

## Experience in teaching deontology to students by managing patients with cardiovascular diseases

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**Aim.** To present the methodological techniques for teaching deontology to students in modern clinical practice on the example of managing patients with cardiovascular diseases.

**Material and methods.** We outlined the lectures and practical classes introduced into teaching fourth-year students within the educational program of the course «Practical issues of medical deontology». Methods of practical classes included solving 50 case problem in all course sections with their subsequent analysis and interactive discussion, watching and discussing videos, students' individual work with developing own case problems with further analysis in classes. Students also assessed the course by anonymous questionnaire survey.

**Results.** Every case problem has three questions for students. The discussion of videos is also carried out with posing a question and discussing the opinions expressed by students. A total of 151 students were surveyed. All students noted that there is a need for this course. One hundred eighteen (78%) students answered that they were satisfied with this course; 33 (22%) students noted that it is necessary to discuss legal aspects of the case problems. Students rated the content and quality of the lectures given at 4,68 points, practical classes — at 4,63 points.

**Conclusion.** Thus, the introduction of deontological education of students will help to improve understanding the meaning of deontology and develop the abilities of congruent behavior in various clinical and life situations, using the example of cardiovascular patients.

**Key words:** deontological skills, case problems, videos.

**Relationships and Activities:** none.

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In modern clinical practice, the physicians' ability to successfully communicate with patients, their relatives, work colleagues, and the media is becoming more and more relevant. This is due to the increased competence of the population, the significantly increased flow of medical information due to the Internet, the active work of insurance companies with patients, the significant interest of journalists in medical issues, etc. [1]. According to polls and sociological research, the number of people impatient with the quality of healthcare varies both in Russia and abroad from 40 to 60% [2]. The number of complaints to medical and legal authorities is growing exponentially [3]. For known reasons, the overwhelming majority of these appeals are associated with cardiovascular and oncological diseases. The study by Shaposhnik II, et al. (2016) revealed that 75-80% of complaints and court cases related to cardiovascular diseases are caused not by diagnostic and treatment errors, but by violation of deontological ethics [4]. This is largely due to insufficient attention to deontology in various clinical situations when teaching students. Of course, according to the program, these questions are studied by 3<sup>rd</sup> year students in a bioethics course. However, this is of a perfunctory theoretical nature. In addition, classes are, as a rule, not taught by clinicians, but by the social and philosophical specialists. As a result, students do not develop the deontological skills when communicating with patients.

In agreement with the university administration, we introduced the course "Practical issues of medical deontology" for fourth-year medical students. The course consists of 100 academic hours: lectures — 16 hours, clinical practical classes — 48 hours, out-of-class work — 36 hours. The aim of the course is to develop basic deontological skills in modern clinical practice using the example of patients with cardiovascular diseases. As a result of mastering the subject, students should be able to apply basic deontological techniques when collecting a medical history and examining a cardiac patient, communicating with patients and their relatives, with work colleagues, with middle and junior medical staff, with the media and society as a whole. Classes are taught by teachers of the Department of Propaedeutics of Internal Diseases. Some lectures are given by the staff of the Department of Clinical Psychology.

There were following topics of the lectures: 1. General concept of medical ethics and medical deontology. Features of the psychology of a sick person; 2. Deontology of collecting a medical history and physical examination; 3. Communication of the examination results and diagnosis to a patient; 4. Communication of information about treatment to a

patient; 5. Doctor-relative relationships; 6. The relationship of a doctor with work colleagues, middle and junior medical staff. The importance of a doctor's appearance; 7. Medical secrecy. Iatrogenic diseases; 8. The relationship of a doctor with society and the state.

The topics of the practical interactive classes are closely related to the lecture subjects. In addition, in practical classes, students analyze deontological problems of emergency care and high technologies. In practical classes, students solve 50 case problems compiled by teachers for all sections of the course. These materials describe a specific situation, containing, in addition to clinical data, certain deontological aspects. The content of case tasks aims to show students how adherence to deontological ethics contributes to the treatment success or, conversely, their violation affects negatively the health of patients. The clinical data on the results of physical examination, diagnostic tests, and the treatment carried out are useful for students. They allow considering a specific clinical problem with deontological aspects as a whole. For each task, 3 questions are posed, to which students give answers. These questions are the subject of discussion and the identification of different students' opinions on the presented situation. As an example, we give one of the case problems and related questions on the topic "Medical secrecy. Iatrogenic diseases".

