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**FORMING DOCTOR'S SET OF VALUES DURING VOCATIONAL
TRAINING: SEMIOTIC DIAGNOSIS OF RESULTS**

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Abstract

The work presents the results of the sociological survey conducted in the 2015/2016 academic year at Siberian State Medical University resulted in obtaining students' opinions on the basic moral and ethical problems of medical practice. The task of the research was to identify the dynamics of transformations of worldview and a set of values of students and related changes in their attitudes to primary issues of bioethics over the past 10 years (using the results of the previous research conducted in 2005). The solution of the first task resulted in emergence of the second task - the transformations revealed required a philosophical analysis and identification of its causes.

Semiotic diagnostics of models of healing, based on the ethical square of Ruben Apresyan (2008), allowed one to categorize them in accordance with ethical stands and models of behavior. It was concluded that medical students must master all the models of doctor-patient relationship, and thus adopt all the goals (as well as corresponding ethical components, in other words, paradigms of values) on which these models are based. To exclude the appearance of deviations in the future professional activity, moral education of a modern medical student must begin as early as possible. Mastering the ethical component of doctor's profession must go through a difficult route in all directions of the value paradigms, indicated in the ethical square.

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1. Introduction

In the process of teaching bioethics, a teacher encounters the question of a set of values of medical faculty students. This question is not an idle one. The answer to it determines the emphasis in working with students, forms directions in organizing a discussion of controversial topics and helps to define the tasks of bioethics in the system of medical education in a broader humanitarian context (Stevens, 2017; Vidal, 2016). One must take into account the fact that teaching bioethics is “not merely focused on skills to improve decision-making” but on how to “improve the professional” (ten Have, 2014, p. 10).

2. Problem Statement

During 2015/16 academic year at Siberian State Medical University (Tomsk, Russia), the sociological survey was conducted aimed at examining students' opinions on the basic moral and ethical problems of medical practice and comparing the obtained data with the data of similar study conducted in 2005. In the course of this research, certain changes in the ideology and students' set of values became apparent, as well as in their attitude to the problems of bioethics. As a result, the problem of studying the transformation of students' set of values and worldview was posed.

3. Research Questions

The task of sociological research was to answer the following questions: Has the attitude of students to ethical component of doctor's professional activity changed over the past 10 years? Has the attitude of students to the primary bioethical problems (beginning of human's life, abortion, IVF, fetal therapy, euthanasia, etc.) changed over the past 10 years? Do the answers of respondents in 2015/16 differ from the answers of respondents in 2005?

4. Purpose of the Study

It was necessary to find out the reasons of discovered changes and to philosophically comprehend tasks that, as a result, face bioethical education at a medical school in medical faculties. The task of the given research was to clarify the dynamics of transformations of worldview outlook and students' set of values for the last 10 years and related changes in attitude to the primary problems of bioethics as well as philosophical analysis of changes occurred and revealing its causes.

5. Research Methods

By the method of the mixed group pencil-paper questionnaire, 181 students of medical and pediatric faculties were interviewed during 2015/16 academic year. The survey was held two times – before studying bioethics and after passing the course. The given sample is not representative and the given data cannot be extrapolated to all the students of medical faculties. However, the obtained data can provide the certain spectrum of characteristics in comparison with the similar survey conducted in 2005/06 academic year at the same University among students studying bioethics.

To identify new images of the main models of healing, the “ethical square” of Ruben G. Apresyan was used (2008), which is a basic scheme of value consciousness. The author also relied on works of Irina V. Melik-Gaykazyan devoted to the bioethical dimension of vocational education problems [Melik-Gaykazyan, 2012) and on her method of semiotic diagnostics of information society technologies (Melik-Gaykazyan, 2010; Melik-Gaykazyan, 2013) in application to models of bioethics (Melik-Gaykazyan et al., 2016; Evdokimov et al., 2016; Mescheryakova et al., 2016).

6. Findings

As a result of the sociological survey, the following data were obtained. During the initial survey, 87% of surveyed responded to the question “Do I need a doctor's oath?” affirmatively, 8% - negatively, others preferred not to answer. During the second survey, 90% responded to the same question affirmatively, and 10% - negatively while no one preferred not to answer. The answer to a similar question in 2005 did not differ much from the 2017 data (89% “yes” and 9% “no”).

94% of respondents agreed with the statement that medical professionalism should include the moral qualities of a doctor and involve the acquisition of ethical knowledge, 4% disagreed and 2% preferred no to answer. The second survey also revealed almost no changes in the answer to this question. (In 2005, 99% of the respondents interviewed agreed with this statement).

The survey showed in 2016 that while attending the bioethics course, the opinion of when a human life begins has changed. If during the first survey, the alternative “from the birth” was chosen by 54% of respondents, after passing the bioethics course as much as 70% chosen this alternative.

