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NOOETHICS AS MODERN STAGE OF GLOBAL BIOETHICS

Abstract: The distinctive feature of the XXI century is the growing interest to the philosophical disciplines due to the necessity of world view analysis of the consequences of rapid changes of human society and the environment. The response to the global ideological, ecological and social crisis and the results of the introduction of new biomedical technologies become bioethics, which in the modern understanding of the problem should be considered as nooethics. (1, 2).

The world view function of bioethics promotes the development of public society and overcoming the negative postmodern trends. Postmodern ideology influenced the world-view in general, lifestyle, moral and ethical values, science, art and religion. The main ideas of human civilization turned out to be lost: belief in progress, endless possibilities of scientific knowledge and of the human mind. In postindustrial society, consumers have become widespread disappointment in the ideals and values of the Renaissance and the Enlightenment.

General trend of the development of bioethics became the aspiration for the universalization of ethical principles, extension of subject from the biomedical field to environmental and global problems of humanity and raising it to the level of metaethics and international bio law considering transcultural and transnational peculiarities.

Bioethics represents an important growth point of philosophical knowledge, the formation and development of bioethics is related to the process of transformation of traditional ethics in general and medical ethics in particular. It is primarily caused by sharply increasing attention to human rights and the establishment of new medical technologies, generating numerous acute problems requiring legal and moral regulation. (3, 4).

Antique ethics with its “Golden Rule” – “What you do not want done to yourself, do not do to others” formed by Confucius and concretized by Aristotle and corporate medical ethics of Hippocrates “Do no harm”, were the forerunners of “reverence for life” ethics. It was A. Schweitzer – an outstanding personality of the XX century who believed that every form of life is sacred and untouchable. (5).

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Bioethics (in the narrow sense) is a “bridge between ethics and biology”, a new science that combines biological knowledge with knowledge of human values.

Bioethics (in the broad sense) is a “bridge to the future, “a way to survive”, a systematic analysis of human actions in biology and medicine in the terms of moral values and principles to ensure the survival of humanity in the post-industrial society.

The subject of bioethics in the narrow sense (biomedical ethics, clinical ethics) is a set of controversial ethical issues which are identified in the course of medical practice and/or during the conduct of biomedical research and experiments. This is the role of applied bioethics. (6).

The subject of bioethics in the broad sense (global bioethics) – is a set of moral and ethical issues related to biomedical, ecological, socio-economic and legal issues of health care. Global bioethics has worldview content. (6).

Bioethics became a response to the negative manifestations of the global ecological crisis and the consequences of the introduction of new biomedical technologies. Its development is connected with the process of transformation and the integration of classical and professional ethics. The emergence of biomedical ethics proved to be direct consequence of the practical implementation of scientific and technological revolution achievements in the conditions of deep ideological crisis and the increasing load of global environmental problems. Huge success of biomedical sciences has generated many complex moral contradictions, bringing the subject of intense discussion and analysis the ethical issues of animal experiments, clinical trials, genetic engineering, organ and tissue transplantation, new reproductive technologies.

The emergence and development of bioethics was the basis of the so-called post-Hippocrates ethics (Fig. 1). In addition to the Hippocratic principles of aid and assistance, avoidance of harm the principles of respect for the individual and social justice were formed. (7).

Retrospective evaluation of the history of bioethics suggests that in the 70 s of the past century it concentrated its attention on the protection of human rights (respect for autonomy, social justice), in the 80 s it was directed at the problem of improving the quality of life with ethically acceptable biomedical technologies, and in the 90 s on the basis of attempts to overcome the global environmental and ideological crisis acquired the character of global bioethics. The impulse for further development of technological and ethical thoughts became additional socio-political challenges in the field of medical biology and innovative technologies.

Odessa medico-philosophical school substantiated the beginning of a new stage of medical ethics historical development which we called “Nooethics.” The prerequisite to the new science becoming was the understanding of the destruction of control mechanisms of the biosphere by the mankind. Transforming the nature and the environment, homo sapiens with the consequences of intellectual labor has changed the conditions of life on the planet, created his noosphere, which, unlike the biosphere has no own control mechanisms.

