REVIEW ARTICLE





Human rights in the context of transhumanist medicine: ethical and legal aspects

Roman M. Fridmanskyy, Andrianna Yu. Badyda, Oleksandr O. Pifko, Ihor Yu. Dir

UZHHOROD NATIONAL UNIVERSITY, UZHHOROD, UKRAINE

ABSTRACT

Aim: To analyze the concept of transhumanism as a new category that extends beyond traditional legal frameworks and its implications for human rights, personal freedom, and the boundaries of technological intervention in human biology.

Materials and Methods: The study employs a comprehensive literature review and analysis of scholarly works on transhumanism, bioethics, and related legal and philosophical concepts.

Conclusions: Transhumanism is a modern philosophical and scientific concept that proposes a radical rethinking of human nature through the use of advanced technologies aimed at overcoming human biological limitations. The development of transhumanist ideas creates new ethical, legal and social challenges, in particular regarding human rights, personal freedom, and the limits of technological intervention in the human body and consciousness.

KEY WORDS: human rights, law, medicine, transhumanism, bioethics, somatic rights

Wiad Lek. 2024;77(9):2077-2082. doi: 10.36740/WLek/195164 **DOI 2**



INTRODUCTION

In the modern world, where technological progress is rapidly changing our understanding of the limits of human capabilities, transhumanism appears as a philosophical current that seeks to use the achievements of science and technology to improve the physical and cognitive abilities of a person. This concept finds a particularly vivid embodiment in medicine, where advanced technologies open new horizons for treating diseases, prolonging life, and expanding human potential. However, along with incredible opportunities, transhumanist medicine raises complex ethical and legal issues, especially in the context of fundamental human rights [1].

Human rights, which have traditionally been considered inalienable and universal, face new challenges in the era of transhumanism. The question of how to protect the dignity and autonomy of the individual in the face of radical biotechnological interventions is becoming more and more relevant. Does a person have the right to genetic modification? How to ensure equal access to human enhancement technologies? Can society limit individual choices regarding biotechnological improvements? These and many other issues require careful analysis and rethinking of traditional concepts of human rights.

The ethical and legal aspects of transhumanist medicine cover a wide range of issues, from issues of

informed consent and privacy to more global issues of social justice and equality. It is important to find a balance between the desire for technological progress and the need to protect fundamental rights and freedoms. This requires not only a review of existing legal norms, but also the development of new ethical principles that will take into account the unique challenges of the transhumanist era. The study of these aspects is critically important for the formation of a responsible approach to the development and implementation of transhumanistic technologies in medicine, which will ensure the protection of human rights in conditions of rapid technological progress [2].

AIM

The aim of the research is to analyze the concept of transhumanism as a new category that extends beyond traditional legal frameworks and its implications for human rights, personal freedom, and the boundaries of technological intervention in human biology.

MATERIALS AND METHODS

The basis of the research will be general scientific methods, such as analysis and synthesis, which will allow to divide the problem into component parts and form a holistic understanding of the relationships between

transhumanism, medicine and human rights. The comparative legal method will be used to compare different legal approaches to the regulation of transhumanistic technologies in medicine in different countries. The historical method will help to trace the evolution of human rights concepts and their transformation under the influence of technological progress. Special methods of legal science will also be applied, in particular the formal-legal method for analyzing legal norms, and the method of legal modeling for forecasting possible scenarios of the development of legal regulation in this area. In addition, it is planned to use sociological research methods, including a survey of experts in the field of bioethics, medicine and law, to obtain current opinions on the ethical dilemmas of transhumanist medicine.

REVIEW AND DISCUSSION

In the light of modern discussions about the future of humanity, the concept of transhumanism deserves special attention as a new category that goes beyond the traditional legal field. The issue of human evolution in the context of rapid technological development is becoming one of the most urgent and discussed in modern society. Rapid changes in all spheres of life, acceleration of scientific and technological progress and global challenges in the socio-economic, political and environmental spheres prompt representatives of the humanities to search for new philosophical and scientific approaches to understanding the key problems of humanity [3].

Transhumanism is one of the most controversial futurological teachings of our time. Proponents of this direction consider transhumanism as a rational worldview based on a critical analysis of scientific achievements and perspectives. This philosophy recognizes not only the possibility but also the desirability of fundamental changes in human nature through advanced technology. The purpose of such transformations is to overcome the limitations inherent in human existence, including suffering, aging and death, as well as a significant expansion of the physical, cognitive and psychological capabilities of a person [4].

