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ENSURING THE RIGHT OF A PERSON AND A CITIZEN TO HEALTH IN THE REPUBLIC OF KAZAKHSTAN IN THE ERA OF ARTIFICIAL INTELLIGENCE

The article is devoted to the study of ways to regulate human rights to health in the era of artificial intelligence. In Kazakhstani judicial practice, there is no scientific development of legal issues and other issues of legal regulation of artificial intelligence. Digital health technologies are announced as an important solution to the problems and shortcomings in the provision of quality health care to achieve the Sustainable Development Goals. However, they pose a threat to privacy and privacy, which can lead to discrimination and violence, resulting in violations of health, housing, employment, freedom of assembly, expression, protection from unjustified detention, physical autonomy and security. Overall, without proper planning and safeguards, digital health technologies can increase health inequalities, widening the digital divide that separates those who can and cannot afford such interventions. This article describes the main health risks associated with digital technologies, as well as the ethical and human rights standards associated with their use. It also proposes several strategies to reduce the risks associated with digital health technologies and discusses accountability mechanisms.

Key words: human rights, artificial intelligence, medical law, WHO, legal regulation.

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Жасанды интеллект дәуіріндегі Қазақстан Республикасында адам және азаматтардың денсаулыққа құқығын қамтамасыз ету

Мақала жасанды интеллект дәуіріндегі адамның денсаулыққа құқықтарын реттеу тәсілдерін зерттеуге арналған. Қазақстандық заң ғылымында құқықтық сипаттағы мәселелердің, жасанды интеллектті құқықтық реттеудің басқа да мәселелерінің ғылыми өңделуі жеткіліксіз. Сандық денсаулық сақтау технологиялары Тұрақты даму мақсаттарына қол жеткізу жолында сапалы медициналық көмек көрсетудегі проблемалар мен олқылықтардың маңызды шешімі ретінде жарияланды. Дегенмен олар жеке өмірге және құпиялылыққа қауіп төндіреді, бұл кемсітушілік пен зорлық-зомбылыққа әкеп соғуы мүмкін, соның салдарынан денсаулық, тұрғын үй, жұмысқа орналасу, жиналу, пікір білдіру бостандығы, негізсіз қамаудан қорғау, дене автономиясы мен қауіпсіздік құқықтары бұзылады. Кең мағынада айтқанда, тиісті жоспарлаусыз және қауіпсіздік шараларсыз цифрлық денсаулық сақтау технологиялары мұндай араласуларға қол жеткізе алатын және қол жеткізе алмайтындарды ажырататын цифрлық теңсіздікті кеңейту арқылы денсаулық саласындағы теңсіздікті арттыруға ықпал етуі мүмкін. Бұл мақала цифрлық технологиялармен байланысты денсаулыққа келетін негізгі зияндарды, сондай-ақ оларды пайдалануға байланысты этикалық және адам құқықтары стандарттарын сипаттайды. Ол сонымен қатар цифрлық денсаулық сақтау технологияларымен байланысты тәуекелдерді азайтудың бірнеше стратегиясын ұсынады және жауапкершілік тетіктерін талқылайды.

Түйін сөздер: адам құқығы, жасанды интеллект, денсаулық құқығы, ДДСҰ, құқықтық реттеу.

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Обеспечение права человека и гражданина на здоровье в Республике Казахстан в эпоху искусственного интеллекта

Статья посвящена изучению способов регулирования прав человека на здоровье в эпоху искусственного интеллекта. В казахстанской судебной практике отсутствует научная разработка правовых вопросов и других вопросов правового регулирования искусственного интеллекта. Цифровые технологии здравоохранения объявлены важным решением проблем и недостатков

в предоставлении качественной медицинской помощи для достижения Целей в области устойчивого развития. Однако они представляют угрозу неприкосновенности частной жизни и неприкосновенности частной жизни, что может привести к дискриминации и насилию, приводя к нарушениям здоровья, жилья, занятости, свободы собраний, выражения мнений, защиты от необоснованного задержания, физической автономии и безопасности. В целом, без надлежащего планирования и мер безопасности цифровые медицинские технологии могут увеличить неравенство в отношении здоровья, увеличивая цифровой разрыв, который разделяет тех, кто может и не может позволить себе такие вмешательства. В этой статье описаны основные риски для здоровья, связанные с цифровыми технологиями, а также этические стандарты и стандарты прав человека, связанные с их использованием. В нем также предлагается несколько стратегий по снижению рисков, связанных с технологиями цифрового здравоохранения, и обсуждаются механизмы подотчетности.