Unfortunately, in the new reality the previous bioethical principles, methods and theories are not sufficiently adequate and effective. In terms of the realized Noosphere the interaction of the individual or the humanity as a whole with the

objects of animate and inanimate nature mostly happens not only directly, but also indirectly through the modified biosphere. If the human activities in the noosphere do not start being regulated by new ethical principles, the consequences of the present noosphere crisis can have global and catastrophic nature. To save all the living things and all the nature and ecosystem in general new ethics should be Nooethics, ie the rules of conduct in the Noosphere, which would maximally facilitate the global interests of all the components of the Noosphere: planet Earth, humanity and the transformed by it biosphere.

Comparing the characteristics of Biosphere and Noosphere, it should be noted that BIOSPHERE exists to the full extent, NOOSPHERE is just being constructed. BIOSPHERE possesses self-regulatory mechanisms. The self-regulatory capabilities of NOOSPHERE are significantly limited. Biosphere ethics – Bioethics as combating degradation and threat to life on Earth. NOOSPHERE ethics – enooethics as the ethics of noosphere development, the ethics of sustainable development and progress by selecting adequate technical economic and socio – political model. Nooethics is the ethics of noosphere construction, the ethics of noowave, noosociety, nootehnologies for the sake of preserving Nature and Humanity.

The concept of Nooethics coincides with the proposal of K. V. Korsak for including in the scientific terminology of such concepts as noosociety, nootehnologies, nooeconomy. According to the author, the chances of survival are “wise technologies” or nootehnologies, the use of which does not destroy the environment. Having lived through three waves of transformations – agricultural, industrial and information, humanity has entered a new transformation – noowave. In the period of a new wave of civilized mankind development the transition of bioethics into nooethics is an ethical choice aimed at further improvement of the noosphere on the way to support nanotechnologies, forming noosociety and ensuring its sustainable and progressive development (Fig. 2).

Everyday medical practice always has ethical, deontological, legal and purely professional measurements that can be displayed as four spheres. (Fig. 3).

Professional sphere includes knowledge, skills and abilities in diagnosis and therapy, interpersonal communication. Legal sphere covers professional and includes legally binding rules of conduct of medical worker. Sometimes legal framework is of purely general nature and does not provide options for action in individual clinical cases. Deontological sphere includes the previous two ones and is inherently extralegal, since it contains, in contrast to the legal sphere, more specific and individualized standards. Ethical is the widest sphere. Its principles are relevant to all the other three areas of medical practice. Of course, the professional must observe both legal and extralegal rules. However, first of all, health professional should take into account the ethical values and stick to ethical standards in their daily activities.

The XXI century technologies – genetic engineering, nanotechnologies, robotics – are many times more dangerous than nuclear, chemical and biological weapons, created last century. The greatest danger is that these technologies are now available to small groups of people and even to individuals. They do not require large factories, considerable stocks of raw materials. Knowledge – that’s what it takes to

manage them. There appears not a weapon of mass destruction but knowledge of mass destruction, and the destructive power of this new “weapon” is magnified by its ability to quickly replicate. We should not forget that knowledge comes by itself neither good nor evil – the man makes them so. The good and the evil, fear and a weapon against fear – are all the result of human intellectual activity.

The object of bioethical and nooethical analysis should become biosafety issues. For example, one of the major problems mankind is facing – the lack of food. In this regard, the most productive biotechnologies are introduced in agriculture. One of such technology is genetic engineering, with the help of which genetically modified products are created. Genetic engineering uses radical techniques of impact on the genetic code of species – a new organism is created, the emergence of which in vivo would be impossible. Sorts and breeds are created the products from which have high nutritional value and contain increased amount of essential amino acids and vitamins. Genetically modified products have become a reality. Their uncontrolled application can be qualified as the violation of human rights, as holding an unauthorized experiment on man, the inadmissibility of which is stated in numerous international documents.

Uncontrolled genetic engineering activities, modification of infectious diseases agents, the cloning of humans and animals as the sources of biological hazard are subject to bioethical control and monitoring.

Bioethical issues are considered in the field of socio-political philosophy, of law philosophy of applied normative ethics, which confirms the worldview role of bioethics (Fig. 4, 5, 6).