The transhumanist approach offers a radically new perspective on the potential for human development, raising both admiration and serious ethical and philosophical questions. This concept presents society with the difficult task of rethinking traditional ideas about human nature, human rights, and the limits of technological intervention in human biology. In the context of legal regulation and ethical norms, the ideas of transhumanism create a new space for discussions and require

careful analysis by legal scholars, philosophers and representatives of other humanitarian disciplines [5].

With the development of modern technologies such as genetic engineering, cryonics and artificial intelligence, the scientific community is faced with a number of new challenges that have the potential to change our traditional understanding of human nature and essence. As noted by D. Kovba and E. Hrybovod, these technological innovations lead to the transformation of the theory of humanism, expanding its classical principles, and in some cases even completely rethinking them. The concept of transhumanism arises against the background of a new scientific and technological revolution and, in the process of forming its institutional and conceptual structure, becomes an integral part of the modern information society. This idea reflects humanity's desire for technological improvement and overcoming biological limitations. The emergence of the phenomenon of transhumanism creates a need for its comprehensive analysis, especially in the context of the search for ethical, value, legal and political mechanisms. These mechanisms should determine the expediency and possibilities of using the latest technologies, including radical modifications of the human body, which could potentially lead to the emergence of a "post-human". Such an analysis is critically important for understanding and regulating the consequences of technological progress for humanity as a whole [6].

Modern reality shows a growing tendency towards "cyborgization" of man - the process of integration of natural and artificial elements. V. Yemelin singles out two main directions of this phenomenon. The first direction - medical - focuses on restoring lost functions of the body with the help of artificial implants or microchips. According to the scientist, approximately one in ten residents of developed countries already have some kind of synthetic prostheses or implants, including pacemakers, defibrillators, artificial heart valves and joints, not to mention cosmetic implants. The second direction is aimed at expanding the capabilities of a healthy person through the integration of various technical additions that directly interact with the human body. Today, such technologies are most actively implemented in the military industry, where they are used to increase the physical and cognitive capabilities of servicemen. This tendency to merge the biological and the technological raises important questions about the future of humanity and the limits of technological intervention in the human body [7].

In modern scientific discourse, the issue of transhumanism is actively discussed by Ukrainian researchers in various aspects. Thus, N. Krokhmal and I. Galchenko investigate the philosophical and social aspects of

transhumanism, considering it as a new stage in the development of humanity [8]. O. Kravchenko analyzes the ethical challenges of transhumanism in the context of biotechnological human improvement [9]. V. Lukyanets focuses on the study of transhumanist ideas in the context of post-non-classical science [10]. D.Sapronov examines the legal aspects of transhumanism, in particular the issue of regulation of new technologies [11]. O. Kostenko investigates the influence of transhumanist ideas on the development of criminal law [12].

The issue of transhumanism is also actively discussed by foreign scientists who consider a wide range of issues related to this topic. N. Bostrom, one of the leading theorists of transhumanism, analyzes the ethical and philosophical aspects of the technological improvement of man [13]. J. Hughes examines the social and political consequences of transhumanist technologies [14]. A. Sandberg focuses on cognitive improvement and its impact on society [15]. New Vita-More examines transhumanism through the prism of art and design [16]. F. Fukuyama, from a critical point of view, analyzes the potential risks of transhumanist ideas for human nature and democracy [17].

Modern American researchers emphasize the important role of bioethics in the context of the demographic aging of European society, where there is a quantitative predominance of elderly people. They emphasize the need to recognize the moral significance of the population aging process and the ethical challenges associated with it in many modern societies [18]. These scientists offer an innovative approach to solving the problems of gerontosophy and social inequality through the application of biotechnology in combination with the ethical principles of transhumanism. In their opinion, bioethics, together with other disciplines, has the potential to influence demographic trends and contribute to the formation of policy decisions aimed at improving the quality of life of the elderly and the aging process in general. This approach forms a new concept of "good citizenship" in an aging society, going beyond traditional ideas about health care. This concept involves the active participation of bioethics in the formation of public discourse and policy on aging, with the aim of creating a fairer and more inclusive society for people of all age categories [19].

In the medical field, the "concept of solidarity" has become widespread, which acts as a tool for ensuring justice and equality in health care issues. This concept encompasses a number of advanced medical innovations and practices. Key components of this concept include:

1. Integrated healthcare information systems that ensure effective exchange of medical data.

- 2. Biobanks are specialized repositories of biological materials and related information that contribute to the development of medical research.
- 3. Personalized medicine, which involves an individual approach to diagnosis and treatment based on the patient's genetic and other characteristics.
- 4. Organ, tissue, cell and blood donation programs, which play a critical role in providing vital resources for medical interventions.

Together, these elements form the basis for a more equitable and efficient health care system that seeks to ensure equal access to health care and resources for all members of society. [20].