If one compares 2005 and 2017 surveys, then the number of abortion supporters were just about the same (the difference is only 1%). However, there were more opponents (8%) and, accordingly, less of those preferred not to answer. In 2005 abortion is recognized as a murder by 6% more respondents and the right of a doctor to refuse from conducting abortion on the basis of moral beliefs recognized by less than 10% respondents.

During 2015 survey, 59% of respondents accepted euthanasia before starting to study bioethics and 50% after. The opinion on acceptance of IVF (in vitro fertilization) has not changed (83% “pro”), 25% of respondents consider human cloning acceptable both before and after passing the bioethics course. In 2005, the number of euthanasia supporters was less by 10% of respondents, IVF - by 16%, but the idea of acceptance of human cloning was supported by more than 12% respondents.

Among other things, the study was aimed at identification of respondents' particular religious confession because this fact is able to significantly influence the attitude of a person to a particular medical technology. 62% of respondents selected Orthodox confession, 7% - Islam, 8% - Buddhism and 20% atheism. A few preferred not to answer. However, belonging to one or another confession is often formal that is pointed out by responds, who consider oneself an orthodox. 41% of respondents consider abortion, 54% - euthanasia and 23% - human cloning as acceptable.

The questionnaire included the open question “Who do respondent consider as the ideal of a doctor?”. It is interesting that 60% of the interviewed could not answer this question, refusing to answer or simply specifying: “I have no ideal of a doctor”. Pirogov was mentioned most often (15 respondents) by 40% of respondents who answered this question, close relatives and parents were mentioned by 12

respondents. This list also includes outstanding medics, living from antiquity (Avicenna) to modern times (Leonid Roshal), protagonists of TV series and books and even doctors-writers (Chekhov and Bulgakov).

In fact during the time that has elapsed since the 2005 survey, a new generation of students has emerged. The conducted research allows drawing a conclusion that a new generation of students with other values, meanings, principles has come. The difference is not so significant, but the apparent dynamics of changes is clearly traced. In 2015, compared to 2005, students prefer not to answer open questions, the questions, requiring justification, which indicates a decrease in the ability to express their thoughts, to defend their point of view, to have their own opinion on controversial issues. For 2015, data are characterized by an increasing number of those who consider themselves atheists: today every fifth person (20%) relate oneself to atheists, while in 2005 there were two times less respondents (10%) in this category. Content analysis of answers to the open question “What are your three cherished desires?” showed that the basic desires of the majority of students do not go beyond their University: to graduate from high school, to get a diploma, to pass a session, to pass anatomy, to pass biology, etc. In 2005, a greater number of students' wishes extended to the future professional activities (to become a good doctor). The number of desires, associated with personal development, decreased. No ideal of a doctor, lack of significant goals in life, unwillingness to defend one's answers, related to unacceptability of euthanasia - all this indicates the ideological doubtfulness, amorphism, indifference.

The reasons of this doubtfulness are as follows. Firstly, today many students are not able to analyze the reality or have poor analytical skills (which is revealed specifically at seminars). Secondly, they are indifferent, i.e. their inadaptability, unevenness in the surrounding reality are manifested. Thirdly, the cultural context has changed. In the last decade, a number of TV series, feature films about doctors and medicine in general were released. The new biomedical technologies make it possible to create entertaining plots, both realistic and fantastic. In modification of symbolic context, not only many live variations appear, but also their everyday visualization occurs (same-sex marriages, surrogate motherhood etc.) and as a result – it becomes obvious, it does not shock.

In 2005, the students did not watch Russian television series “Interns” (the premiere was in 2010), “Dr. House” series was not so popular, while today its characters (House, Wilson) become the ideal of a doctor for the medical students. New symbols, new images of a doctor emerge. It is very difficult to imagine the existence of doctors like Dr. House, such genius, focused on creativity and uniqueness in medical profession, in the past. In medicine of the past, both distant and near (for example, in the Soviet healthcare system) existences of Dr. House would be unthinkable.

Therefore, when obtaining medical education, it is also important whether students understand what kind of doctors they will become in reality, and, accordingly, where they will work. Based on the “ethical square” by Ruben Apresyan (2008), the author can present models of doctor's professional behavior in various circumstances of one's training and practice, which was reflected in Table 1.

