis of international legal instruments, institutional mechanisms, and strategic policy documents demonstrates that the digital transformation of healthcare and the expansion of telemedicine services have been consistently recognized at the international level as essential components of sustainable development, human security, and the realization of the right to health. However, the research reveals a significant fragmentation of regulatory approaches and the absence of a unified international legal mechanism governing telemedicine.

The study confirms that the World Health Organization (WHO) has played a leading normative and strategic role in promoting digital health governance. Through a series of resolutions adopted by the World Health Assembly (WHA58.28 (2005), WHA66.24 (2013), WHA71.7 (2018), WHA73.28 (2020)), as well as the Global Strategy on Digital Health 2020–2025, WHO has established strategic priorities for digital health transformation, emphasizing interoperability, data protection, patient safety, and national legislative development. Nevertheless, these instruments remain primarily programmatic and recommendatory in nature, lacking binding legal force [7].

Empirical findings from the WHO Global Observatory on eHealth indicate substantial disparities among states in terms of telemedicine infrastructure, regulatory capacity, and institutional support. Only approximately 30 % of countries have established dedicated telemedicine development agencies, while half of the surveyed states lack formal structures in this field. Major obstacles include insufficient infrastructure, limited financial and technical resources, shortage of qualified personnel, and inadequate legal regulation of data privacy and cross-border medical liability.

The research further establishes that, although telemedicine-related provisions appear in various international documents—such as the International Covenant on Economic, Social and Cultural Rights (Article 12), the Universal Declaration of Human Rights (Articles 19 and 25), International Labour Organization conventions, and EU Directive 2011/24/EU on cross-border healthcare—these norms regulate specific aspects of health rights and information access rather than telemedicine as an autonomous legal phenomenon [8].

Regional developments, particularly within the European Union, demonstrate a more structured regulatory approach. Directive 2011/24/EU establishes patient rights in cross-border healthcare, including telemedicine services, and outlines obligations related to information transparency, compensation mechanisms, and cooperation among member states. Similarly, the WHO European Regional Digital Health Action Plans (2023–2030) promote human rights-based digital governance and regulatory harmonization. However, these mechanisms remain regionally limited and do not provide universal applicability [9].

The analysis of ITU initiatives confirms the growing technical dimension of digital health governance. Through multiple resolutions and strategic plans, ITU has promoted the development of telecommunications infrastructure and standards necessary for telemedicine. Yet, coordination between technical standardization and legal regulation remains insufficiently institutionalized at the global level.

Overall, the results indicate that while strategic frameworks and policy initiatives supporting telemedicine development are widely established, a comprehensive and binding international legal mechanism regulating cross-border telemedicine services does not currently exist within the United Nations system. This regulatory gap creates potential risks related to jurisdictional conflicts, professional liability, digital sovereignty, patient data protection, and unequal access to digital health technologies.

The findings substantiate the need for the development of an institutionalized international mechanism within the UN framework, potentially under the supervision of the Committee on Economic, Social and Cultural Rights, aimed at harmonizing telemedicine regulation, consolidating existing WHO and ITU standards, and ensuring effective protection of patients' rights in the digital healthcare environment.

Discussion

The findings of this study demonstrate that the international legal regulation of telemedicine remains structurally fragmented despite the growing global recognition of digital health as a strategic priority. While numerous international and regional instruments acknowledge the importance of digital technologies in

healthcare, they primarily address telemedicine indirectly through broader frameworks related to the right to health, digital governance, data protection, or telecommunications development. This normative dispersion creates legal uncertainty, particularly in cross-border contexts.

One of the key issues identified is the absence of a binding universal legal instrument specifically regulating telemedicine services. Although WHO resolutions, ITU strategic initiatives, and UN human rights documents provide important policy guidance, their largely recommendatory nature limits enforceability and uniform implementation. As a result, states have developed telemedicine regulation at different speeds and with varying degrees of legal sophistication, leading to regulatory asymmetry [10].

The comparative analysis of national approaches reveals both convergence and divergence in regulatory models. Countries such as France demonstrate a structured legal framework that clearly defines telemedicine services, establishes professional responsibilities, integrates financing mechanisms through health insurance systems, and ensures quality control through accreditation procedures. In contrast, other jurisdictions focus primarily on technological deployment without sufficiently addressing liability standards, professional certification, or cross-border data governance. This disparity illustrates the tension between technological innovation and normative preparedness.