Ключевые слова: права человека, искусственный интеллект, медицинское право, ВОЗ, правовое регулирование.

Introduction

Good health is a prerequisite for the progress of individuals and society as a whole. Artificial Intelligence (AI) is the latest technological innovation that is rapidly impacting the healthcare industry. Like many technological innovations in health care, it has great potential to improve individual and public health, but also risks to individual rights and public health. In addition, the pace of development and implementation of these technological developments is much faster than the regulatory framework that governs them, which requires careful attention from policy and policymakers. The use of AI in healthcare represents a paradigm shift occurring in healthcare as a whole, shifting the focus from disease and therapy to self-management of health/wellness/prevention and from universal treatment protocols to personalized precision medicine. In this evolving environment, full respect for human rights, including social rights, must guide health policy development and further technological progress. This is necessary to ensure the safe introduction of more mature IP mechanisms from the perspective of human rights and the fair and equitable distribution of the benefits of innovation in society.

Implementation of digital healthcare technologies with the help of artificial intelligence should comply with the principles of protection of the human right to health. Enshrined in several human rights treaties, the right to health has four main elements: accessibility, affordability, acceptability and quality. The use of digital technologies for healthcare must satisfy at least these four key elements. These obligations mean that governments must ensure that digital infrastructure is available across the country, both in terms of hardware (such as computers, cell phones, cell towers, Internet and broadband) and software (such as applications). It also includes digital literacy training for all users, including leaders, health professionals and communities. Addressing the availability and affordability of digital health technologies supports efforts to address the digital divide. Digital health technologies should be a step towards supporting states in the implementation of the right to health, which means that they should be suitable and of good quality for all communities (that is, they should be able to perform clinical or public health services). Although there is no specific global treaty addressing human rights related to digital technologies, many existing human rights obligations apply.

Materials and methodology

General scientific methods were used during the research. The method of careful study of scientific and theoretical materials was the main one. The method of analysis was used during the formulation of proposed new Kazakh laws on issues of human rights protection during the use of JI in medicine, as well as during the formulation of proposals for the development and adoption of new international conventions in the studied areas. The generalization method was used in drawing up the conclusions of this article, and the logical method was used to justify the need to introduce medical devices based on JI into diagnosis, treatment and rehabilitation processes in order to facilitate the work of doctors.

The theoretical basis of the study was provided by scholars in the field of international law, including J. Tobin, who deeply studied the field of health law (Tobin 2012), and others. works. International treaties related to human rights, WHO guidelines and regulatory legal acts of the Republic of Kazakhstan were considered as the information base for the preparation of the article.

Results and discussion

In 1942, the science fiction writer Asimov described the famous "Laws of Robotics" in his story "Detour" (which was included in his 1950 collection of stories "I, Robot"):

1. The robot must not harm a person or avoid harming a person through its inaction.

2. A robot must obey orders given by humans, unless such orders conflict with the First Law.

3. A robot must protect its existence unless such protection is inconsistent with the First or Second Law.

These "laws" raise more questions than they answer, making them a very interesting attempt to counter the unpredictability of autonomous computing systems (Mireille Hildebrandt, 2020). In this regard, devices made on the basis of AI, which are subject to special supervision in any field, especially in healthcare, are causing concern.

The right to the highest attainable standard of physical and mental health is not a newly invented phenomenon. At the international level, it was first formulated in the 1946 Constitution of the World Health Organization (hereinafter – WHO), in its preamble, health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." The preamble further states that "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being, regardless of race, religion, political opinion, economic or social status." (Constitution of the World Health Organization, 1946).

