

ФИЛОСОФИЯ НА МЕДИЦИНАТА

THE CLASSICAL AND MODERN TRENDS OF INTERACTION BETWEEN EUROPEAN PHILOSOPHY AND MEDICINE

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Резюме

Анатолій Верменко. Класическите и съвременните направления на взаимодействието между Европейската философия и медицина. В статията се разглежда взаимодействието на Европейската философия и медицина през периодите на Новото време, Просвещението и XX-XXI век. Особено внимание се обръща на влиянието на изследванията на основните философи от класическия и модерния периоди в областта на светогледните и мотивационните основи на човешката дейност върху формирането на теоретичната и аксиологичната основа на съвременната медицина, както и концепциите за връзката между менталното и физическото здраве на човека. Отразени са основните аспекти на съвременните онтологични, гносеологични, методологични, социално-философски и етични изследвания в сферата на медицинската теория и практика.

Ключови думи: философия на медицината, медицинска теория и практика, светогледни и мотивационни основи на човешката дейност, философия на Новото време, философия на Просвещението, съвременна философия на медицината

Анотація

Анатолій Верменко. Класичні та сучасні напрями взаємодії Європейської філософії та медицини. У статті розглянута взаємодія Європейської філософії та медицини упродовж періодів Нового часу, Просвітництва та XX-XXI століть. Особливу увагу надано впливу досліджень основних філософів класичного та сучасного періодів у сфері світоглядних та мотиваційних засад людської активності на формування теоретичної та аксіологічної бази сучасної медицини, а також концепції взаємозв'язку ментального і фізичного здоров'я людини. Також висвітлені основні аспекти сучасних онтологічних, гносеологічних, методологічних, соціально-філософських та етичних досліджень у сфері медичної теорії і практики.

Ключові слова: філософія медицини, медична теорія і практика, світоглядні та мотиваційні засади людської активності, філософія Нового часу, філософія Просвітництва, сучасна філософія медицини

Abstract

Anatoliy Vermenko. The classical and modern trends of interaction between European philosophy and medicine. The interaction between European philosophy and medicine during historical periods of the New Time, the Enlightenment era and XX-XXI century is highlighted in the

article. Special attention is paid to the influence of research in the world outlook and motivation basis of human activity, conducted by the main philosophers of the classical and modern time; on the formation of theoretical and axiological basis of modern medicine, as well as the concept of interrelation of human's mental and physiological health. The main aspects of theoretical research in ontology (or metaphysics), gnoseology (epistemology), methodology, social philosophy and ethics connected to medicine theory and practice are also discussed in the article.

Key words: philosophy of medicine, medical theory and practice, world outlook and motivation basis of human activity, philosophy of the New Time, philosophy of Enlightenment, modern philosophy of medicine

Introduction. In connection with the relevance of the problem of building a new system of development and functioning of medicine and medical education in Ukraine, an important and relevant component of such changes can be considered a change in the role and content of social and humanitarian disciplines, in particular philosophy, as a component of the system of higher medical education, which should ensure the formation of systemic scientific outlook of students.

In recent years, teachers of humanities departments in Ukrainian medical universities have systematically conducted research on the possibilities of involving European experience in solving the mentioned problems, however, in most cases, the historical context of such research is focused on the period of the 19th-20th centuries. It was at this time that a complete system of medical knowledge was formed in its modern version and its philosophical understanding was carried out accordingly.

However, the basic philosophical principles of the philosophical understanding of the content, tasks, ethical norms of medical activity and medical practice were formed in European society during the New Age and Enlightenment. The purpose of this study is to consider the historical heritage of representatives of this period.

The object of the main attention of the author of this research is the study and understanding by representatives of the philosophy of the New Age and the Enlightenment of the essence of human needs, the mechanisms of their formation and practical implementation as an important component of the worldview and motivational foundations of a healthy lifestyle, which is a necessary, and in many cases, the most important part of the prevention of the most common modern diseases, as well as a necessary prerequisite for the maximum implementation of human creative abilities.

