

Ethical Issues in Modern Biotechnology and Biomedical Innovation

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Introduction

In the last third of the 20th century, the rapid development of biotechnologies created a new way of the natural and human world and a new moral dilemma. The transition beyond the ordinary experience of people, on the one hand, allows people to master such forces of nature, which it would be impossible to master without science and which are more powerful than those previously possessed by man. On the other hand, there are serious dangers to humanity as a whole “, which sharply puts the question of human rights and dignity (Mehta & Gair, 2001). In this context, we are talking, first, about biomedical technologies, which, in a certain way, updated the ethical component and, at the same time, transformed the traditional conception of the nature and nature of medicine itself, the possibilities, and the essence of human life itself. In the late 60s, the question “What is a person and what is its essence?” became a subject of interest not only in philosophy but also in other spheres of scientific knowledge and practice. The development of biotechnology has become a threat to the transformation of man as a biological species.

Analysis

Biotechnologies not only “save” a person, but in the process of socialization, they carry out some “repressive” functions (new genetics directions – genomics and pathology, cell biology (mechanisms of reception, fuse, transmembrane transfer, etc.), molecular immunology, cooperation, and the immune system, pharmacology, computer methods for the synthesis of therapeutic drugs, etc (Amin, Azlan, Hashim, & Ahmad, 2011). (which characterizes the active embodiment of scientific knowledge in clinical medicine) have become progressive directions; hematologic anesthesiology and was the impetus for the emergence of new units of modern surgery – cardiac, vascular, plastic, etc ..; developed methods for immunomodulation, dialysis, and other methods of cleaning the body, etc.)

Such technologies allow years to support life processes in the human body, to which consciousness will never return. They do act on a person that they allow you to fight with hereditary diseases, as well as modify and modify the very nature of man. Another round of problems is an extraordinary leap in the development of reproductive technologies in obstetrics and gynecology (in 1978, Cambridge, England) was the first to implement the in vitro method (in vitro), resulting in the first baby “from the test tube” – Louise Brown, in the same way, sheep Dolly (Scotland) was cloned in 1997. Technologies that help parents become couples who cannot have children but create the problem of “extra”

embryos that need to be destroyed (Mehta & Gair, 2001).

These problems are increasingly becoming the beginning and the object of heated discussions since they affect the common man, his needs, aspirations, and hopes – a situation arises of a kind of “deepening” of man into the world, designed for her by scientific technologies (where, incidentally, human, and penetration “inside”) – this is design not only for the person but also for her. Therefore, a person faces the need to make decisions independently and, most importantly, take responsibility for his own choice, which, perhaps, does not give a bright idea of the fine line between permissible and unacceptable from an ethical point of view (Amin, Azlan, Hashim, & Ahmad, 2011).

Of course, a new level of such problems has posed both to scientists and ordinary people new ethical issues that need to be addressed in practice on a daily basis. Also, it was mainly alarming that not all existing moral systems were able to comprehend these problems from an ethical point of view. It was necessary to go through a painful path trying not to break the invisible boundary between good and evil and find moral systems that would be effective in modern realities (Mehta & Gair, 2001). The answer to this unique challenge, which at least partially could substantiate the solutions to various problems, was the emergence of bioethics (the science of survival, which includes in the sphere of scientific interest not only the person with his corporeality and value dimensions).

In all bioethical problems facing a person, there is a need to make decisions and take responsibility for the choice made, the choice not only for oneself but also for the destinies of their loved ones. Therefore, the existing problems in society, for example, the legal and ethical standards necessary for conducting biomedical experiments involving human beings, are singularly acute. Cloning (the consequence is the creation, with the help of genetics, of an entirely “new” type of people who will be several levels higher than a modern man in terms of physical and intellectual abilities), the truth about an incurable disease is needed, and there is a need for permission of relatives for organ transplantation? After ensuring the continuation of a person’s life, extremely acute moral problems arise, first, concerning ethical criteria. And finally, whether it is a crime or perhaps a person’s salvation, which, by the way, overwhelmingly receives a variety of reviews, are caused, respectively, by different values and interests of people (Macer, 2008).

One of the most ambitious human studies programs, the Human Genome, was launched (its costs are equal to the costs of space programs, about \$ 200 million a year), and the main task is to decipher human DNA. The moral credo of this program is directed to the treatment, prevention, and rehabilitation of hereditary diseases (identification of genes that are associated with genetic diseases like Alzheimer’s disease, diabetes, schizophrenia, cancer, atherosclerosis, etc. It should be borne in mind that genes only predispose to hereditary diseases and are not a decisive factor (Macer, 2008)

Conclusion

The use of biotechnology, especially for commercial purposes, goes much further, affecting both the

environment and the transformation of human identity. Dangerous experiments are conducted on the creation of a certain type of “fantasy” of transgenic plants and animals with genes transplanted from other living organisms, which entails a number of dangerous effects on human health. For example, this is the use of genetically modified products for the production of transgenic plants to increase income in the ration of cattle and prion proteins (meat and bones of patients with sheep encephalitis). Thus, pathogenic bacteria already developed antibiotic-resistance genes and began to transfer between species. The harmful or useful gene for one species can go from biocenosis to another and unpredictably change the character of his actions in the hereditary system.

References

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