Efforts to enumerate human rights and strengthen their protection through clear legal mechanisms are contained in international and regional human rights conventions, including the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights (including General Comment No. 14 defining the right to health), as outlined in regional human rights conventions such as the International Covenant on Civil and Political Rights and the African Charter on Human and Peoples' Rights, the American Convention on Human Rights, and the European Convention on Human Rights (Tobin 2012). Thus, according to Article 12 of the International Covenant on Economic, Social and Cultural Rights: "States parties to this Covenant recognize the right of everyone to achieve the highest level of physical and mental health. In order to fully realize this right, the states party to this Covenant shall: a) ensure a reduction in the number of stillbirths and alienation of children and create conditions for the healthy development of children; b) improvement of all aspects of environmental hygiene and labor hygiene in industry; c) prevention and fight against epidemic, endemic, occupational and other diseases; d) in case of illness, should include the necessary measures to create conditions for providing medical aid and medical care to all" (International Covenant on Civil and Political Rights, Article 12). From helping doctors diagnose diseases more accurately to making personalized recommendations for patient care and increasing access to specialized medical consultations, some of the most promising and impactful applications of AI are in healthcare. However, there are ways in which IWs threaten the right to health. One is the ability to discriminate or program AI-based systems to prioritize outcomes (eg, cost savings) over patient well-being (Access Now: Human Rights in the Age of Artificial Intelligence – The Jus Semper Global Alliance, 2021).

Not all governments sign up to key human rights instruments; some have signed but not ratified such charters or expressed reservations about some of the provisions. However, in general, human rights set out in international instruments establish a framework for the protection and promotion of human dignity worldwide and are implemented through national legislation such as constitutions or human rights legislation.

Machine learning systems can promote human rights, but they can also violate basic human rights standards. The Office of the High Commissioner for Human Rights has made a number of findings regarding the implementation of human rights by the AI.

In guidance issued in March 2020, the Board noted that AI and big data "when new technologies are developed in an accountable manner" can improve the human right to health and ensure that some vulnerable populations have access to effective, personalized care, such as assistive devices, embedded environmental applications and robotics. . In addition, the Board noted that such technologies may dehumanize care, violate the autonomy and independence of older people, and seriously threaten the privacy of patients – all of which are in violation of the right to health.

In a speech to the Human Rights Council in February 2021, the United Nations Secretary-General highlighted a number of human rights concerns related to the growing collection and use of data on the COVID-19 pandemic and called on governments to "place human rights at the center of regulatory frameworks and legislation for the

development and use of digital technologies "to be placed". Human rights organizations have interpreted and, where necessary, adapted existing human rights laws and standards for the assessment of AI and are revising them in light of the challenges and opportunities related to AI.

In 2018, a coalition of advocacy and technology groups released a Machine Learning Standards Declaration in Toronto, calling on both governments and technology companies to ensure that algorithms uphold the core principles of equality and non-discrimination. The Toronto Declaration: Protecting the Rights of Equality and Non-Discrimination in Machine Learning Systems is a declaration that advocates responsible practices for machine learning practitioners and policy makers. It is a joint statement issued by groups such as Amnesty International and Access Now, with other prominent signatories including Human Rights Watch and the Wikimedia Foundation. This declaration addresses the human rights impact of AI and places AI within a universally binding and valid framework of human rights laws and standards; it provides public and private sector accountability and mechanisms to protect individuals from discrimination and promotes equality, diversity and inclusion, while ensuring fairness and effective remedies and remedies (The Toronto Declaration, 2018).

The recommendations of the Organization for Economic Co-operation and Development (hereinafter – OECD) Council on Artificial Intelligence, the first intergovernmental AI standards, were adopted by 36 OECD member countries in May 2019 and have since been adopted by a number of partner countries. The OECD IA Principles were the basis for the IA Principles endorsed by the G20 governments in June 2019. Although the OECD recommendations are not legally binding, they contain political commitment and have been influential in helping governments develop national legislation and international standards in other policy areas (such as privacy and data protection). The OECD has launched an online AI public policy platform, the AI Policy Observatory (see section 9.6), and has collaborated with the Council of Europe, the UN Economic, Scientific and Cultural Organization (UNESCO) and the WHO on the ethical implications of AI on these and other initiatives.

The right to health applies to all states: every state has ratified at least one international human rights treaty that recognizes the right to health. Moreover, states have undertaken to protect this right through international declarations, domestic laws and policies, and international conferences.

In recent years, the right to the highest attainable standard of health has been promoted by, for example, human rights treaty monitoring bodies, the WHO and the Commission on Human Rights (now replaced by the Human Rights Council), which in 2002 endorsed the mandate of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. These initiatives have helped clarify the nature of the right to health and how it can be realized.

In March 2020, based on the decision of the 40th session of the UNESCO General Conference (Resolution 40 C/37), the Director General established a special expert group (SEG) to prepare a draft recommendation on the ethical aspects of artificial intelligence.