Presentation of the main material. The founder of the rationalist school of modern philosophy, R. Descartes, paid special attention to the moral aspects of scientific research, and therefore, in his opinion, the development of science should not take place through the involvement of individual discoveries in the general theoretical picture of the world, but through the creation of a general ethical terminology that does not fill individual gaps in knowledge, but illuminates general truths.

The most important for the further development of medicine should be considered to be the doctrine of reflexes created by R. Descartes. It was based on the principle of general determinism and the idea of the human body as a special machine. It was the further development of reflexology that ensured the equivalence of physiology to morphology in medical science and practice, with further in-depth study of the structure and functional purpose of various levels and elements of the nervous system of the human body. It was the further development of reflexology that ensured the equivalence of physiology to morphology in medical science and practice, with further in-depth study of the structure and functional purpose of various levels and elements of the nervous system of the human body. R. Descartes and J. Borelli also founded the iatrophysical

doctrine, popular for a long time in medicine and biology, which explained the structure and functioning of human and animal organisms using purely physical and mechanistic principles and was later transformed into the philosophy of mechanistic materialism (Verkhratsky, 2011).

Representatives of the iatrochemical school in modern medicine and biology, opposite to iatrophysics, Helmond, Sylvius and Paracelsus founded and defended the idea of the primacy of chemical processes in the functioning of human and animal organisms and can be considered the founders of biochemical science. Paracelsus is also often recognized as the founder of the experimental direction of medical research. F. Sylvius considered the violation of the acid-alkaline balance in the body as the root cause of humoral diseases, and its pharmaceutical and dietary restoration as the main task of treatment. Therefore he carried out numerous laboratory studies on this issue, which contributed to the gradual rejection of the absolute preference for the observation method in medical science. He also created a fairly realistic theory of the role of fermentation in the process of assimilation of food. The results of his research contributed to the discovery of many important enzymes. Strictly speaking, modern socially oriented medical prevention owes its emergence to the development of this theory to a considerable extent. However, the negative result of the concept mentioned above was a significant increase in the unjustified use of poisonous chemical compounds in medical practice, since iatrochemists considered moderate doses of them useful for treatment, and gave excessive preference to chemical means of treatment over means of plant and animal origin.

F. Bacon, the founder of the empirical school of modern philosophy, opposed to rationalism, considered the necessary basis of the inductive method of scientific research he invented to carry out systematic observations of the object of research and check their results during the experiment. Applying this general methodology specifically to the problems of medical science and practice, this researcher emphasized the special role of the history of the disease, which allows us to adequately understand the causes of its occurrence, and considered the main methods of treatment to be etiological therapy and medical diet. He also considered the restoration of the patients' health and the reduction of their suffering to be equally important tasks of the doctor, and recommended that in the case of incurable diseases, he should focus on the latter. F. Bacon was also the first to propose the division of medicine into three main branches: the treatment of diseases (practical medicine), the maintenance and improvement of the general state of health (valeology) and the increase of life expectancy (gerontology), which generally remains relevant in our time.

Francis Bacon, is widely known for his aphorism: "Knowledge is power". The English philosopher called for mastery over one's own and the surrounding nature, "listening" to it and obeying its laws. "Compulsion forces nature to take cruel revenge for itself", therefore "let no one be completely confident in their victory over nature, because nature may not reveal itself for a long time and come alive again at the opportunity or temptation" (Bacon, 2007). Bacon outlined the mechanism of formation of secondary, individualized personal needs on the basis of primary, generic ones. He noted that the habit of performing certain actions and observing certain forms of behavior is the main factor of changes in the motivational sphere, aimed at adapting the individual to living conditions, which depend on his place in society and the state of this society. And only when people find themselves in fundamentally new situations, when their social experience turns out to be insufficient and ineffective, they act in accordance with universal and individual nature (Ibid).