Own experience of ethical evaluation of clinical and research problems, the analysis of domestic and foreign monographs, textbooks, periodical publications, participation in international congresses and symposia have convinced us of the need to teaching bioethics and biosafety in higher medical educational institutions.

Given the international experience, we have developed and approved in the Ministry of Health of Ukraine 10 standard programs for different courses and departments. 7 of them are educational programs on the subject “Basics of Bioethics and Biosafety” for students of the 3rd–4th courses on various subjects. 3 programs are elective courses for the students of the 5th and the 6th courses, including two programs of “Medical Aspects of Bioethics and Biosafety” for the specialties: dentistry, medicine, pediatrics, medical prevention, medical psychology and one of “Medical and Psychological Aspects of Bioethics and Biosafety” for the specialty medical psychology.

In 2013 the first Ukrainian national textbook was published. Its distinguishing feature is that in contrast to our previous textbook “Bioethics” published in Ukrainian, Russian and English, it contains material on biosafety and the risks of biomedical technologies. In accordance with the newly developed training programs, the national textbook was called “Bioethics and Biosafety”. Another distinguishing feature is the division of the material into general bioethics, special bioethics and applied bioethics. General Bioethics is about the history, purpose, objectives, methods and directions of development of bioethics in the health care system in relation to the concept of human rights.

Special bioethics considers bioethical aspects of a healthy lifestyle formation, social justice and socio-ethical obligations, bases of professional activity of the doctor, the relationship between medical staff, patient and their family. Separately presented are bioethical principles of biomedical research, the concept of biosafety, bioethical and legal assessment of medical errors and iatrogenesis is given.

The most important section of the national textbook is “Applied Bioethics” or clinical bioethics. The section provides an overview of bioethical issues of reproductive technologies, medical genetics, the final phase of life, rehabilitation, euthanasia, transplantation, transfusion, psychiatry, socially dangerous infections, biopsychosocial medicine.

Designed and implemented by us (1, 3, 8) concept of bioethics teaching in higher medical educational institutions includes: teaching the theoretical foundations of the subject and methods of bioethics in the historical aspect of the formation of ethical thought and in the context of philosophical science in general; the development of standard curricula, textbooks and guidelines on the principles of compliance of credit-modular system; teaching the features of bioethical analysis in separate areas of biomedical science and clinical disciplines; the clinical orientation of teaching.

Learning the basics of bioethics and nooethics in medical higher educational institutions, since 2013 has become a compulsory element of the curricula in the higher medical educational institutions of Ukraine. The national textbook Zaporozhan V. N., Aryayev N. L. “Bioethics and Biosafety” considers bioethics and nooethics as a basis of medical professionalism formation. Civilizational worldview and scientific-practical importance of bioethics and nooethics is irrefutable.

It can be stated that they to some extent rescue philosophy from stagnation and return the ancient spirit of debate and polemics to this science.

Nooethics is intended to combine organically science, philosophy and religion on the basis of the recognition of humanistic values of unity of Man, his Mind and the Noosphere created by it.

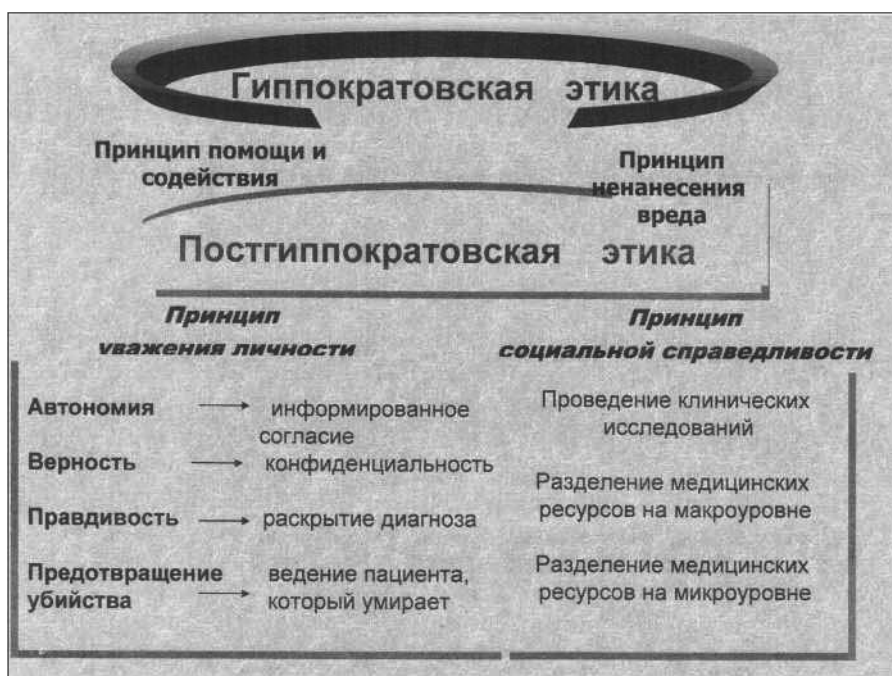
The formation and improvement of the professional model and world view of physician and researcher of the XXI century is inextricably linked with the creative mastering and applying the principles and rules of bioethics as a moral connection of modern achievements of biomedical sciences and biotechnologies with the objectives of stable development of society and with health care.