Taking into account the difficult situation caused by the COVID-19 pandemic, from the end of March to the beginning of May 2020, the work of the SEG was carried out online and ended with the preparation of the initial draft of the recommendation on the ethical aspects of AI. In this document, member states are encouraged to use effective AI-based systems to improve public health and ensure the realization of the human right to life, to strengthen and support international cooperation in the face of global health threats and uncertainties, and also to ensure that AI-based systems implemented in the health sector comply with international legislation and it is said that it should strive for compliance with international norms, principles and standards in the field of human rights (Ethics and governance of artificial intelligence for health: WHO guidance. Executive summary, 2021). As a member state of UNESCO, the Republic of Kazakhstan should also take into account the recommendations on legal regulation and ensuring the rights of citizens to health when applying AI.

In the Republic of Kazakhstan, in the field of increasing the efficiency of the health care sector and the accessibility of medical care to the entire population, the goal of achieving this through digitization has been advanced, in particular, the integration of basic services with information systems in the health sector, the use of mobile digital applications, the introduction of electronic health passports and the transition to paperless hospitals. . For this purpose, the Ministry of Health, together with experts and representatives of the business community, has developed new ways of digitizing health care.

Currently, 4 health care projects based on JI are being implemented in the territory of the Republic of Kazakhstan.

1. Medical certificates with QR-code to protect against forgery. The purpose of the project is to solve the problem of fraud during the issuance of medical certificates, to prevent the possibility of falsification and to ensure the transparency of this process. Advantages of the project: "Smart Astana" mobile application allows you to check the correctness of the disability sheet of references.

2. Smart clinic. The goal of the project is to reduce the number of queues and medical errors when prescribing medicines and referrals for examination. Increasing the accuracy, speed and informativeness of diagnostic studies (to reduce the number of complications of chronic diseases in a certain period of time and to reduce the incidence in general) and to increase the level of compliance of treatment with established standards. Advantages of the project: an opportunity to make an appointment for medical specialists in one of the following ways: by calling the clinic's call center, using the "electronic government" portal, using a mobile application, making an appointment with a doctor using a self-writing terminal located in the lobby of the clinic.

3. Robotic surgeon. The reference center for robotic surgery was established on the basis of the hospital of the Presidential Administration of the Republic of Kazakhstan and offers all the opportunities for the implementation of medicine with the help of a robot – a new direction in surgery for Kazakhstan. This is the first such project in the post-Soviet space, which was created not only for the purpose of conducting clinical trials and operations, but also for training and improving the skills of doctors. Three-dimensional control of the operating field by the robotic surgeon; enlarge the image of the operating organs several times; complete elimination of hand tremors; lack of large incisions and a quick recovery period for the patient; minimal risks of infection; created as an aid to the specialist, ensuring the absence of severe pain after surgery.

4. AI for oncology treatment. Treatment of oncological diseases requires doctors to find an individual case for the patient and constant monitoring of the condition, because there are no universal methods of treatment. Artificial intelligence, which has recently been piloted in Kazakhstan's health care sector, can help monitor world treatment practices and make more accurate diagnoses. To address this issue, a pilot trial was conducted using IBM's Watson for Oncology, a cognitive platform that provides oncologists with evidence-based medicine treatments. The program selects individual methods of treatment, expands access to oncological expertise and analyzes a large volume of medical literature, processing data from more than 300 medical scientific journals, 200 textbooks and about 15 million texts. Watson for Oncology artificial intelligence was trained by leading oncologists from the National Comprehensive Cancer Network. Watson for Oncology has successful experience in 15 leading countries of the world (official website of the Electronic Government of the Republic of Kazakhstan). Along with the development of such new technologies, there is a risk of violation of human rights, including the right to health.

The Constitution of the Republic of Kazakhstan dated August 30, 1995 also announced the obligation to preserve the social rights of citizens. According to Article 29 of the Constitution of the Republic of Kazakhstan, "Citizens of the Republic of Kazakhstan have the right to protect their health." Also, "Citizens of the Republic have the right to receive the amount of guaranteed medical care established by law free of charge." (The Constituruion of RK, article 29).

The concept of the right to health may also include the right to protection of personal data, in our case medical data. States should establish a legal framework that provides appropriate safeguards in the event that PI systems rely on the processing of genetic data; personal data related to offenses, criminal cases and convictions, as well as related security measures; biometric data; personal data relating to "racial" or ethnic origin, political opinions, trade union membership, religious or other beliefs, health status or sex life. Such safeguards should also protect this data from being processed in a discriminatory or one-sided manner.

