

Differentiation of Adverse Outcomes in Medical Practice: Moral and Legal Aspects (Russian Health System Set Asan Example)

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Abstract

The article substantiates the need for strict differentiation of such definitions as ‘medical error’, ‘direct harm’, ‘iatrogenism’, ‘indirect harm’, ‘accident’; their criterion determination and legal status, since the harmful consequences of treatment are one of the main threats to both individual and public health throughout the world. The problem analysis is based on transdisciplinarity, a methodology that studies the problem at various levels of reality, taken as a whole. This methodology contributes to the penetration of interdisciplinary methods and knowledge, allows you to form new motivation about the issues under consideration, to systematize, to transfer existing knowledge to new situations, to combine the known and reveal new facts. The study revealed ambiguity in the interpretations of various kinds of definitions of unfavorable outcomes, which leads to problems of differentiating these concepts. The article proposes a criterion for differentiating unfavorable outcomes in medical practice, based on the actions of the physician, which differ depending on the physician’s adherence to generally accepted professional requirements or deviations from them. Adverse outcomes resulting from a physician’s departure from generally accepted professional requirements should be subject to legal liability. The study of the analyzed issues also revealed the absence of such categories as ‘medical error’ and ‘iatrogeny’ in the law field as well as any regulations of these actions. The article concludes that the use of transdisciplinary methodology contributes to the formation of new knowledge that is capable of meeting modern requirements and its application in practice.

Keywords: debt; ‘Medical error’; ‘Indirect harm’; systems approach; interdisciplinarity; ‘accident’; ‘Direct harm’; transdisciplinarity; ‘Iatrogeny’.

Introduction

Variability is one of the most important properties of the sociocultural environment. As a rule, the change in the paradigm of the cognitive process is historically associated with social reasons. A

cognitive process is a subject-object act, acting as the ratio of thinking to an object through modeling, carried out from external to internal signs, allowing one to understand the very essence of the object under study. The cognition process, which occurs both at the empirical and rational levels, begins with the mental selection of a certain object, the criterion of which is the goals of human activity. In this regard, human cognition cannot exist outside the rational, which is understood as a self-sufficient system of universally valid rules, criteria, and standards. Rational cognition presupposes a logical consideration of one or another object of reality based on generally accepted principles, taking into account objectivity, rationality, and criticality. At the present stage, the post-non-classical type of rationality prevails, according to which the knowledge gained about an object is correlated with the values of both the scientific community and with the goals of a general social nature.

Medicine is one of the most important areas in human life; but like any human activity has its own errors, in particular, harmful consequences as a result of treatment.

Medicine as a field of human activity is a complex non-stationary system. Its parameters change, the system evolves. As a rule, a complex system has the property of integrity, but at the same time, the properties of the system are not inferred only from the properties of its elements, since the elements of the system themselves are complex systems that contain elements ordered by both internal and external structural relations that affect each other. 'Products of action' in such systems can include not only the desired, purposefully created effect, but also the side results of the activity. Since the nature of the action assessment is relative to the nature of the consequence, then the outputs of the system will be numerous.

The issue sources discussed in the article were the works of Western and Russian scientists. So, in particular, the methodological basis was the works of L. Bertalanffi [21], E. Morin [24], I.V. Lysak [9], L.P. Kiyashchenko [5,6], substantiating the systemic approach, the relationship between the concepts of 'interdisciplinarity' and 'transdisciplinarity' and defining transdisciplinarity as a principle of scientific research that allows integrating disparate knowledge into a new holistic system.

The issue of 'medical errors' was considered by thinkers and doctors even before our era, the modern approach in the domestic literature on this issue goes back to the work of I.V. Davydovsky [2]. Among foreign authors, the work of R.K. Riegelman [12]. The classification, causes of 'medical errors', analysis of definitions associated with 'medical errors', the need to determine their legal criteria for regulating compensation for harm and liability of physicians are considered by S.V. Avdeev, A.I. Kozlov [8], Y.T. Sharabchiev [17], N.V. Elshtein [18], A.V. Suchkov [13], T.V. Suchkova [14], A.A. Markov, P.G. Dzhuvalyakov, V.V. Kolkutin [10], A.A.

Mokhov [11], A.G. Fomenko [16]. Authors such as L. Helmchen, M. Richards [23], H. Woodward, O. Mutton [27], A. Hannava [22], S. Petronio, A. Torke [25,26] describe the model of disclosure of 'medical errors' and the influence of this mechanism on the frequency of medical errors in the treatment process.

Materials and methods

The material for the study was modern medical ethics, the Code of Ethics of a Russian Doctor [20], and the Criminal Code of the Russian Federation [15].