Another critical aspect concerns data protection and digital sovereignty. Telemedicine inherently involves the cross-border transfer and processing of sensitive health data, raising concerns related to privacy, cybersecurity, and jurisdictional competence. While regional regimes such as the GDPR provide advanced standards for personal data protection, their extraterritorial application does not resolve global fragmentation. The absence of harmonized international standards may create conflicts of laws and undermine trust in digital health systems.

Furthermore, the discussion highlights that telemedicine should not be viewed merely as a technological tool but as a transformation of healthcare delivery models. Its effective implementation requires not only infrastructure and legal frameworks but also institutional capacity, professional training, ethical regulation, and sustainable financing mechanisms. The experience of the COVID-19 pandemic demonstrated the potential of telemedicine to ensure continuity of care; however, emergency-driven expansion often preceded comprehensive legal regulation, exposing systemic vulnerabilities.

The study also confirms that telemedicine governance intersects with fundamental human rights, particularly the right to health and the right to privacy. Balancing accessibility of digital medical services with confidentiality of personal health information remains a central normative challenge. In this regard, the development of a coordinated international mechanism could strengthen coherence among existing WHO, ITU, and human rights standards.

Overall, the discussion supports the argument that the future of telemedicine regulation requires a multi-level approach: strengthening national legislation, enhancing regional harmonization, and advancing institutional coordination at the universal level. Establishing a specialized international platform or auxiliary body within the UN system dedicated to digital health governance could contribute to consolidating standards, promoting best practices, and reducing regulatory fragmentation.

Modern information technologies today are primarily aimed at ensuring the integration of digital solutions across all sectors, increasing the speed of processes, and improving the efficiency of management systems. Healthcare is no exception: modern medicine is gradually transforming into a leading economic and social sector, driven by the growing demand for qualified specialists, the increasing volume of patient health information exchange, and the necessity of continuous professional development of medical personnel. In this context, digitalization and the use of information and telecommunication technologies (ICT) are viewed not merely as technical modernization, but as a structural transformation that affects the entire healthcare governance system.

In many countries, the application of ICT in healthcare initially emerged in general digitalization policy documents, where the main goals and tasks of modernization were defined. Subsequently, these approaches developed into national strategies and sectoral programs specifically aimed at digital health and telemedicine. For instance, Australia's national digital health strategy envisaged the creation of secure interaction channels between doctors and patients by 2022, while the United States developed a dedicated information technology strategy in 2014 through the Department of Health and Human Services. Scholarly research also supports this trend, emphasizing that states typically begin with broad digital transformation frameworks and later establish specialized strategic directions for digital healthcare and telemedicine development.

At the beginning of the 21st century, multiple foreign states initiated large-scale projects for introducing digital solutions into healthcare to enhance service accessibility and system efficiency. In the United Kingdom, for example, projects aimed at electronic health infrastructure were launched, reflecting the policy-

driven nature of digital health reforms. However, researchers and practitioners consistently point out that the implementation of e-health projects often faces systemic barriers. One of the most frequently cited issues is the complexity of creating standardized, interoperable solutions across medical organizations. This challenge has been particularly highlighted in the Russian Federation, where experts identify the difficulty of building unified medical digital standards as a persistent structural problem.

From a broader analytical perspective, the effective implementation of telemedicine is often limited by several interconnected factors: insufficient Internet coverage or poor network quality, inadequate digital competencies among medical personnel, and the lack of sufficiently developed international and national regulatory frameworks. In this regard, telemedicine is not only a technological innovation but also a phenomenon that requires coherent legal and institutional support.

Historically, the earliest telemedicine initiatives can be traced back to the United States, where attention was directed toward digital healthcare modernization as early as the 1970s. At that stage, two major practical needs dominated: first, the systematization and secure storage of patient information through data management systems in medical institutions; second, the delivery of medical support to individuals in situations where traditional access to healthcare was difficult—such as military personnel, sailors, astronauts, or residents of remote regions. Although these foundational objectives shaped telemedicine development, regulatory issues regarding legal responsibility, quality control, and patient rights remain open in many jurisdictions to this day [11].

Among foreign models, France is frequently cited as one of the most institutionally developed examples of telemedicine regulation. Telemedicine was introduced into the French healthcare system in 2009, and for the first time its legal definition was established in Law No. 2009-879 of 21 July 2009 (loi HPST). Under Article 6316, telemedicine is defined as the provision of remote medical care through information technologies, covering remote medical services conducted either between medical professionals or between a medical professional and a patient. French regulation also emphasizes that telemedicine, as a medical service, must comply with professional ethics and is provided under the supervision and legal responsibility of a doctor [12].