The main principles of using information technologies for health care purposes in Kazakhstan are normatively approved in Chapter 7 on digital health care of the Code of the Republic of Kazakhstan dated July 7, 2020 No. 360-VI "On Public Health and Health Care System". Thus, according to paragraph 1 of Article 62: "The specifics of the protection of electronic information resources containing personal medical data are established in accordance with the legislation of the Republic of Kazakhstan on information and personal data and their protection" (On Public Health and Health Care System" of the Republic of Kazakhstan dated July 7, 2020 RKZ Code No. 360-VI). Before the approval of this code, there was a significant number of regulatory legal

acts regulating social relations related to human life and health, however, they led to certain difficulties in the application of health care legislation. The new Code of the Republic of Kazakhstan "On Public Health and the Health Care System" provides for a fundamentally different way of regulating public relations in the field of health care, and it defines the legal, organizational, economic and social foundations of health care services in the Republic. The Health Code combines the maximum possible number of norms in one act, they regulate the scope of the complex of various relations in the field of health care and are aimed at systematizing the legislation in the field of health care and bringing it into line with international norms and standards. This Code does not provide specific measures to protect citizens' rights to health related to artificial intelligence, although there are provisions indirectly related to AI for health purposes. Additional provisions regarding the confidentiality of personal medical data are specified in Article 273 of the Code. Thus, "Personal medical data, the fact of seeking medical help, information about the state of a person's health, the diagnosis of his illness, and other information obtained during his examination and (or) treatment constitute the confidentiality of a medical worker." In addition, other legislative and normative legal acts of the Republic of Kazakhstan, including the Laws of the Republic of Kazakhstan "On Information" (Law of the Republic of Kazakhstan dated November 24, 2015 No. 418-V RKZ) and "On Personal Data and Their Protection" (Law of the Republic of Kazakhstan Law N 94-V of May 21, 2013) is applied. These documents regulate various aspects of digitization, but not in terms of a specific technology (artificial intelligence, big data, blockchain, etc.), but in terms of digital data and the general terms of digital data use, processes and their impact on health or the health care system. These documents regulate directly related rights, such as protection of personal data, privacy, and health rights.

In the Republic of Kazakhstan, many diagnostic and rehabilitative processes are being carried out with the use of JI in medical institutions and research and medical centers, and many newly invented devices for medical purposes using JI are being launched. However, due to the fact that this industry is relatively new in Kazakhstan and there have been no violations and, accordingly, court cases related to it, legal means of regulation have not yet been conceived. However, as a member of the WHO, it is better for this organization to adhere to the WHO guidelines on the use of JI in the field of health care and its ethical principles, adopted in 2021, and other regulatory and legal documents related to this field, because it establishes world standards for the protection of the human right to health.

Conclusion

Currently, there is practically no systematic regulation of the development, production and use of artificial intelligence at the national and international level, which makes it difficult to solve important legal issues related to the use of artificial intelligence.

Digital technologies hold great promise for eliminating disparities and barriers to quality and access to health care. They have the potential to reduce healthcare costs, transform healthcare systems to deliver more accurate and timely care, and break down silos across sectors. But the fear of rights-infringing digital technologies is real and rooted in the experiences of a population that already faces discrimination, social marginalization and surveillance. In the future development of digital health technologies, more emphasis should be placed on the development of community-owned technologies according to ethical principles aimed at promoting accountability and justice. They can also facilitate the reporting of wrongdoing by law enforcement agencies against vulnerable and key populations. Governments should also ensure that digital health measures directly address the digital divide and inequalities in access. In addition, governments should use the data provided by digital health technologies to increase transparency and facilitate dialogue with the public to inform and validate outcomes.

The variety and complexity of digital health technology makes it difficult for the layperson or anyone else to understand the implications of pressing the "accept" button when a five-thousand-word message appears on a phone screen. Addressing this and harnessing the potential of digital health technologies requires a meaningful adoption of standards and principles to ensure that these technologies truly protect rights, empower people and do not harm.

The creation of a regulatory legal framework in the field of development and use of artificial intelligence should be carried out smoothly and carefully, taking into account the specifics of the use of AI in various fields and possible risks, as well as on the basis of clearly developed ways of regulating the need to develop new technologies for the benefit of the individual, society and the state.

Әдебиеттер

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