The purpose of the article is to analyze, within the framework of subjective actions, the interpretation of various definitions of adverse outcomes in medicine; determine their differentiation criterion; to reveal the interdependence of legal and professional ethical norms for the implementation of the responsibility of medical workers and the maximum reduction of harmful consequences from poor quality medical care.

The objects under consideration are dialectically linked and are in the interdisciplinary field of knowledge. Using the anti-elementary strategy in the form of a systematic approach, the problems under study in this article are an emergent property of the system. For completeness of the research task, the problems considered in the article are analyzed within the framework of the paradigm of transdisciplinarity. This methodology is characterized by the convergence of research methods, the use of which, taking into account the natural and human sciences, makes it possible to analyze at several levels at the same time, to systematize the issues under study, and, as a consequence, to enter a new round of facts, which, in turn, allow us to identify new provisions in the problems under study.

The greatest efficiency of this methodology is based on the dialectical method through the main functions of scientific knowledge, i.e. explanation, understanding, and forecasting. If logical deduction from the corresponding standard is sufficient to explain a fact, then within the framework of understanding (the hermeneutic method) the existence of two modes of cognition (one dependent on subjectivity, the other not) makes it difficult to understand the objects under consideration. Forecasting from the newly obtained facts allows us to draw a conclusion about hypothetical assumptions that are worth discovering in the future.

Results

Medicine is one of the humane professions, its goal is to preserve and improve life. And this goal is realized not only through medical knowledge but also through the spheres of morality and law. For many centuries, the healing process was carried out on the principles of the Hippocratic Oath. But the development of the historical process requires new standards, including in the field

of medicine and law. The modern model of medical ethics, bioethics took shape in the 70s of the 20th century. In this model, along with the primordially conservative one, based on the principle of 'do no harm' a liberal form and the principle of 'autonomy' appear. The constants of liberalism proclaim in medicine respect for the rights and dignity of the patient and the granting of the right to make independent decisions about their health.

The principle of 'do no harm' is the oldest in medical ethics. The Hippocratic Oath states 'I will direct the regime of the sick to their benefit in accordance with my strength and my understanding, refraining from causing any harm and injustice' [7]. The content of this postulate testifies to the personal responsibility of the physician for the healing process. In the modern Code of Ethics of a Russian doctor in article 3 [20], the essence of the principle 'do no harm' is the ability of a medical specialist to compare benefits and complications in the treatment process. Such a skill is not always possible, even for a professional, it is the consideration of this fact that complements the principle of 'do no harm' with the physician's ability to admit his mistakes, analyze and correct them.

In medical practice, the principle 'do no harm' includes the forms of 'direct harm' (as a result of inaction; malicious intent, dishonesty, and negligence; incompetence originating from the Hippocratic oath 'being far from everything intentional, unrighteous and harmful' [7]); 'Indirect harm' (as a result of objectively necessary actions); 'Accident' (acting in accordance with generally accepted professional requirements, but the impossibility of anticipating complications). The so-called 'medical errors' stand apart. As an analysis of this problem, let us consider its classical version, which goes back to the work of I.V. Davydovsky [2], who defines 'medical errors' as a conscientious delusion with the exclusion of malicious intent, dishonesty, and negligence. In this definition, the criterion for 'medical error' is 'conscientious delusion', which can be considered within the framework of morality or a psychological factor. The Western vision of this problem belongs to R.K. Riegelman [12], an American researcher who distinguishes between 'mistakes due to ignorance' and 'mistakes for want of skill.' 'Errors of ignorance' occur, according to the author, as a result of the doctor's failure to possess the necessary information. But the main reason for "medical errors", according to Riegelman, is the inability to apply knowledge. If, according to Davydovsky, there is no consideration of 'medical errors' in the aspect of determining the qualification of a doctor's actions, then, according to Riegelman, incompetence is made a mistake.

There are two extremes on the issue of 'medical errors'. One is that 'medical error' and 'direct harm' are identified, due to the fact that both of these concepts contain a subjective factor, and their end result is an unfavorable outcome for the patient's health. The second extreme is even

greater inconsistency when a 'medical error' is perceived as inevitable in medical practice, for example, an 'accident'. This view is carried out on the basis of formal logic, which allows one to come only to syllogism as a tautology. According to the dialectical method of G.W.F. Hegel [1], the overall result and direction of the development process in double negation express the unity of three main points overcoming the old, continuity in development, and the appearance of the new. In this regard, the 'medical error' method differs from 'direct harm' and other adverse outcomes in medicine. The phenomenon of 'medical error' is revealed through the development of knowledge from 'phenomenon' to 'essence' as a unity of opposites. 'Essence' expresses the internal general in 'phenomena', their qualitative specificity. It is possible to cognize it only at the level of abstract thinking. 'Phenomenon' is an external manifestation of 'essence' perceived directly. But since 'phenomena' are more prone to change, they can only be an appearance, a product of human consciousness.