Yu. Melyakova and S. Zhdanenko single out a special sphere of anthropological freedom - the freedom of pleasure. According to them, this form of freedom occupies a leading place among all possible freedoms available to the posthuman. This concept of freedom of pleasure goes beyond the traditional understanding of human rights and freedoms, reflecting new aspects of human existence in the context of transhumanist ideas. It is not just an opportunity to receive pleasure, but rather a fundamental right to seek and realize the various forms of pleasure that may become available thanks to technological progress and the expansion of human capabilities. This concept emphasizes the importance of individual choice and self-realization in a potential post-human society [21].

The Association of Transhumanists in its international forums and official declarations defines one of the key tasks of transhumanism as "increasing the level of human happiness", which includes, in particular, the fight against suffering. A number of means and technologies are offered to achieve this goal. Among the recommended methods of increasing satisfaction, the following are distinguished:

- Pharmacological means: anxiolytics to reduce anxiety and fear, analgesics to relieve pain, entactogens and antidepressants to temporarily suppress negative emotions, doping and nootropics to improve cognitive functions.
- Promising technologies that, according to the scientific community, can significantly increase the level of human satisfaction: telepresence systems, brain-computer interfaces, neuroprosthetics and brain modeling, technologies for transferring human consciousness to a synthetic medium, such as an artificial body (avatar).

These approaches reflect the desire of transhumanists to radically improve the human experience and overcome the biological limitations associated with negative emotions and physical discomfort. However, they also raise important ethical questions about the nature

of human happiness and the limits of technological intervention in the human psyche and body [22].

The transhumanistic model of freedom does not at all resemble the moral freedom of humanism, since the anthropological concept and the entire system of values will be completely reformatted today [21]. A. Horyachkovska reveals the key concept and ultimate goal of transhumanism - the creation of a posthuman. This idea also resonates with the theories of post-postmodernism, representing a new stage in the evolution of the human species. Posthuman, according to this concept, is considered as a fundamentally new biogenetic species. In theory, this species would be so modified and improved that it would be able to overcome the limitations of the physical body. It is assumed that the posthuman will have the ability to exist in intangible forms, such as information structures in computer networks. This futuristic concept suggests the possibility of transforming human consciousness into a form of artificial intelligence or metamind. Thus, the posthuman is presented as an entity that goes beyond the traditional understanding of human existence, able to function in the digital space without attachment to the physical body. This idea reflects a radical vision of the future of humanity, where the boundaries between biological and technological, physical and virtual blur, opening new horizons for the development of human consciousness and intelligence [22].

The modern era is characterized by a rapid expansion of the space of human freedom, which goes far beyond the boundaries of traditional social reality. In the context of transhumanist ideas, the freedom of a transhuman covers not only external aspects of life, but also internal ones: mental and neurophysiological states, biochemical and molecular biological processes. This new paradigm of freedom gives a person the status of not only the carrier and potential resource of these processes, but also their full-fledged moderator, which is embodied in the concept of "the right to dispose of one's own body." Thus, a person receives an unprecedented level of control over his biological essence, which opens new horizons for self-determination and self-realization, but at the same time raises complex ethical and legal questions about the limits of such freedom [21]. The modern tendency towards the pragmatic objectification of immaterial phenomena as objects of market relations creates the basis for a radical transformation of ideas about the human body and its potential. In this context, human abilities and attributes are seen as potential means of enrichment, similar to material possessions. This principle of commercialization became the basis for the legitimization of biotechnological manipulation of the human body,

including postmortem use, turning it into a kind of medical product and the object of biotechnological experiments. Within the framework of the transhumanist concept of freedom, the human body becomes an attractive resource for economic investment, which opens up new opportunities, but at the same time raises serious ethical questions about the limits of commodification of human nature and the potential consequences of such an approach for society and individual dignity [4]. The concept of the body as a biomaterial and a resource is formed at the intersection of two key trends of modern society. On the one hand, it is the result of the expansion of personal human rights, which gives the individual greater control over his own body. On the other hand, this concept reflects the trend towards all-encompassing commercialization, which permeates all spheres of life, including the sale of biospecimens for banks, the patenting of genes, and the existence of an (often illegal) market for human organs and tissues [5].

