

MEDICINOS ISTORIJA IR RAIDA

The approach of medical students towards studies of the humanities and social sciences

Irayda Jakušovaitė, Aurelija Blaževičienė

Department of Philosophy and Social Sciences, Kaunas University of Medicine, Lithuania

Key words: medical education; medical humanities; medical socialization; attitudes of medical students.

Summary. *Objective.* To analyze the attitudes of the medical students from Kaunas University of Medicine, Krakow Jagiellonian University, and St. Petersburg State University towards the studies of the humanities and social sciences.

Materials and methods. The survey was carried out in three universities (Kaunas University of Medicine, Krakow Jagiellonian University, and St. Petersburg State University) during 2004–2005. The questionnaire for the investigation was developed based on R. D. Stenberg's works on the ways of knowledge-, practice-, and personality-oriented thinking.

Results. After the analysis of students' attitudes towards the importance of the disciplines of ethics, philosophy, sociology, and psychology at the universities of Kaunas, Krakow, and St. Petersburg, important differences have been found among them. Students gave the highest priority to ethics in their profession. Answering the question, "Are philosophical studies important in medical studies," statistically significant differences appeared among Krakow, Kaunas, and St. Petersburg universities. Students of all the universities agreed that sociology and psychology studies were important for their future profession.

Conclusions. Having estimated the opinions of medical students' attitudes towards the importance of the humanities and social sciences, we may state that the students of Krakow and St. Petersburg universities more often agreed that ethics and philosophy were important for their studies. The importance of psychology science was emphasized by the students of all universities, and the students of Kaunas University of Medicine and St. Petersburg State University agreed more often that the discipline of sociology was important for the future studies.

Introduction

Medicine has always been considered the most humane science, and no questions concerning the values in the content of education have been raised. The application of new technologies in medicine (reproductive medicine, the discovery of genome, control of the dying process, etc.), the process of the democratization of the society, the defense of patients' rights, and the development of market relationships in medicine resulted in the emergence of urgent ethical dilemmas that will be solved in the settings of the broadening Europe (1). On the other side, there is a clear evidence of socialization of medicine. The main changes in medical thinking and healthcare of the second part of the 20th century are related to the transfer of the focus of health care (panel), which has shift-

ed from the individual to the community, from cure of disease to preservation of health, from episodic care to continuous and comprehensive care, and from an individual approach provided by single primary care physicians to comprehensive, community-based primary care (2). In the second half of the 20th century, the character of diseases has changed, and the aging population has faced problems that cannot be solved by biomedicine.

In biomedical paradigm, a human being is considered as composed of anatomical parts, physiological and biochemical processes either normal or pathological, and there is nothing to be considered as a whole entirety. Unfortunately, a number of medical specialists believe that is possible to master medicine by studying the nature sciences or other clinical sub-

jects. However, every decision made by a medical doctor regarding a patient is a decision based on values. A biomedical background is not sufficient to make one or another decision (3, 4). The culture of education process, now largely shaped by performance in examinations and emphasis on factual content, must be changed to one which values self directed learners and problem solvers (5).

The mission of Kaunas University of Medicine (KUM) is the education and training of health professionals of international standards, modern research in health promotion, disease prevention, diagnosis and treatment, and the provision of the highest quality of specialized health care to the patients. The KUM belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world.

In most countries, education in the humanities in universities of applied sciences is limited to professional education. This is understandable. We think that university-based education is a forming process that is oriented to striving for meaningful liberty and changing of a personality. It would be highly complicated to achieve any essential changes without the existence of an intellectual medium (6). The majority of modern universities recognize the concept of liberal higher education based on the formation of individual's intellectual abilities and his/her character features that influence the development of mental capacities. The aim of the university education is "intellectual self-empowerment," which is a premise for the liberation of an individual and the society as a whole. The branches of knowledge, focusing on the effectiveness of production and satisfaction of the pragmatic needs, in industrial society have an advantage against the humanities taken for the core of liberal education. Hence, the question arises, "Which general abilities should be developed?" There are many and various opinions, but most of them agree that the main are the following: intellectual and imagination skills, analytical and creative thinking, independent evaluation, acceptance of different ways of thinking, critical self-cognition, and the ability to apply the acquired knowledge to concrete situations in real life (7). If this approach were used as the guidelines for the general action in each discipline, no problems would arise. However, is it possible to create a general model for the development of student's abilities and actions for all possible fields of studies? For example, are students

skilled enough to study physics, philosophy in the analytical, creative, interpersonal, and critical way? The answer to this question will help to establish the criteria for the selection of the subjects.