Nevertheless, France's experience demonstrates that the existence of legal definitions alone does not guarantee immediate implementation. For nearly a decade, telemedicine expansion faced practical delays, largely due to insufficient regulation of social security mechanisms and financing models. This gap was partially addressed in 2017 through the Social Security Financing Law, which introduced coverage of telemedicine and teleconsultation costs under the Assurance Maladie health insurance system. Later amendments broadened the scope to include telemonitoring services. In 2019, the French Public Health Code introduced additional concepts such as *télésanté* and *télésoin*, integrating telemedicine into broader telehealth governance. French law also established key operational requirements, including the principle that the first medical examination should generally occur in person, while follow-up monitoring and consultations may be conducted remotely—subject to exceptions such as emergencies or vulnerable patient categories.

An important structural aspect of the French model is the differentiation of healthcare professionals and the determination of which categories may provide telehealth services. Moreover, French law outlines multiple telemedicine service forms, including teleconsultation, telemonitoring, teleexpertise, telemedical assistance, and emergency telecare. Special procedural guarantees are imposed on telemedicine providers, such as compliance with national health authority guidance, periodic certification, accurate recordkeeping in electronic medical files, and patient instruction on technology use. A notable regulatory mechanism introduced in 2023 requires annual accreditation of private institutions providing teleconsultation services by the Haute Autorité de Santé (HAS), with the objective of ensuring quality standards and compliance [13].

The Russian Federation represents another significant case of telemedicine development, where the concept was initially formulated in 2001 and incorporated into broader healthcare digitalization approaches, including teleconsultations, telemonitoring, internet-based medical platforms, and remote professional training [14]. In 2017, legislative amendments formally introduced “telemedicine technologies” into healthcare regulation and distinguished two main digitalization tracks: remote medical assistance (teleconsultation and monitoring) and electronic medical documentation (electronic records and e-prescriptions). The Russian model generally permits doctor-to-doctor and doctor-to-patient interactions; however, restrictions remain in place regarding remote diagnosis without an initial in-person examination. During the COVID-19 pandemic, Russia expanded telemedicine through specific ministerial orders, enabling outpatient support for patients via audio/video communication and smartphone applications, relying heavily on electronic patient records [15].

Despite the progress, several obstacles continue to hinder telemedicine development in Russia and similar jurisdictions: insufficient funding for medical equipment, gaps in training and digital education for medi-

cal staff, limited Internet access in remote areas, and unclear legal status and liability frameworks for telemedicine consultants. These challenges confirm that telemedicine legal regulation is an evolving process requiring continuous improvement and institutional capacity-building [16].

Beyond these examples, many other states have also adopted telemedicine-related norms. Armenia recognized telemedicine as a form of medical care in legislation, Belarus implemented digital health reforms through national digital programs and presidential decrees, and Kazakhstan established a more structured approach through its 2020 Code on Public Health and the Healthcare System.

The experience of the Republic of Kazakhstan is of particular scholarly interest, as the legal regulation of telemedicine and digital healthcare in Kazakhstan has evolved in close connection with reforms of legislation governing public health, medical services, and personal data protection. Within Kazakh legal doctrine, medical services are regarded not only as an element of the healthcare system but also as an independent civil-law category that is significant for determining patients' rights, the obligations of medical organizations, and the scope of liability of healthcare providers. In particular, M.Yu. Prudnikova examines medical services as a civil-law category, which makes it possible to analyze telemedicine services through the prism of contractual obligations, quality of services, informed patient consent, and the civil liability of medical institutions [17].

Furthermore demonstrate that the digital transformation of law requires careful consideration of the risks associated with algorithmic transparency, personal data protection, cybersecurity, and the preservation of meaningful human control over digital technologies [18]. These findings are directly relevant to telemedicine, as the remote provision of healthcare services involves the processing of sensitive medical data, the use of digital platforms and artificial intelligence, as well as the cross-border exchange of information. In this regard, the Kazakh scholarly approach confirms the necessity of developing a comprehensive legal framework for telemedicine that integrates the norms of medical, civil, information, and international law.

Overall, the comparative analysis of foreign regulatory models demonstrates that effective telemedicine governance depends on several essential components: strategic planning through national digital health strategies, legal formalization of key concepts and definitions, protection of patient personal data, establishment of interaction models (doctor–patient and doctor–doctor), implementation of secure electronic medical records, financing mechanisms (especially through insurance systems), continuous training of medical personnel, and the development of infrastructure, particularly Internet coverage and reliable digital platforms [19].