According to Thomas Hobbes, a human is both a natural being and an element of social organisms of various levels and types, the most important of which are civil society and the state. Hobbes considered the needs of self-preservation, increase of wealth and improvement of well-being, increase of social status and prestige, which dominate the personal and social

consciousness and lead to the "war of all against all" to be the defining components of the human essence.

As for alternative, altruistically oriented (justice, mercy, compassion, etc.) and oriented to the preservation of the achieved level of well-being needs and inclinations, "each person obeys them when he wants it and when he can do it without any danger to himself" (McLaughlin, "The Originals: Classic Readings in Western Philosophy", online resource). The need to maintain one's own health as a basis for working capacity and the ability to self-protect can be considered one of the most widespread and influential motivational bases of human activity.

David Hume in his work "On the Immortality of the Soul" expressed considerations regarding the growth of people's needs in accordance with the development of their abilities, primarily mental, as well as their energy. Such a tendency leads to the fact that individuals are constantly forced to spend more and more effort to satisfy growing needs, moreover, needs grow faster than the possibilities of their satisfaction (Hume, "A Treatise of Human Nature", online resource).

John Locke believed that the main regulator of human behavior is not legal, but moral norms arising from the agreement of individuals, most of whom strive for good, not evil. In the book "An Inquiry into Human Understanding", Locke wrote that all types of activity of individuals are ultimately governed by two factors: the desire to obtain or increase pleasure and satisfaction, and the desire to avoid or reduce suffering. It is these desires that are the basis for building the concepts of good and evil, as useful and not useful for their satisfaction. On the basis of these two aspirations, various passions, intentions, impulses, directed at one or another object, arise, which directly motivate people to action. After a person satisfies a certain desire or becomes convinced of the impossibility of its satisfaction, it weakens or disappears altogether, giving way to another.

Locke emphasized that one should distinguish between desires aimed at actively creating, using or, on the contrary, avoiding or destroying objects, situations, phenomena, and those aimed at passively contemplating them. The last variety, according to the English philosopher, is most often found in relationships between people, since observing the happiness or unhappiness of others (without any active actions) allows individuals to enjoy or makes them suffer, depending on the attitude to events and their participants (Locke, 2021). It should be added that the same "passive pleasure" can be given to people by art, especially in our time of global computer and television information easy access and widespread of "mass culture". Locke believed that suffering (in modern terminology – negative emotions) are much more active stimuli for human activity than pleasures (positive emotions). Therefore, most individuals can remain passive for a long time, being satisfied with the existing level of pleasure and not taking active actions to increase it, but physical and spiritual suffering necessarily will cause activity aimed at eliminating it.

Locke also noted that consciousness, will, and reason cannot always control the behavior of an individual. First, in many cases, the freedom to choose and implement activity programs is limited by external factors that make certain actions impossible and others necessary, and these actions are often completely opposite to those that are desirable or undesirable for the subject of thinking, volition and desire. Secondly, the choice of one of several equally possible options of activity is ultimately determined by "anxiety of the mind due to the absence of some good" or the presence of a certain suffering, and the mind can only shift the center of attention of the individual from one such concern to another, and even then not always (Ibid). Therefore, for most of their lives, people perform involuntary actions.

The specified "concerns" (according to modern terminology – secondary needs), according to Locke, arise on the basis of life needs common to all people under the influence of habits formed by upbringing, the example of others, social environment and position, the

specifics of professional activity and lifestyle, even fashion. Therefore, one should distinguish between natural (necessary) and artificial (optional, often distorted and harmful) needs. It is these last ones that force the vast majority of people to spend almost all of their energy and time on petty actions that have nothing to do with achieving the real benefits of earthly and afterlife.

Representatives of the empirical philosophy of the New Age considered the preservation of human health and capacity to work as one of the main tasks and conditions for improving individual and social life, and therefore one of the priority areas of scientific and philosophical research in the field of worldview and motivational foundations of human activity. The achievement of the representatives of this philosophical trend in substantiating the priority of basic, constantly existing needs, in particular the need to preserve and improve the basic physical and mental health parameters of an individual, over secondary rapidly changing individual needs, is a sufficiently valid basis for further study of the creative heritage of philosophers of the New Age with the aim of the subsequent application of their most valuable ideas in order to improve the humanitarian component of the modern system of higher medical education.