According to the definition of S. Ranish, transhumanism acts as a unifying slogan for various cultural, political, philosophical and digital currents that promote techno-futuristic concepts of overcoming the limitations of human biology [23]. V. Vovk notes that transhumanism as a separate movement was finally formed at the end of the 20th century, promoting the idea of overcoming death and aging with the help of advanced technologies. The 20th century became revolutionary for European culture, marked by a number of "turns" - scientific, linguistic, visual, and at the turn of the 20th-21st centuries there was an "anthropological turn", which is characterized by a new attitude of man to his body and an emphasis on physicality. Every historical era and society expresses its essence through ideologies and worldviews, which are reflected in philosophy, science, law, art, religion, rules of behaviour and ideas about bodily beauty. These ideas form a certain ideal, which is considered a standard for its time. Modern transhumanist trends, supported by technological progress, lead to a rethinking of the concept of the body. V. Vovk claims that the traditional understanding of the body as a "soma" - a local autopoietic biosystem - is annulled. A person is no longer considered a "somatic automaton" controlled by the body's instinctive programs. Instead, it appears as an entity that opposes itself to the unity and non-contradiction of the natural world, going beyond biological limitations [24].

Yu. Turyansky rightly notes that the doctrine of transhumanism, which can lead to the restriction of individual freedom for the sake of hypothetical future ideals, does not meet the legal standards of a developed society. He emphasizes the difficulty of finding the "golden mean" between the extremes, emphasizing

the need to define a clear vector for the development of a new generation of somatic rights through law, public institutions and legal policy. The scientist calls for caution in perceiving convergent technologies as a panacea for the future of humanity. He proposes a "third way", which involves strengthening the responsibility of a person for his future, preserving his evolutionary and biological certainty and the maximum realization of somatic rights. This approach requires not only a general strategy for the development of the latest technologies, but also a detailed consideration of each right from the somatic group, clearly determining the acceptability or unacceptability of the opportunities provided by global technological transformations. Such a position emphasizes the need for a balanced approach to the development of technologies and the protection of human rights, avoiding both excessive techno-optimism and unfounded fear of innovation. This requires careful analysis and regulation of every aspect of somatic rights in the context of technological progress [25].

CONCLUSIONS

Based on the above, the following conclusions can be drawn:

- Transhumanism is a modern philosophical and scientific concept that proposes a radical rethinking of human nature through the use of advanced technologies aimed at overcoming human biological limitations.
- 2. The development of transhumanist ideas creates new ethical, legal and social challenges, in particular regarding human rights, personal freedom, and the limits of technological intervention in the human body and consciousness.
- The concept of "cyborgization" of man and the idea of creating a "post-human" raise important questions about the future of humanity, including the potential risks and benefits of radical modification of the human body.
- 4. Transhumanism is closely related to the development of bioethics, especially in the context of the aging of the population and the search for new approaches to improving the quality of life, which requires a rethinking of traditional ethical norms and legal standards.
- 5. There is a need to find a balance between technological progress and the preservation of fundamental human rights, which requires the development of new legal mechanisms and ethical principles for the regulation of transhumanist technologies.

REFERENCES

- 1. Bielov DM, Hromovchuk MV, Hreca YaV, Tymchak VV. Essence of somatic human rights in the process of biomedical research. Wiad Lek. 2021;74(10):2663-2668. doi: 10.36740/WLek202110226.
- 2. Bielov DM, Petsa DD, Svyshcho VY, Novytsky VV. The human right to transplantation of organs and tissues: medicine, ethics and law. Wiad Lek. 2022;75(10):2519-2525. doi: 10.36740/WLek202210138.
- 3. Bublitz JC. My Mind Is Mine!? Cognitive Liberty as a Legal Concept. Cognitive Enhancement: An Interdisciplinary Perspective. Springer Netherlands. 2013, p.233-264.
- 4. lenca M, Andorno R. Towards new human rights in the age of neuroscience and neurotechnology. Life Sci Soc Policy. 2017;13(1):5. doi: 10.1186/s40504-017-0050-1.
- 5. Fukuyama F. Transhumanism. Foreign Policy. 2004;(144):42-43.
- 6. Kovba DM, Hribovod YeH. Teoretychni aspekty fenomenu transhumanyzma: osnovni napriamky [Theoretical aspects of the phenomenon of transhumanism: main directions]. Dyskurs. 2019;(36):38-52. (Ukrainian)
- 7. Yeromin VA. Kiborghizatsiia ta invalidyzatsiia tekhnolohichno rozshyrenoi liudyny [Cyborgization and disability of a technologically advanced person]. Natsionalnyi psykholohichnyi zhurnal. 2013;(9):62-70. (Ukrainian)
- 8. Krokhmal NV, Halchenko II. Transhumanizm yak novyi etap rozvytku liudstva [Transhumanism as a new stage of human development]. Hileia: naukovyi visnyk. 2019;143(4):146-149. (Ukrainian)
- 9. Kravchenko OP. Etychni vyklyky transhumanizmu [Ethical challenges of transhumanism]. Filosofiia nauky: tradytsii ta innovatsii. 2020;1(21):43-51. (Ukrainian)
- 10. Lukianets VS. Transhumanistychni idei v konteksti postneklasychnoi nauky [Transhumanist ideas in the context of post-nonclassical science]. Filosofska dumka. 2018;(4):32-46. (Ukrainian)
- 11. Sapronov DI. Pravovi aspekty transhumanizmu: vyklyky ta perspektyvy [Legal aspects of transhumanism: challenges and prospects]. Pravo Ukrainy. 2021;(3):86-95. (Ukrainian)
- 12. Kostenko OM. Transhumanizm i rozvytok kryminalnoho prava [Transhumanism and the development of criminal law]. Pravo i suspilstvo. 2020;(2):120-127. (Ukrainian)
- 13. Bostrom N. In defense of posthuman dignity. Bioethics. 2005;19(3):202-214.
- 14. Hughes J. Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future. Westview Press. 2004.