In light of the above, and considering the social significance of telemedicine, the Republic of Uzbekistan should intensify the development of telemedicine legal regulation by systematically incorporating international and comparative experience. Based on this approach, an authorial definition of telemedicine can be proposed as follows: telemedicine is a type of remote medical service that includes diagnosing patients, providing consultations, and monitoring their health condition remotely, while relying on information and communication technology systems that support disease prevention, health strengthening, protection of public health, medical education, and scientific and medical research.

Conclusions

The conducted research confirms that the digital transformation of healthcare systems and the rapid expansion of telemedicine services represent a structural and irreversible stage in the evolution of global health governance. Telemedicine has evolved from an auxiliary technological instrument into a strategic component of national healthcare systems, enhancing accessibility, continuity of care, and operational efficiency. At the same time, its cross-border and data-driven nature generates complex legal challenges that require coordinated and harmonized international regulation.

The analysis demonstrates that, despite the strong normative foundation of the right to health under Article 12 of the International Covenant on Economic, Social and Cultural Rights and related interpretative instruments, a comprehensive and binding universal legal framework specifically regulating telemedicine services has not yet been established. Existing international mechanisms—primarily within the framework of the WHO, ITU, and regional regimes such as the European Union—provide valuable strategic guidance but remain fragmented and predominantly recommendatory. This regulatory asymmetry creates risks related to jurisdictional uncertainty, professional liability, digital sovereignty, and protection of patients' personal data.

Comparative legal experience shows that effective telemedicine governance depends on a combination of clearly defined legal concepts, standardized professional responsibility rules, data protection guarantees, financing mechanisms (especially insurance-based models), interoperability standards, and institutional supervision. The integration of telemedicine into national healthcare systems must therefore be accompanied

by comprehensive legislative modernization, capacity-building, and technological infrastructure development.

From the perspective of the Republic of Uzbekistan, digital transformation of the healthcare sector has been recognized as a strategic priority within broader state programs on digital development and public service modernization. The gradual implementation of electronic medical records, teleconsultation mechanisms, and digital public service platforms demonstrates Uzbekistan's commitment to advancing digital healthcare infrastructure. However, the legal framework regulating telemedicine remains in the formative stage and requires further systematic development. In particular, it is necessary to:

- legally define telemedicine and its categories in sectoral legislation;
- establish clear rules concerning professional liability in remote medical services;
- strengthen mechanisms for protection of medical data and cross-border data transfer;
- introduce accreditation and quality-control procedures for telemedicine providers;
- ensure interoperability of digital health systems and integration with public e-governance platforms.

To implement these objectives in the Republic of Uzbekistan, it is advisable to introduce a separate chapter on telemedicine into the Law of the Republic of Uzbekistan “On Public Health Protection” or adopt a special law regulating telemedicine services. Such legislation should define the legal status of telemedicine providers, establish the classification of telemedicine services, determine accreditation requirements, and regulate professional liability issues.

Accreditation of telemedicine providers could be entrusted to the Ministry of Health of the Republic of Uzbekistan, while quality control and compliance monitoring could be carried out by the State Inspectorate for Quality Control in Healthcare. Such an approach would ensure uniform standards of medical care, cybersecurity and personal data protection.

Particular attention should be paid to the allocation of liability among participants in telemedicine relations. Professional liability for diagnostic and treatment errors should primarily rest with the healthcare professional and the medical institution providing medical services. At the same time, digital platforms should bear responsibility for technical failures, unauthorized disclosure of medical data, cybersecurity breaches, and interruptions in the functioning of telemedicine systems.

Comparative analysis demonstrates that the French model of telemedicine regulation appears to be the most suitable for adaptation in Uzbekistan. France has established a comprehensive framework combining legal definitions, accreditation procedures, quality-control mechanisms, integration with the health insurance system, and clear rules of professional responsibility. These elements could be gradually incorporated into the Uzbek healthcare system while taking into account national legal and institutional particularities.

Taking into account international best practices and Uzbekistan's ongoing digital reforms, the development of a coherent national telemedicine framework should be aligned with international standards while reflecting domestic legal and institutional realities. In this regard, Uzbekistan may benefit from adopting human rights-based approach to digital health governance, ensuring that the right to health, privacy, and data protection are balanced with technological innovation and public interest considerations.