Patient C., 53 years old, head of the plant workshop, was delivered to the intensive care unit of the cardiology department by an ambulance, with a diagnosis of coronary artery disease, anteroseptal ST elevation Q-wave myocardial infarction, complicated by Lown grade IV ventricular premature beats, Killip class II acute heart failure. Before admission, pain was relieved by 1,0 ml of 1,0% morphine solution intravenously. One hour after the onset, successful systemic thrombolysis was carried out with tenecteplase at a dose of 30 mg intravenously; aspirin at a dose of 250 mg and clopidogrel at a dose of 300 mg were given internally. Further, the disease proceeded without complications, after 3 days the patient was transferred to the cardiology department for patients with acute coronary syndrome.

On the same day, the physician received a phone call from the patient's colleagues. They asked about his diagnosis, well-being and the prospect of further work capacity. The doctor answered them that the patient has an extensive myocardial infarction and within 3-4 months he will be on sick leave. It is possible that surgical treatment will be required. Then the disability is usually set for 1 year. After 3 days, colleagues visited the patient and told him that they knew about his diagnosis and the forthcoming operation. In addition, they informed

him that a disability group would be determined, which would not allow him to work after the end of the sick leave for one year. In this regard, another shop manager has already been appointed to his place. When colleagues left, the patient was upset and could not sleep for a long time. In the morning, the patient developed an intense pain syndrome behind the sternum, a recurrent myocardial infarction was diagnosed, complicated by cardiogenic shock. The following questions are posed to this problem: 1. Should the doctor have been allowed to inform the patient's colleagues by phone? 2. Was the doctor supposed to provide them with information about the patient's diagnosis, treatment and further work ability? 3. What should the doctor have done in this situation?

Then students take turns expressing their opinions on each of the questions posed. Often, on the same issue, different judgments are put forward, usually complementing the previous ones, but often opposite. Thus, a discussion arises, which is guided by the teacher. At the end of the analysis, the teacher can read out, if necessary, the proposed answers to this problem: 1. Information by phone should not be communicated to anyone under any circumstances. Even if they are close relatives of the patient, it is better to invite them to talk with the doctor. In addition, the doctor is not sure of the identity of the person with whom he is having a telephone conversation; 2. The doctor should not inform anyone about the diagnosis of the patient and further management tactics, except for close relatives (in the case of the patient's consent). It should be emphasized that even to the patient himself, the whole truth about his illness should be revealed gradually and with an optimistic perspective. The patient has the right, but not the obligation to know everything about his illness; 3. The doctor should tactfully reply to the patient's colleagues that his state is currently satisfactory; the examination and the necessary treatment are being carried out. It was unacceptable to make assumptions about the further management and the timing of disability.

Thus, this case clearly demonstrates to the students how the deontological mistake made by the physician had a negative effect on the disease course.

It is also promising to use in practical classes some methodological techniques. In particular, when simulating various clinical situations, one of the students play the role of a doctor, the other as a patient. In accordance with the psychological types of patients identified by A.E. Lichko and N. Ya. Ivanov, a teacher invites a student, playing the role of a patient, to imitate this or that type of behavior. The student, performing the role of a doctor, is invited to ask questions of a patient accordingly, to react to his

answers and behavior in general. At the same time, a teacher corrects the performance of the roles by students. Then other students of the group express their opinions on how successful the behavior of a student-doctor and his questions were, as well as how much the behavior of a student-patient and his answers corresponded to the given psychological type of a patient.

No less interesting and instructive is watching videos prepared in advance on various topics. Watching a video clip takes 3-5 minutes. The roles in this material are played by students — members of the university drama circle. In this case, all the details are analyzed. For example, one of the plots is devoted to the doctor's first contact with a patient and the deontological aspects of questioning. The teacher offers the following series of questions for analysis: 1. How friendly did the doctor greet the patient? 2. Did he ask him to sit down, and how? 3. How attentively did the doctor listen to the patient? 4. Did the doctor ask leading questions, and how appropriate were they? 5. Did the doctor have eye contact with the patient, or did he fill out an outpatient card or medical history all the time, or was he typing on a computer? 6. What was the physician's appearance (clothing, hairstyle, hands, jewelry, etc.).

It should be noted with satisfaction that the discussion of all deontological problems arouses interest among students, accompanied by many questions to a teacher and to each other. A teacher, as a rule, sums up the discussion on the situation. He often stresses that there is no single answer to a number of questions. Much depends on the individual characteristics of the patient, his relatives, and other circumstances (education level, social status, personality type, etc.).

Out-of-class work of students consists in simulating various deontological situations on a given topic in the form of case tasks or short video clips. For this, they usually involve their fellow students, dorm roommates, and in some cases, close relatives. Then these materials are presented in practical classes, followed by analysis and critical assessment of the group students. Sometimes students raise questions that were not even intended for training, but at the same time are of significant interest. As an example, we give one of the situational tasks compiled by a student.

