

## MODERN BIOTECHNICAL PROBLEMS OF MEDICINE AND THEIR SOLUTIONS

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### **Annotation.**

The article analyzes the content and essence of the ethical problems of science on the example of bioethics, medical deontology. In practice, the pros and cons of using modern medical technologies are highlighted. The ethical aspects of events such as cloning and transplantation are also revealed. In short, technological advances are creating new ethical challenges. To address them effectively, the gap between knowledge and ethics must be avoided.

### **Keywords:**

Science ethics, bioethics, medical deontology, scientist responsibility, technism, medical technology, cloning, transplantation.

Scientific medicine, especially in the context of scientific and technological development, has made great strides in understanding the nature of diseases and their treatment. But as a result of the influence of the doctor and the patient, the subject-object relationship puts medicine at a dead end. Technocratic and technicism make the patient the object of treatment, and the physician the appendix of the equipment. The following appeal is still relevant: "Give a medical student a medical history, teach him how to talk to the patient."

Any knowledge, humanities, natural sciences, technical, etc., in the course of its activities, when its moral condition is determined, is subject to an ethical test. It finds its place in society only after the past. And this is especially relevant today.

Technical advances in medicine have brought him new ethical challenges. The point is, in the second half of the twentieth century. In connection with the scientific and technological revolution, new directions in medicine emerged, which opened the "golden age of biotechnology and biomedicine" for mankind. This includes organ and tissue transplantation, cloning, artificial insemination, the widespread use of euthanasia, advances in genetic engineering, and many other discoveries.

The modern stage of medical ethics is called bioethics, which is defined as a science that studies the social, legal, and ethical consequences of the emergence of new, complex biomedical technologies, the cost of treatment, and the new rights of patients. In many textbooks, bioethics is understood as the science of the laws, principles, and rules governing the professional conduct of the medical professional, which warns the physician not only to use scientific and technical advances for the benefit of man in the context of new medical technologies.

Bioethics is a modern form of professional biomedical ethics. In it, the task of regulating human relations is subordinated to the task of preserving human life. The way out of this situation is seen only in the way of combining science with morality, and moral norms must become the inner dimension of man, his Conscience. Conscience and extrasensory, paracentric knowledge in this science is what makes the world and man, the Absolute, the Truth, access to it spiritual and humane.

One of the first founders of bioethics was the American biochemist Van Rensselaer Potter, author of the book "Bioethics - a bridge to the future", published in 1971. He noted that the scientific and technological achievements of mankind, especially in the field of biomedical technologies, are not only positive but also negative, as they directly affect the human body and psyche, its nature and essence in general. That is, microbiologists study and protect humans from the effects of harmful microorganisms, but their use is involved in creating bacteriological weapons that harm both humans and nature in general, because humans are an integral, organic part of nature. The development of science, especially in the field of

medicine, is unstoppable, he called for the humanization, "ethnicization" of the scientific and creative activity of scientists and their discoveries. V. According to Potter, the physician-scientist, the practicing physician of the third millennium, must be able to predict the future positive effects of this knowledge in order not to harm a sick or healthy person. V. Potter believes that the highest moral duty of man is to preserve life on Earth. Therefore, from a bioethical point of view, he called on society to be connected not only to humanity but to all living nature. He saw the goal of bioethics as a combination of universal, ethical, and biological factors. As you can see, bioethics is very complex. Due to the complex nature of ethics, solving ethical problems today also requires a complex approach. Therefore, the subject-object relationship in medical ethics also serves as a systemic relationship between human-science-society and physician-patient. This shows that bioethics has a special place in the system of ethical teachings, and its analysis, evaluation of its role is still in their infancy.

We can approach bioethics from the perspective of philosophical and sociological sciences. First of all, this problem arose in connection with the euthanasia associated with the solution of the human rights problem: does a person have the right to live or to die? From the point of view of many sciences and approaches to this problem, man has the right to life, and this enshrined in the constitutions of all the countries of the world. Any religion recognizes the right of man to life. But when the question arises as to whether a person has the right to die, most scholars, religious and other leaders give a negative answer. There are statements on this issue by representatives of all three directions of world religion, as well as the majority of national religions and denominations. They all had a very negative attitude towards this problem because it is God, not man, who has this right. Both modern philosophies hold that man cannot commit suicide even in the most tragic of circumstances.

Euthanasia is also a problem for medicine. Your doctor may recommend that you give up your life based on your health condition. it is known that euthanasia is rarely accepted in countries. Thus, euthanasia is a bioethical problem that is solved taking into account human health, personal characteristics of the individual, the specific legal practice of a particular society.

The second major bioethics problem is the transplant problem. The fact is that as a result of organ and tissue transplantation, changes occur in the organism itself, and these changes are observed not only at the level of the organism or tissue but also at the level of the whole organism, as a person.

The third major bioethical problem is the cloning problem. Cloning is known to have been invented in 1997: it was created by cloning a sheep named Dolly not far from Edinburgh, Scotland. Two to three years later, five piglets were successfully cloned. In particular, the experiment of American scientists at the University of Hawaii, which was frozen with the sperm of mice until they became lifeless, and then successfully used to fertilize, raised the question of cloning humans as well. The results of this experiment surprisingly had a long-term perspective on the long-term storage and subsequent fertilization of seeds not only of animals but also of humans. Therefore, this experiment was declared a moratorium on human cloning, i.e., the growth of a human from a separate human cell, immediately after the creation of clones of sheep and pigs. The prohibition is explained by the fact that the effects of these biomedical experiments on the human body are unpredictable, and no clear ethical criteria have been developed to allow the cloning of a person with clear positive qualities. They had no confidence that no beast, or any Frankenstein, would be taken as a result. Therefore, modern medicine has focused its research on cloning individual organs, tissue structures that can play the role of additional material during surgery.