The aim of the article was to analyze the attitudes of the medical students from KUM, Krakow Jagiellonian University (KJU), and St. Petersburg State University (St. PU) towards the studies of the humanities and social sciences.

Materials and methods

The survey was carried out in three universities (Kaunas, Krakow, and St. Petersburg) during 2004–2005. A total of 447 third-, fourth-, and fifth-year students, who had had a block of humanities and social subjects, took part in this survey. The questionnaire for the investigation was developed on the basis of R. D. Stenberg's works on the ways of knowledge-, practice-, and personality-oriented thinking. The questionnaire consisted of five parts: motivation of professional choice, understanding of humanistic values, understanding of key professional competencies, and the role of the humanities and social sciences for the profession. The questions on the meaning of the humanistic values in the profession of physician were based on Z. Zalewski's, Z. Szawarski's, S. Holm's, G. Fangerov's works (4, 8, 9).

Five types of answers were possible (according to the Likert's scale) – from "absolutely agree" to "absolutely disagree." Statistical analysis of the data was carried out by applying SPSS software (version 11.5). Statistical relationship between qualitative features was evaluated by the chi-square goodness-of-fit test. Level of significance was defined at $P < 0.05$.

Results and discussion

Table presents the characteristics of the studied sample (Table). The sample consisted of the equal number of the third- and fourth-year medical students; the fifth-year students made up 15% of all respondents.

After the analysis of students' attitudes towards the importance of the disciplines of ethics, philosophy, sociology, and psychology at the universities of Kaunas, Krakow, and St. Petersburg, important differences have been found among them. Students gave the highest priority to ethics in their profession.

Ethics is the discipline that systematically analyzes and rationally justifies our moral choices. Medical ethics is one of the various forms of special ethics being concerned with application of general principles to moral problems of medical profession (10, 11). Hence, the objectives of introducing ethics as an im-

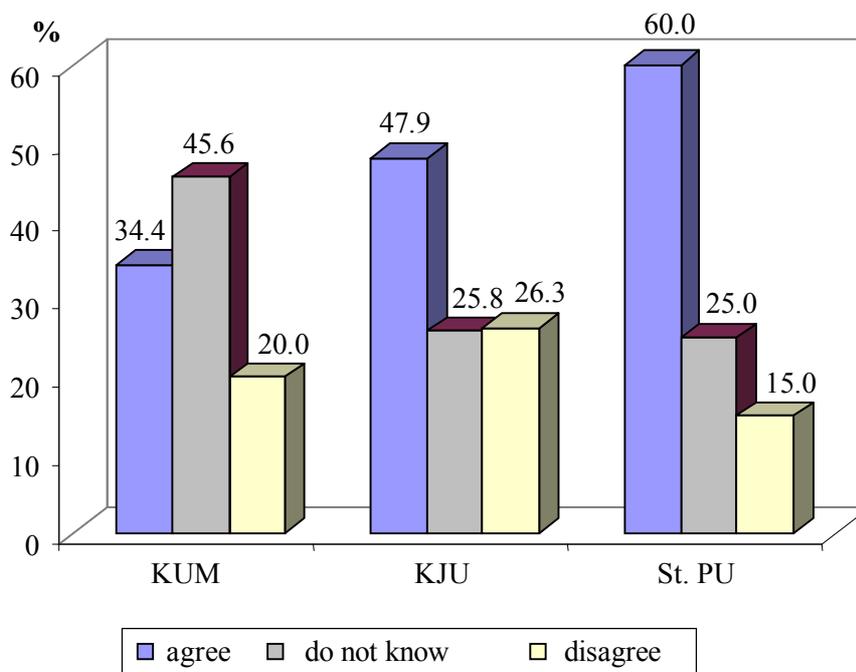
Table. Characteristics of the studied contingent