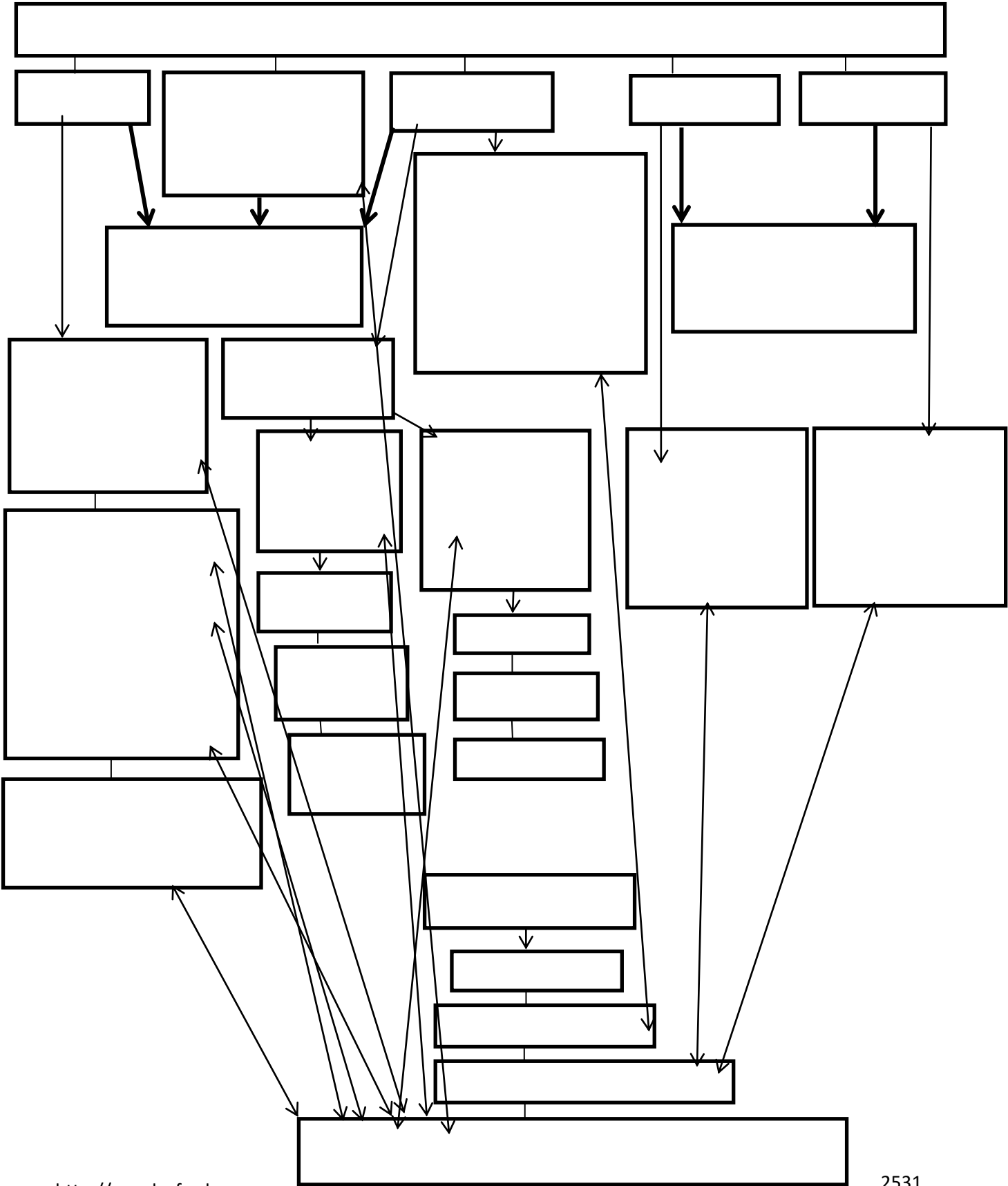
'Medical error' is an independent category that occurs due to unskilled actions of a specialist and its complexity lies in defining the boundaries of delimiting the causes of incompetence. Modern medicine is a complex differentiated system, as a rule, a physician has one or another qualification, within the framework of which he must be competent, and if the unfavorable outcome was the result of incompetent actions within the framework of the duties of a physician with the appropriate qualifications, then, in this case, we are talking about applying 'direct harm'. Otherwise, it is about a 'medical error' and as a result, it should have an independent legal sanction, in contrast to the legal norms regulating the form of 'direct harm'.