The current stage of development of bioethics shows that the introduction of new technologies related to scientific and technological progress in medicine plays an important role in solving ethical problems in medicine. According to modern scientists, by the middle of the XXI century, a biorobot called "cyborg" can create a synthesis of man and machine. At the same time, a person may experience regression, which remains the fulfillment of someone else's wishes. This inevitably leads to a loss of integrity of the human appearance in the form of Nomo sapiens, atrophy of the forehead of the brain, which of course poses new problems for bioethics. But today we can predict that the radical solution of biological problems depends on the state of society, its moral development, the individual as an individual, his ability to self-govern, and only then medicine.

An important ethical problem of medical science is the social responsibility for the discoveries of the physician and the scientist. V. Veyskopf is fair as he writes, "as a result of the constant development of

science-based technologies, human problems are very close and very dangerous; they emphasize the importance of fundamental science as a means of penetrating deeply into the essence of natural phenomena. The scientist must be prepared to face the consequences of the impact of science on society; it should be aware of specific guidelines and social mechanisms that lead to the misuse of scientific results, try to prevent abuse, and increase the benefits of scientific discoveries. Sometimes he has to find the strength to withstand public pressure, forcing him to participate in activities he deems harmful. This puts the scientist at the center of social and political life and struggle.”[1]

There are two directions in scientific ethics: external ethics (the study of ethical problems arising from the interaction of society and science) and internal ethics (the study of interrelated problems in the scientific field) [2]. All of this suggests that bioethics issues go beyond medical jurisdiction and have a broad social meaning. Of course, bioethics is inextricably linked to medical ethics, which deals with the relationship between physician and patient, physician and colleague, physician and nurse, junior medical staff, physician and patient relatives, physician and society. The basis of this ethics is deontology, the doctrine that the physician should be concerned with his duty to the patient. Medical ethics, as a type of professional ethics, strengthen the requirements for the physician in terms of his professionalism and ethical qualities as a subject of medical knowledge. Sometimes it is difficult to draw the line between professionalism and ethical qualities in a physician's work. Therefore, the requirements for the ethical culture of the physician are increasing year by year. Today, as in the past, we also have the deontological training of medical students, which primarily provides moral and ethical theoretical knowledge. necessary. It also requires the ability to behave properly in any situation. In the past, it was said that "a white robe makes you compelled." It was about the fact that the physician, even outside the medical institution, must continue to possess high moral and deontological qualities - a conscious attitude to his duty; for this, the interest of the patient must, first of all, adhere to the basic rule of Hippocrates' oath: "physician - no harm", knowledge and general moral culture (politeness, humility, politeness, speech culture, dress culture, etc.). The psychological culture of the physician also plays an important role in deontology. In the past, this aspect of culture attracted the attention of philosophers and physicians, but psychological limitations, the ability to manage emotions, the ability to work on empathy are very important and they form the basis of a physician's overall culture. As a clear example of medical ethics, they adopt rules that a physician must follow when a problem of a close relationship between physician and patient arises. These guidelines were developed by the American Medical Association's (AMA) Committee on Ethics and Legal Affairs, and they sound as follows:

1. The close relationship between the doctor and the patient that arises during treatment is immoral;  
- a close relationship with an ex-patient may in some cases be considered immoral;
2. The issue of the close relationship between doctor and patient should be included in the curriculum of all medical professionals;
3. Physicians must report violations of medical ethics by their colleagues [3].

As you can see, these recommendations are very strict. Violating them is a certain disciplinary and legal issue for physicians who are members of this association can lead to consequences. This document is based on the principle of respect for duty. "Fulfillment of an obligation" means fulfillment of certain requirements. Includes unacceptable behaviors that are inconsistent with society, the medical community, and the requirements placed on it, the physician, the physician of his or her will, and reason. While the code of conduct is clearly and unambiguously formulated for every medical profession, the principle of "duty performance" does not recognize excuses to avoid it, including pleasant and unpleasant, useful and useless arguments, and so on. If a person can act following the requirements of the principle of "duty", then he is fit for the chosen profession, if not, he will have to leave this professional community [4]. At the same time, clearly defined sets of rules have been developed for almost all medical specialties [4].

The basic ethical principle of the science of bioethics is the principle of respect for human rights and dignity. Under the influence of this principle, the main issue of medical ethics - the relationship between doctor and patient - changes. It is well known that paternalism "worked" in a regime of unconditional priority or the supremacy of the physician's authority. Today, the issue of patient participation in medical decision-making is very relevant. This is far from secondary - participation in several new models of doctor-

patient relations is taking shape. Among the - information, advice, commentary. Each of them is a specific type of protection of human rights and dignity [3].

The contradiction of "rights", "principles", "values" (and in fact - human life and cultural norms) is the reality of modern society. A clear organizational form of resolving possible conflicts in the field of biomedicine, such as public associations of ethics (ethics committees). B. According to Yudin, "bioethics should be understood not only as a field of knowledge but also as an emerging social institution of modern society." The institute brought together ethics committees in hospitals, ethics commissions in scientific institutions, specialized bioethical organizations, as well as physicians, priests, lawyers, biomedical ethics experts, and other citizens. Their task is to address issues related to the development of recommendations for specific problematic situations of biological medical activity, its theoretical or practical side [4].

Consequently, the ethical culture of the modern physician is an important factor in his successful professional career. While the competitiveness of any specialist is of great importance in a market economy, the doctor's ethical culture, ethics, deontological culture is the most important component of success, which stands alongside professionalism and competence. The above problems show the urgency of bioethics, its future urgency because the development in medicine is constant and medicine inevitably faces new achievements, as well as new ethical problems that accompany them.

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