Deep knowledge in the field of bioethics and biosafety is an essential part of a modern model of a medical specialist. Like the Atlantes they create and maintain the system of modern worldview.

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<i>Hippocrates ethics</i>	
The principle of aid and assistance	The principle of harm avoidance
<i>Post-Hippocrates ethics</i>	
The principle of respect for person	The principle of social justice
Autonomy → informed consent	Carrying out clinical trials
Faithfulness → privacy	
Truthfulness → disclosure of diagnosis	Separation of medical resources at macro level
Preventing murder → maintenance of dying patient	Separation of medical resources at micro level

Figure 1.



<i>Nooethical stage of bioethics</i>		
Information wave		NOOWAVE
BIOSPHERE	Human activity → as a powerful geological force	NOOSPHERE
Latest technologies and biotechnologies		Nootechnologies
Postindustrial society		Noosociety
Threat of degradation		Sustainable development
↑ BIOETHICS	→	↑ NOOETHICS

Figure 2.



Interaction of various spheres of practical work of medical specialists

ETHICAL SPHERE

DEONTOLOGICAL SPHERE

LEGAL SPHERE

PROFESSIONAL SPHERE
(knowledge, skills, abilities)

Figure 3.

Examples of bioethical issues in the sphere of socio-political philosophy

1. How should human rights be protected in the biomedical sphere?
2. How should the best balance of social justice and social obligations with the economic possibilities of society be provided?
3. How can a sufficient level of biosafety be ensured?
4. What is health and how respect for a healthy lifestyle can be achieved?
5. What provisions should be enshrined in the international, national and local codes of ethics?

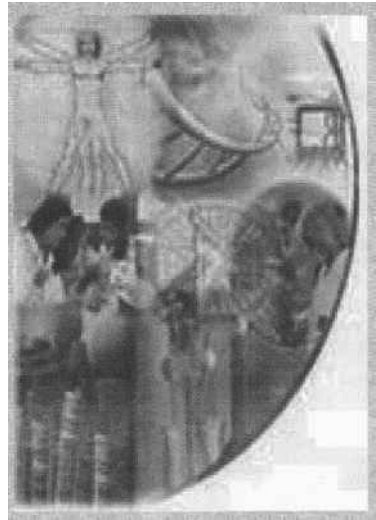


Figure 4.

Examples of bioethical issues in the sphere of legislation philosophy

1. What is the moral validity of banning or restricting the abortion?
2. Are the laws forbidding euthanasia needed?
3. Are the laws authorizing hospitalization of mental patients without their consent needed?
4. What ethical component of the laws on organ and tissue transplantation, using new reproductive technologies and cloning should be.



Figure 5.

Examples of bioethical issues in the sphere of applied normative ethics

1. Does the doctor have moral obligations to inform the patient about terminal illness?
2. Can the breach of patient confidentiality have moral justification?
3. Can euthanasia have moral justification?
4. Is surrogacy moral?
5. Whether the quality of life can be opposed to its value?
6. How is it possible to determine the “best” interests of incompetent patient and correlate them correctly with the family and society interests?
7. The problem of decision making and surrogate informed consent?



Figure 6.