Medicine, like any human knowledge, cannot be absolute, the method of doubt by R. Descartes [3] should be the leading one in medicine. This method obliges in difficult cases to resort to consultation of doctors. Justification for 'medical error' is impossible due to their commission as a result of deviation from generally accepted professional actions. The errors of theoretical reason, according to I. Kant, can be overcome only with the help of practical reason on the basis of free autonomous pursuit of duty [4].

Adverse outcomes in medical practice include 'iatrogenies' (ancient Greek *ιατρός* - doctor + ancient Greek *γενεά* - birth) these are changes in the patient's health for the worse caused by a careless action or the word of a doctor. [19, p.385] Their specificity is varied depending on their causes [8]. The situation in this category is similar to the problem of 'medical errors'. The lack of legal status of 'iatrogenies' and legal sanctions, as a rule, in practice lead to their identification with 'direct harm'. Such an approach from both the cognitive and moral and legal sides seems to be reductionist. The consequence of the lack of a well-grounded understanding of the studied categories is a decrease in the responsibility of doctors, on the one hand, and, on the other, the

presence of subjectivity in making a decision on a sanction that determines the degree of guilt of a doctor. The results of the above are presented in diagram 1.

Diagram 1. Approaches to Adverse Medical Outcomes.



Discussion

The discussion of the problems under consideration in the article is aggravated by the maturing of another ethical dilemma in the field of medicine, which is associated with the introduction of artificial intelligence (or AI) into the process of medicine.

Two types of knowledge: factual, propositional, i.e. signifier ('knowledge of what') and hidden, experimental ('knowledge of how') are interconnected. But it is impossible to reduce knowledge based on skills to knowledge of facts. AI systems will improve performance only in knowledge 'apart', and in medicine, positive results can be obtained only on the basis of complex knowledge. Even if we assume that the percentage of 'medical errors' will decrease, there will also be a decrease in the professionalism of doctors who are out of practice. And the question also arises, who will be responsible for AI mistakes?

The analysis carried out in relation to adverse outcomes in medicine revealed the main problem in this issue, which lies in the disciplinary interdependence. The objects under consideration include knowledge of both purely professional and moral, legal, psychological, and communicative knowledge. The presence of intersubject feedback presupposes the reflection of knowledge in a private disciplinary field in terms of the content, methods, and means of the studied phenomena corresponding to modern conditions, the vision of a new function of the problems being studied. Knowledge needs to be quickly translated and transmitted in an increasingly complex and expanding environment. There should be no formalization of the information used. For the analyzed objects, a qualitatively new version of information and knowledge is required. The specificity of intersubject cognition allows, through the function of explanation, to reveal the cognitive and logical essence of the objects under consideration; the function of understanding contributes, on a psychological level, within the framework of sensory experience, and on a theoretical basis, to substantiate their meaning through clarifying the goals of medicine, morality, and law.

Conclusion

A liberal position concerning the problems under study is not only fraught with the choice of wrong decisions, but also provokes a decrease in the responsibility of doctors, which in turn leads to an increase in undesirable consequences in medical practice.

The main emphasis in the article is the need for a strictly unambiguous understanding of the definitions of adverse outcomes in medicine and their adequate regulation in the field of law.

The implementation of these tasks is possible based on a systematic approach within the framework of the paradigm of transdisciplinarity, which allows developing knowledge that

corresponds to objective reality and serves to increase the level of professionalism of healthcare professionals.

The study presents the author's diagram 1, which reflects the differentiation of unfavorable outcomes in the process of treatment based on a criterion that determines the boundaries of the unacceptable and inevitable in medical practice. Such a criterion is the actions of a doctor, which, with the proper performance of duties, strictly correspond to generally accepted professional requirements. Derogation from them, depending on the severity of the harm and the reasons, is subject to legal liability (i.e. disciplinary, administrative, civil and criminal). Besides, diagram 1 reveals a gap about 'medical errors' and 'iatrogenies'; there are no specific articles in the legal field regulating these categories. Russian legislation proposes a project to introduce additional norms in the Criminal Code of the Russian Federation, article 124.1 'Inappropriate provision of medical care' and article 124.2 'Concealment of violations of medical care.'

As a forecast, as a result of the analysis carried out in the study, a conclusion can be drawn. If, based on an interdisciplinary approach that requires the knowledge and opinions of specialists in various subject areas of knowledge, the content of all forms of adverse outcomes in medicine is clarified and consolidated, the criteria for their differentiation are determined and independent legal sanctions are formed for each of the definitions, the quality of medical care will increase.

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