During the fighting in the Donbas, a wounded high-ranking nationalist prisoner was hospitalized in a militia-controlled city hospital. The patient had a bullet wound in his thigh with a comminuted fracture and bleeding. The patient is conscious; blood pressure is unstable. The bleeding was stopped; a temporary splint was applied. The only surgeon remained at the hospital. The rest of the doctors either died or

managed to leave the combat zone. It was reliably known about the prisoner that he was distinguished by cruelty towards civilians and captured militias. The patient required emergency surgery to save his life. However, the surgeon refused to perform the operation. His entire family had died shortly before that during the shelling of the city. In addition, he wanted to preserve materials for the operations of wounded militias and civilians. The patient died a few hours later due to a fat embolism.

The student posed the following questions to the problem: 1. Do you think the surgeon was right? 2. What should a doctor do in such situations? 3. What considerations, in addition to deontological, can justify the need to provide assistance in such situations?

There were following answers of the student: 1. It is difficult to assess the actions of a person who has lost his entire family and who is forced to provide medical assistance to the person through whose fault this happened. This situation often arises in the course of hostilities. It has been described many times in the literature. In this case, doctors, as a rule, provided assistance to a wounded enemy. There are known cases when even the doctors of the Hitler's army did this, and for Russian military doctors this was generally the rule. From the point of view of medical ethics and deontology, the refusal of a doctor to provide assistance is completely unacceptable; 2. In such a situation, medical duty should be higher than political convictions. In addition, prisoners of war are subject to protection under international conventions. The doctor is obliged to provide care, especially emergency, to any sick and wounded person; 3. If the prisoner survives, he will be held accountable for his crimes under the law. Moreover,

it is important to preserve it for the court, since it will be important for the victory in the war, including the moral one. Providing medical assistance to the enemy confirms the strength of the belligerent to which the doctor belongs. A medical worker has no right to take revenge on a prisoner for his atrocities.

Particular attention is paid to developing the skills of expressing sympathy for a patient and his relatives in various clinical situations, which often occur in cardiovascular diseases. Students are also taught the rules of behavior with the media. Given that cardiovascular diseases in most cases have a chronic course, the deontological aspects of the relationship between doctors of intensive care, inpatient, outpatient and rehabilitation departments are considered in sufficient detail, and rules of behavior with middle and junior medical staff are developed.

At the end of this course, an anonymous survey of students is conducted. In one of the latest, 151 students took part. All 100% of the respondents noted that there is an urgent need for this course. A total of 118 (78%) students answered that they were satisfied with this form of the course; 33 (22%) students noted that it is necessary to indicate the legal basis of the situations under consideration. Students rated the content and quality of the lectures given at 4,68 points, practical classes — at 4,63 points.

Thus, there is every reason to believe that the introduction of various forms of deontological education of students will help improve their understanding of this important section and develop the skills which will help in various clinical and life situations on the example of cardiovascular patients.

**Relationships and Activities:** none.

## References

1. Krasnikova IG. Ethical and social aspects of a doctor's relationship and the patient in the information society. In the book: Bioethics and modern problems of medical ethics and deontology: materials of the Republican scientific-practical conference with international participation (Vitebsk, December 2, 2016) Ministry of Health of the Republic of Belarus, UE "Vitebsk State Order of Friendship of Peoples Medical University". Vitebsk: VSMU. 2016. pp. 174-7. ISBN: 978-985-466-868-0. (In Russ.)
2. Mestergazi GM. The doctor and the patient. Tutorial. M.: BINOM. Laboratory of Knowledge, 2015. p. 112. ISBN: 978-5-9963-0053-2. (In Russ.)
3. Nogaller AM. Questions of medical ethics and deontology in the XXI century. Clinical medicine. 2017;95,7:669-71. (In Russ.) doi:10.18821/0023-2149-2017-95-7-669-671.
4. Shaposhnik II, Bogdanov DV. Deontological education of students at the department of propaedeutics of internal diseases. In: Optimization of Higher Medical and Pharmaceutical Education: Quality Management and Innovation. Materials of the IV All-Russian (VII intra-university) scientific and practical conference. Chelyabinsk: 2016. pp. 151-4. ISBN: 978-5-94507-224-4. (In Russ.)
5. Poroykov SYu. Psychological types: monograph. 2nd ed., Rev. and add. Moscow: INFRA-M. 2017. p. 306. ISBN: 978-5-16-105139-9. (In Russ.)