- 15. Sandberg A, Bostrom N. Converging cognitive enhancements. Annals of the New York Academy of Sciences. 2006;1093(1):201-227.
- 16. Vita-More N. Aesthetic enhancement of humans. Technoetic Arts. 2013;11(2):185-190. doi: 10.1386/tear.8.2.207 1. DOI 21
- 17. Fukuyama F. Our Posthuman Future: Consequences of the Biotechnology Revolution. Farrar, Straus and Giroux; 2002.
- 18. Hromovchuk M, Brych V, Sabadosh M. Euthanasia: some aspects of bioethics. Visegrad Journal on Human Rights. 2019;(4):33-38.
- 19. Berlinger N, Solomon MZ. Becoming Good Citizens of Aging Societies. Hastings Center Report. 2018;48(3):22-29. doi: 10.1002/hast.905.
- 20. Gould CC. Solidarity and the problem of structural injustice in healthcare. Bioethics. 2018;32(9):541-552. doi: 10.1111/bioe.12474.
- 21. Meliakova YuV, Zhdanenko SB. Posthumanisticheskaia kultura skvoz prizmu estestvennykh prav cheloveka [Posthumanistic culture through the prism of natural human rights]. Visnyk Natsionalnoho yurydychnoho universytetu imeni Yaroslava Mudroho. 2020;(3):128-144. (Ukrainian)
- 22. Horiachkovskaia AN. Filosofiia transhumanizma: o surrohatakh bytiia, pokhishchenii identichnosti i evtanazii chelovechestva [Philosophy of transhumanism: about surrogates of existence, protection of identity and euthanasia of humanity]. Visnyk Kharkivskoho natsionalnoho universytetu imeni V. N. Karazina. Seriia: Teoriia kultury i filosofiia nauky. 2014;(50):1092. http://periodicals.karazin.ua/thcphs/issue/view/209. [Accessed 18 April 2024] (Ukrainian)
- 23. Ranisch R, Sorgner SL. Introducing Post- and Transhumanism. Frankfurt am Main: Peter Lang; 2015. p. 7-28.
- 24. Vovk VM. Somatychni prava yak klaster yurydychnykh harantii «samovlasnosti» v konteksti transhumanizmu [Somatic rights as a cluster of legal guarantees of "self-ownership" in the context of transhumanism]. Filosofski ta metodolohichni problemy prava. 2020;(2):68-72. (Ukrainian)
- 25. Turianskyi Yul. Somatychni prava liudyny v suchasnii doktryni konstytutsionalizmu: teoretyko-pravove doslidzhennia [Somatic human rights in the modern doctrine of constitutionalism: theoretical and legal research]. Dys. dokt. yuryd. nauk. Natsionalnyi universytet «Lvivska politekhnika»; 2020. (Ukrainian)

CONFLICT OF INTEREST

The Authors declare no conflict of interest

CORRESPONDING AUTHOR Roman M. Fridmanskyy

Uzhhorod National University 26 Kapitulna St., 88000 Uzhhorod, Ukraine e-mail: roman.fridmanskyy@uzhnu.edu.ua

ORCID AND CONTRIBUTIONSHIP

Roman M. Fridmanskyy: 0000-0003-4213-8449 A D F Andrianna Yu. Badyda: 0000-0002-5980-5132 D F

lhor Yu. Dir: 0000-0001-9829-4294 D

Oleksandr O. Pifko: 0000-0002-9180-2564 A B D

A — Work concept and design, B — Data collection and analysis, C — Responsibility for statistical analysis, D — Writing the article, E — Critical review, F — Final approval of the article

RECEIVED: 29.05.2024 **ACCEPTED:** 28.09.2024