Undoubtedly, worthy of attention in the context of this research is the study and understanding by representatives of the philosophy of the Enlightenment, as the continuation of the tradition of the New Age, the essence of human needs, the mechanisms of their formation and practical implementation as an important component of the worldview and motivational foundations of a healthy lifestyle, which is an important component of the prevention of physical and mental diseases, as well as a necessary prerequisite for the maximum implementation of human creative forces. In the opinion of the author, the ideas of the representatives of this historical period can be especially relevant in our time, when the subject of sharp worldview and ideological debate is the relationship and principles of interaction between rational and irrational components and the principles of motivation of human behavior, in particular, manifestations of destructiveness and aggression in collective and individual consciousness and practical activity.

In the philosophy of the French Enlightenment, there were various options for understanding and explaining the motives of human activity. Voltaire believed that passions drive a person to action, and reason is called to manage these actions, determining their optimal plans, forms, and means. For the normal functioning and development of both the individual and the society, the harmonious coordination of the ability to enjoy today and the ability and desire to take care of the future, that is, tactically and strategically oriented needs, is extremely important. "It is very likely that God gave us these needs and passions so that our ingenuity can turn them into our welfare. If many people abuse them, then we should not complain about the good that people turn into evil" ("Voltaire's writings" from Philosophical Dictionary, online resource).

The French thinker Francois de La Rochefoucauld (1613-1680), known for his brilliant aphorisms, among many interesting and insightful considerations about the motives of human behavior, expressed a few that deserve attention in the context of the research being carried out. "Passions are the only speakers whose evidence is always convincing, their art seems to be born of nature itself and based on inevitable laws". "There is a constant change of passions in the human heart, and the suppression of one of them almost always means the victory of another". "It is not what surrounds us that gives us joy, but our attitude towards those around us, and we are happy having what we love, not what others consider worthy of love" (François de La Rochefoucauld, "Moral maxims and reflections", online resource). The above quotes allow us to conclude that La Rochefoucauld, first of all, considered it necessary to take into account, and not ignore or suppress, the emotional and subconscious component of the human essence during the planning and implementation of all varieties and aspects of the life of an individual and society. Secondly, in his opinion, the actualization of some needs stops the implementation of others, and it is their interaction, and not the influence of various norms, plans, principles, and beliefs, that

is the main and determining mechanism of tactical and strategic reorientation of the activities of individuals. Finally, the emotional state of the subject of action, which is an indicator of the degree of satisfaction of his dominant needs, is significantly more influenced by his own assessment of the life situation than by social assessment.

J. O. La Mettrie expressed an interesting opinion that the more living beings have a developed mind, the more they lose their instincts, and this is not always and not in all aspects useful for them ("Man as machine", online resource). Creatively developing these considerations, one can come to the conclusion that too little regulation of human behavior by instincts is one of the reasons that among all the inhabitants of our planet, Homo sapiens turned out to be the greatest threat to the biosphere and its own species. For example, it is the innate behavioral programs in the vast majority of cases that do not allow predatory and poisonous animals to use the most effective and deadly means and techniques of attack used during hunting for breeding partners, food, territorial and other resources against individuals of their own species. prey or protection from animals of other species. For a long time, people have used any means and technologies against each other during wars, criminal attacks, and even domestic quarrels with almost no restrictions. In the history of mankind, there have been many attempts at socio-cultural regulation of such actions – from the ancient Greek laws on the non-use of bows and arrows in wars between polities to modern international agreements on the prohibition of chemical and biological weapons, anti-personnel mines, etc., but in most cases their effect was limited and short-lived.