Table 01. Models of doctor's professional behavior

Activeness (contributing to one's own goals)	
Implementing ethics of pleasure (hedonism) A doctor, on the assumption of his understanding of the good, realizes his (creative) goals. A collegial model of doctor-patient relationship	Implementing ethics of perfection (perfectionism) A doctor, on the assumption of what each man of sense considers the good, realizes his own goals. An engineering model of doctor-patient relationship
Implementing ethics of use (utilitarianism) A doctor, on the assumption of his corporate understanding of the good, contributes to someone else's goals. A contractual model of doctor-patient relationship.	Implementing ethics of altruism (agapism) A doctor, on the assumption of what each man of sense considers the good, contributes to someone else's good. A priestly model of doctor-patient relationship.
Passiveness (contributing to someone else's goals)	

The table contains the basic scheme of an ethical component of doctor-patient relationship, and first of all, an attitude of a doctor to a patient: by what values a doctor is guided, what professional goals one initially sets. As a scheme, the table cannot reflect the whole diversity and nuances of doctor-patient relationship, but it represents the typical models of this relationship and corresponding values. The given models of relationship between a doctor and a patient were discovered and described by Robert M. Veatch (1972).

Implementing ethics of pleasure (hedonism). A vivid example of the given ethical attitude is Dr. House who treat his patients as an interesting medical puzzle. House *himself selects* his patient while a patient agrees to be treated by him. A collegial model of doctor-patient relationship takes place because they are essentially partners. The goal of the patient is to get rid of illness (it is frequently about the life and death of the patient). Besides, a doctor pursues his own goals, shows his own interest in discovering the correct diagnosis and so in healing a patient.

Doctor's attitude can be expressed in the following way: "I cannot cure, but I will look for every possible way, try every possible method and I will find the answer to the question". Doctor-patient relationship in this type of treatment is subject-subject. Besides, sometimes something happens that turns a doctor into an object of patient's aspirations. Then the object-subject model of relationship emerges. It can be expressed like this: "You, as a subject, turn me, as a doctor, into an object of Your aspirations, Your challenge is similar to the situation when a school teacher should follow his disciples' requirements" (Dörner, 2003, p. 120).

Implementing ethics of use (utilitarianism). The given ethical attitude is typical for doctors maintaining corporate ethics, working in medical institutions with a strong corporate culture. Doctor-patient relationship is built according to a contractual model of R. Veatch. The meaning of the contract is not a legal but symbolic one. "Here two individuals or groups are interacting in a way where there are obligations and expected benefits for both parties" (Veatch, 1972).

In the contractual model, responsibility and moral authority are separated. A doctor comprehends that in cases of a meaningful choice, a patient should keep the freedom to rule his life and destiny while a patient has legitimate reasons to believe that treatment will be conducted in accordance with his values.

A variation of the contractual model, which is far beyond its legal understanding, is described by Irvin Yalom: “We met weekly for a few months in an irregular contractual arrangement. “Psychotherapy,” an observer might have said, for I entered her name in my professional appointment book and she sat in the patient’s chair for the ritual fifty minutes. Yet our roles were always blurred. ...Life, death, spirituality, peace, transcendence: those were the topics we discussed; those were Paula’s only concerns. Mostly we talked about death” (Yalom, 2000).

Doctor's attitude can be expressed in the following way: “I cannot cure, hence, I won't cure”. It does not mean doctor's attitude is immoral. In the given case, a doctor acts in a consistent manner according to the Hippocratic Oath, saying that a doctor will apply all measures for the benefit of a sick person in accordance with *his forces*, i.e. his knowledge and skills. A doctor in the given ethical position is guided by the understanding of the good as it is accepted in the given corporation. Quitting corporation would irresistibly change understanding of the good (which is not only the good for a patient and it will be treated by a doctor from the point of view of utilitarianism). That is why, as a rule, a subject-object doctor-patient relationship model takes place.

Implementing ethics of perfection (perfectionism). This is noteworthy that a doctor is aimed to defeat a disease, to cure a patient (thus to achieve one's professional perfection). In this aspiration, a doctor insensibly tries a role of God. “You are just a *repairman*”, - told the protagonist lady Rose to Dr. Dusseldorf, which cured Oscar and felt guilty because he was not able to save the boy in the “Oscar et la dame rose” film. And Rose reminds him that he is not God.

Because of doctor's acts as “a repairman”, it is obvious that he applies the engineering model of treatment. The primary goal of this model is to fix a breakage occurring inside the body of a patient. The engineering model is based on a concept of medical activity as a sphere of application of objective scientific knowledge to natural mechanisms of human body life. In medical practice, overvaluation of importance of hardware and instrumental data occurs. For such doctor, selection of the treatment method is a technical procedure, which does not depend on personal preferences and values of a doctor. What is good for a patient is defined via a complex of objective features, and a patient opinion is not taken into consideration since it is non-objective, non-scientific. Accordingly, such approach comes to the sharp contradiction with the principle of respect for patient autonomy.

In this model, technological achievements in medicine are somewhat divinized; at least, usage of modern equipment and innovative methods of research is lifted to unachievable height. A doctor, implementing ethics of perfection, is aimed at innovations, which one will embed in the latest technologies even at the expense of health and life of others.