At the universal level, the establishment of a coordinated international mechanism under the UN system—potentially through enhanced cooperation between WHO, ITU, and human rights bodies—would contribute to reducing regulatory fragmentation and promoting harmonized standards for cross-border telemedicine services. Uzbekistan, as an active participant in international legal cooperation, could contribute to and benefit from such initiatives by aligning national reforms with emerging global standards.

Ultimately, the future of telemedicine regulation lies in balancing innovation with legal certainty, accessibility with data security, and technological progress with the protection of fundamental human rights. The creation of an integrated, multilevel regulatory framework—combining national legislative reform, regional harmonization, and strengthened international coordination—will ensure that telemedicine serves as a sustainable and rights-oriented instrument of global digital healthcare transformation.

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Ф. Юсупова

Денсаулық сақтау жүйесін цифрлық трансформациялау жағдайындағы телемедициналық қызметтерді халықаралық-құқықтық реттеу

Зерттеудің мақсаты — денсаулық сақтау жүйесінің цифрлық трансформациясы жағдайында телемедициналық қызметтерді халықаралық-құқықтық реттеу тетіктерін кешенді талдау. Соңғы жылдары цифрлық технологиялардың, жасанды интеллект пен медициналық деректердің трансшекаралық алмасуының және қашықтықтан медициналық платформалардың қарқынды дамуы медициналық көмекке қолжетімділікті біршама кеңейтті. Сонымен қатар бұл салада юрисдикция, лицензиялау, кәсіби жауапкершілік, киберқауіпсіздік, дербес деректерді қорғау және цифрлық егемендік мәселелеріне қатысты күрделі құқықтық тәуекелдер қалыптасты. Зерттеуде доктриналық

және салыстырмалы-құқықтық талдау, құжаттарды зерттеу және контент-талдау әдістері қолданылды. Телемедицинаны реттейтін халықаралық және өңірлік құқықтық құралдар, соның ішінде Дүниежүзілік денсаулық сақтау ұйымының ұсынымдары, адам құқықтары жөніндегі халықаралық актілер, Дүниежүзілік сауда ұйымының нормалары, Еуропалық одақтың GDPR ережесі және 108+ Конвенциясы қарастырылды. Зерттеу нәтижелері телемедицинаны халықаралық деңгейде құқықтық реттеудің фрагментарлығын, мемлекеттер арасындағы реттеушілік асимметрияны және медициналық деректерді қорғауға қатысты құқықтық олқылықтарды анықтады. Қорытындыда телемедицинаны реттеудің халықаралық деңгейде үйлестірілген құқықтық жүйесін қалыптастыру қажеттілігі негізделді. Мұндай жүйе технологиялық инновациялар, пациенттердің құқықтарын қорғау және мемлекеттің цифрлық егемендігі арасындағы тепе-теңдікті қамтамасыз етуге бағытталуы тиіс.

Кілт сөздер: телемедицина, халықаралық медициналық құқық, денсаулық сақтауды цифрлық трансформациялау, трансшекаралық медициналық қызметтер, денсаулық сақтау құқығы.

Ф. Юсупова

Международно-правовое регулирование телемедицинских услуг в условиях цифровой трансформации системы здравоохранения

Цель исследования заключается в комплексном анализе международно-правовых механизмов регулирования телемедицинских услуг в условиях цифровой трансформации здравоохранения. В последние годы стремительное развитие цифровых технологий, искусственного интеллекта и трансграничного обмена медицинскими данными и дистанционных медицинских платформ существенно расширило доступность медицинской помощи. Одновременно возникли сложные правовые вопросы, связанные с юрисдикцией, лицензированием, профессиональной ответственностью, кибербезопасностью, защитой персональных данных и цифровым суверенитетом государств. В исследовании применялись методы доктринального правового анализа, сравнительно-правового анализа, анализа документов и контент-анализа. Были рассмотрены международные и региональные механизмы регулирования телемедицины, включая рекомендации Всемирной организации здравоохранения, международные акты в области прав человека, нормы Всемирной торговой организации, регламент Европейского союза GDPR и Конвенцию 108+. Результаты исследования выявили фрагментарность международно-правового регулирования телемедицины, значительную регуляторную асимметрию между государствами, а также правовые пробелы в сфере трансграничного оказания медицинских услуг и защиты медицинских данных. В заключение автором обоснована необходимость формирования согласованной международно-правовой системы регулирования телемедицины, обеспечивающей баланс между защитой прав пациентов, технологическими инновациями и цифровым суверенитетом государств.

Ключевые слова: телемедицина, международное медицинское право, цифровая трансформация здравоохранения, трансграничные медицинские услуги, право на здоровье.

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