K. A. Helvetius emphasized the leading role of the sensory-emotional component of the human essence and the system-forming and optimizing function of private interest. However, such "selfish morality" was based on universal moral values and did not foresee the aggravation of inter-individual and inter-group competition, but on the contrary, the humanization and harmonization of relations between all members of society on the basis of rapprochement and coordination of their needs, interests, worldview and moral orientations. In particular, Helvetius believed that a person should be guided and is indeed guided in everyday life primarily by common sense, and "the same can be said about the expression "common sense" as about the words "educated humanity". Humanity, in turn, contains primarily the principle of justice ("A Treatise on Man: His Intellectual Faculties and His Education", online resource).

D. Diderot, unlike the other French educators mentioned above, was a supporter of the theory of innate moral feeling (to a large extent sharing the views of the English educator, the author of one of the concepts of Shaftesbury's sensualist-altruistic ethics) and considered the most important motives of human activity, which are based on the desire for integrity, mutual love and support. All kinds of influence of life circumstances on the personality can, in his opinion, only suppress these generic inclinations or contribute to their development and realization, but not change their essence. At the same time, Diderot believed that a person is "only a simple passive machine, a tool of various motives that move him, he is not only not free, but also has not performed any act that would directly result from the decision of his will", acting like an automatic mechanism ("Reason and Resonance", online resource). Such a complete deprivation of a person's free will distorted the understanding of the specifics of their life, which was later used to justify and defend numerous behaviorist, mercantilist, pragmatist, paternalistic, and especially totalitarian theoretical concepts and practical technologies of social manipulation of the behavior and development of individuals. In the medical field, this concept was one of the reasons for the emergence of ideas about the passive role of the patient as a consumer of medical services, which only in the second half of the 20th century was changed to the modern theory of active cooperation between the patient and the doctor and personal responsibility for the state of one's health.

In the context of this study, the creative heritage of the successor of the Enlightenment, the prominent French naturalist and evolutionist J.-B. Lamarck, deserves special attention. In the book "Analytical System of Positive Knowledge about Man" he wrote that man can be both the wisest, kindest, noblest, and the cruelest, meanest, and most short-sighted creature in the world. Everything depends on the extent to which the inclinations, habits and preferences that determine the nature of the vital activity of individuals and their associations in each individual situation and throughout their existence are formed and guided by reason and reason, and to the extent that the latter are enlightened by knowledge. After all, this determines the extent to which individuals and teams are able to predict, realize, and evaluate the immediate and distant consequences of choosing and implementing one of the possible options for their actions. A person, blinded by selfishness, is insufficiently prudent even in what concerns his own interests: due to his tendency to extract pleasure from everything under his control, ... due to a carefree attitude to the future and indifference to his own kind, he seems to contribute to the destruction of the means of self-preservation and thus – to the extermination of one's species" ("Zoological philosophy; an exposition with regard to the natural history of animals", online resource). Deprived of foresight, prudence, the ability to self-control and self-correction of behavior due to ignorance and lack of education, such individuals (and even whole nations) are capable, if their destructive activity is not hindered by the opposition of external forces, the influence of laws, traditions and customs, or if they are not fortunate enough to master new means and methods of activity, "to turn vast expanses of land, once extremely fertile and densely populated by various living creatures, into bare, barren and dead deserts." The same thing happens in the relationship between individuals and their associations of different levels and types, who seek to rob, subjugate, oppress and extort each other, and even, blinded by fanaticism, try to completely exterminate those who differ from them in terms of cultural and ethnic, religious, class, ideological or other characteristics. "We can probably say that man's purpose seems to be to destroy their kind, having previously turned the globe into an uninhabitable one."