If I cannot cure, then I will polish the methods of treatment I know, I will search for the new technologies and create them if needed – this is the position of a doctor within the given model.

Implementing ethics of altruism (agapism). The given approach in medicine is manifested in ethics of care and responsibility (subject-object position of a doctor). As Klaus Dörner marked, “the more

serious the disease of a human being, the more limited his perception. Thus, doctor's responsibility becomes much greater” (Dörner, 2003, p. 132).

The model of relationship by R. Veatch is priestly, it is filled with such ethical values as mercy, compassion, love to a patient; but at the same time, it excludes patient autonomy. Nowadays the ethics of care may be manifested as neopaternalism when a doctor in fact understands better than a patient does what this patient actually wants (Dörner, 2003, p. 132). A vivid example of an altruistic approach to a patient and true mercy is Dmitry Dmitrievitch Yablokov, whose image was imprinted in the memory of his contemporaries as a doctor kneeling beside a patient bed.

Each of the four mentioned approaches has its “extreme” manifestations, formed as sublimations and deviations. They can be arranged as shown in Table 2.

Table 02. Sublimations and deviations of doctor's professional behavior

<p>Implementing ethics of pleasure (hedonism)</p> <p>Sublimation – <i>in creativity (Dr. House)</i> Deviation – <i>Herta Oberheuser</i></p>	<p>Implementing ethics of perfection (perfectionism)</p> <p>Sublimation – <i>in striving to be equal to God</i> Deviation – <i>Frankenstein</i></p>
<p>Implementing ethics of use (utilitarianism)</p> <p>Sublimation – <i>in charity</i> Deviation – <i>medicine in fascist Germany</i></p>	<p>Implementing ethics of altruism (agapism)</p> <p>Sublimation – <i>in a selfless service</i> Deviation – <i>in distanced paternalism (doctor in Leo Tolstoy's "Death of Ivan Ilyich")</i></p>

Sublimations were mentioned above. Now it is necessary to concentrate on deviations.

The example of ethics of hedonism: the only accused woman at Nuremberg trial of doctors was Herta Oberheuser, who, by the testimony of witnesses, approached her patients as laboratory Guinea pigs not human beings. Subsequently, she was accused of extreme cruelty and sadism (Ebbinghaus, 1997). While implementing ethics of utilitarianism, deviation is manifested when interests of a single person or the minority may be sacrificed for the benefit of the society, the whole mankind. Medicine in fascist Germany is a vivid example of such deviation.

An example of deviation in ethics of perfectionism is Doctor Frankenstein. The story of a young doctor was developed in Mary Shelley's sci-fi novel “Frankenstein or the Modern Prometheus” (1818). The novel was about doctors in general as it indicated how young Frankenstein discovered his mission (Shelley, 2016). The aspiration of Frankenstein to uncover the secret of life outgrew into monomania, which leads him to creation of a being, suffering deeply and revenging its creator, destroying everything, which is valuable to the latter (Shelley, 2016).

There is a deviation in implementation of altruism ethics, the classic example of which is described by Leo Tolstoy in “Death of Ivan Ilyich” (Tolstoy, 2005): a chilly approach and indifference of the doctor while treating the patient, *distancing* himself from the patient. The model of distanced behavior of a doctor, as a rule, is manifested when the patient is dying. For a doctor, it is a way of psychological defense.

7. Conclusion

Such original sorting of patients existed already in antiquity and lasted for many centuries. By the modern era, medicine has accumulated experience that allowed it to support the deadly sick, to alleviate their suffering. As is known, it is because Francis Bacon introduces the concept of euthanasia, meaning alleviation of suffering, pain and ensuring the easy and peaceful death of an incurably ill patient.

The ethical square allows arranging the models of healing according to the different ethical positions and models of behavior. In the process of obtaining medical education, there is a need for students to master all the models of doctor-patient relationship and, accordingly, to master the goals on which these models are based, as well as the corresponding ethical components, in other words, the paradigms of values. In order to exclude the emergence of deviation in the future professional activity of a modern medical student, the introduction of moral education into the curriculum is necessary, starting from the first years of study. Mastering the ethical component of doctor's profession must go through a difficult route from ethics of altruism to ethics of perfection and then to ethics of hedonism (which would help to exclude deviations), as well as in the other direction: from ethics of altruism to ethics of utilitarianism, and then to ethics of hedonism. The latter direction, if ignored, leads to emergence of amateur doctors, and finally, to their low competence. It should be noted that the ethical square is applicable to other educational programs, and bioethical symbolism influences the corresponding competencies in education in the field of various specialties (Ardashkin et al., 2016).

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