Therefore, Lamarck proved that human activity inevitably acquires a suicidal and environmentally destructive character, if its subjects cannot in time master sufficiently safe and effective methods, tools and forms of satisfying their needs and form such a system of personal and social stimulants on this basis and regulators of life activities, which would allow to harmonize their interaction with the natural and social environment. Lamarck, like his predecessors, educators, considered the development of science, education and culture, which should ensure the multiplication of knowledge about the universe and man and their distribution in society, to be the main means and method of optimizing the directions and rates of formation of the need-motivational sphere, worldview, abilities of individuals and collectives. Unfortunately, such views contained not only positive and realistic components, but also significant shortcomings, since the subconscious-irrational aspects of human essence and behavior were almost completely ignored, which led to the one-sidedness and insufficient effectiveness of the proposed programs for changing the nature of individual and social life activities and development.

During XX-XXI century the interaction between philosophy and medicine acquired specific character which is still under discussion in philosophical anthropology, gnoseology and social philosophy. Two most common points of view are that philosophy performs compensatory function as scientific theory of medicine or can be interpreted as theoretical addition to medical knowledge in the frame work of natural philosophy approach like it was in previous periods of philosophy and medicine historical development. The compensatory approach as specific to modern time points primary to the hetero chronic character of medical culture formation caused by the slower development of its theoretical and gnoseological system in comparison to its practical and object orientated elements including ethics. One of the main reasons of such hetero

chronic development of medical culture and its slower development if compared to biological science is specifics of human being as both biological and social object of research. The above mentioned conditions cause the actuality of attempt to one more time re-evaluate the object of research of medicine and its place in the system of modern knowledge which was undertaken by the author of this research.

Main representatives of modern philosophy of medicine are Rachel Ankeny, Christopher Boorse, Nancy Cartwright, H. Tristram Engelhardt, Fred Gifford, Havi Carel, Donald A. Gillies, Jeremy Howick, Hilde Lindemann, Ingvar Johansson, Keekok Lee, Michael Loughlin, Frederica Russo, Kazem Sadegh-Zadeh, Kenneth F. Schaffner, Miriam Solomon, David Papineau, Edmund Pellegrino, John Worrall, Jacob Stegenga and others, so their points of view were basic for the formulation of problematic and methodological basis of this research (Boorse, 1987, pp. 361), (Engelhardt, Wildes, 2004, pp. 1730-1741), (Schaffner, Engelhardt, 1998, pp. 267-268).

The main object of research of medicine was and is during all the historical periods the human in all the fullness of its definitions beginning with physical body and finishing with social, psychical and spiritual qualities of personality. Medicine researches all the aspects of human life activity which are related to the problem of human health and disease, norm and pathology in all their diversity and specific relations of human and its natural, social and cultural environment. The specific laws of medicine are the objective laws of normal and pathological life activity of human organism and human personality.

It is necessary to consider the problem of correlation between the subject and the object on the basis of dialectic methodology in the process of medicine development and its paradigmatic changes. Elemental holistic concepts of ancient world were the following. Hippocrates proposed to heal not the disease but the patient, taking into account the main features of a person, her mode of life and natural environment. Socrates is told to express such a thought, "Good doctors say that it is impossible to heal one eye, but the whole head, if eyes are to be recovered. Likewise, it is impossible to heal a head without healing the whole body. The biggest mistake is the division into doctors of the body and doctors of the soul, because they are indispensable in fact".

Biomedical model is based on the socio-medical understanding and modern holistic approaches to a human in the context of integrity of human existence. Thus, considering the complexity and multi-level structure of the object of research medicine is connected both with natural and humanitarian sciences and has the status of a synthetic science, an intermediary one. Theoretical foundation of medicine is biology, but it does not cover all its content. So, considering the objective position and functional designation of separate medical sciences they are divide into 3 groups: medical and biological sciences (fundamental and theoretical), clinical (applied and practical) and social and hygienic (development of optimal health preserving model of life activity in natural and social environment).

The philosophy of medicine can be described as a branch of philosophy that studies problems of ontology (or metaphysics), gnoseology (epistemology), methodology, social philosophy and ethics connected to medicine theory and practice. Philosophy of medicine is closely connected to medical ethics, bioethics and philosophy of healthcare (which is concentrated on research of ethical and political issues arising from healthcare research and practice). The newest direction school, in the philosophy of medicine is analytic philosophy of medicine. Intense debates have occurred in the past over whether there is a distinct field rightly termed "philosophy of medicine" but now there are dedicated journals and professional organizations, well-established canon of scholarly literature, and distinctive questions and problems, so it is defensible to claim that philosophy of medicine is already firmly established. Ethics and axiology were always among the main problems of philosophy of medicine, but bioethics is generally considered to be a distinct field. However, philosophy of medicine serves as a foundation for

many debates within bioethics as it analyzes fundamental components of the practice of medicine that frequently arise in bioethics such as concepts of disease.

The ways in which health-care professionals (ranging from clinicians to biomedical scientists) interpret, evaluate and use knowledge are central concerns of medical gnoseology and epistemology. Evidence-based medicine studies the ways in which medical specialists can gain knowledge regarding key clinical questions such as the effects of medical interventions, the accuracy of diagnostic tests, and the predictive value of prognostic markers. It is usually interpreted as methodology of appliance of medical knowledge to problems of clinical care but sometimes it is extended to philosophy of evidence which research hierarchy of evidence and rank different kinds of research methodology by the relative evidential weight they provide. Currently most philosophers deny the legitimacy of such the extension. The philosophy of medicine also has made important contributions to general philosophy of science and particularly to understandings of explanation, causation, and experimentation as well as debates over applications of scientific knowledge. Finally, the philosophy of medicine has contributed to discussions on methods and goals within both research and practice in the medical and health sciences. Most researches in philosophy of medicine are currently based the Western tradition, although there are growing literatures on philosophy of non-Western and alternative medical practices. It emphasizes philosophical literature while utilizing relevant scholarly publications from other disciplinary perspectives.

The ontology of general medical science includes a set of logical definitions of most general terms that are used across medical disciplines, including: 'disease', 'disorder', 'disease course', 'diagnosis', and 'patient'. It provides a formal theory of disease that is elaborated further by which extended by specific disease ontology, including the infectious disease ontology and the mental disease ontology. The main field of researches is restricted to humans, but many terms and methods can be applied to other organisms as well. The ontology of medicine recently developed a special interest the idea of causality because the purpose of medical research is to reveal causes of disease and causes of healing. The scientific processes used to generate causal knowledge give clues to the metaphysics of causation. For example, there is quite popular idea that randomized controlled trials are more helpful in revealing causal relationships than observational studies. Here causation is understood as counterfactually dependent, so the main difference of randomized controlled trials from observational studies is that they have a comparison group in which the intervention of interest is not given. Main causal paradigms in biomedicine are the linear mono-factorial paradigm championed mainly in clinical medicine; and the non-linear, reciprocal, multi-factorial paradigm invoked in epidemiology.

Conclusion. On the basis of the above considerations, the author considers it possible to formulate the following conclusions of the conducted research. During the New Age, the period of dominance of naturalistic philosophy as a basic element of the worldview of medicine was completed and the basic foundations of the scientific-theoretical type of medical worldview were formed. Philosophy began to perform a compensatory function regarding the diachronic nature of the development of the methodological-epistemological base of medical theory and practice compared to the somewhat faster development of both medical practice and ethics, as well as biological sciences, which are not limited by the human-dimensional specificity of the research object and process. It is the performance of a complex worldview and theoretical integration function that is the basis for preserving and strengthening the importance of the leading role of philosophy within the humanitarian component of the modern system of higher medical education.

Representatives of the philosophy of the Enlightenment considered the preservation of physical and mental health of a person to be one of the main tasks of improving individual and social life activities, and therefore one of the priority areas of scientific and theoretical research.

The achievements of the representatives of this historical period in the field of determining the content, structure, and mechanisms of practical implementation of worldview and motivational principles of human activity are a sufficiently valid basis for further study of the creative heritage of the philosophers of the Enlightenment with the aim of improving the humanitarian component of the modern system of higher medical education.

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