Characteristic	The group of the investigative N (%)	Kaunas University of Medicine N (%)	Krakow Jagiellonian University N (%)	St. Petersburg State University N (%)
Gender				
Female	277 (62.2)	140 (77.8)	104 (50.7)	33 (55.0)
Male	168 (37.8)	40 (22.2)	101 (49.3)	27 (45.0)
Year of studies				
3rd year	203 (45.6)	–	189 (90.7)	17 (28.3)
4th year	175 (39.3)	134 (74.6)	19 (9.3)	22 (36.7)
5th year	67 (15.1)	46 (25.6)	–	21 (35.0)

portant component of medical education curriculum are the following: a) to sensitize the students to diverse issues concerning the human race as such; b) to arouse awareness regarding the psychological, social, and behavioral dimensions of health and disease; c) to provide an integrated approach to problem solving (12, 13).

Estimating the students' attitudes towards the meaning of the discipline of medical ethics, statistically significant differences have been found among the universities (Fig. 1). More than half of students from the St. PU and almost half of KJU students agreed with a statement that the discipline of ethics was important for their studies; 34.4% of KUM students gave such response. Such opinion of KUM

students can be explained by that students usually oversimplify the attainment of the moral competence. They are sure they know the main principles of ethical behavior. We have to agree with S. Holm that nowadays the ethics is not only "teaching about the rules and etiquette of good medical doctor" (4). Nowadays medical students do not only learn the rules but also learn the justification for the rules, study the underlying theoretical structure. The broader conception of medical ethics is needed to enable students to think and act independently according to professional rules. That is not enough. Students also have to know why they should follow the rules. If they are not able to think for themselves, they are not able to adapt to changes in society (9, 14).

**Fig. 1. The attitude of the students towards the importance of ethics**

$\chi^2=23.5$; $df=4$; $P<0.001$. KJU – Krakow Jagiellonian University; KUM – Kaunas University of Medicine; St. PU – St. Petersburg State University.

Positive approach of students from St. PU towards studies of ethics correlates with the findings from the research that was carried out in different universities of St. Petersburg in 2000–2004, which aimed to define the intellectual-moral differentiation of modern students (15). Only 20% of KUM respondents and 26.6% of KJU students did not consider ethics important in their future profession.

The basis for the student's critical thinking is philosophical studies. Answering the question, "Are philosophical studies important in medical studies?" statistically significant differences appeared among Krakow, Kaunas, and St. Petersburg universities (Fig. 2). One-third of the students of Krakow and St. Petersburg universities agreed that philosophical studies were important for their future profession; meanwhile, only 10% of KUM students shared the same opinion. Even 42.2% of the respondents did not have their opinion on this question. One of the reasons is that in KUM philosophy is taught in the second year, when students have not had direct contact with patients yet. Moreover, philosophy is considered a discipline of the general education, and this causes a negative attitude of students towards it. Small percentage (25.0%) of the respondents without opinion in KJU could be explained by the strong tradition in teaching philosophy of medicine. The Polish school claimed that philosophy of medicine was necessary for future doctors (16). The philosophical approach

makes it possible to recognize the subject of medicine – health, disease, and the sick – and its aim – treatment, restoration of health, or just alleviation of suffering (17). In KUM, the philosophy of medicine was started 3 years ago. However, the main reason is that in a consumerist society, the one we live now, the question "What is truth?" is frequently substituted for the question "What is the use of it?" in the academic environment. The influence of the market relationships resulted in the emergence of new concepts: efficiency, productivity, quality and perspectives of studies, flexibility of curriculum, *etc.* In the market environment, activity-oriented competence is the easiest to "sell," while the competence based on the criteria of truth/false, justice/injustice, *etc.*, meets much smaller demand (18, 19).

Psychology plays an under-recognized but extremely important role in health and illness. Furthermore, as evidenced by the rising prevalence rates of chronic diseases, traditional health care providers lack appropriate tools to tackle the behavioral health issues associated with the epidemic of current chronic diseases, whereas psychologists have developed and validated numerous disease management programs aimed at treatment adherence and improvement in lifestyle. In addition, the psychological impact of having a chronic medical condition is not well addressed by conventional medical treatments (20).

Estimating students' view towards the importance

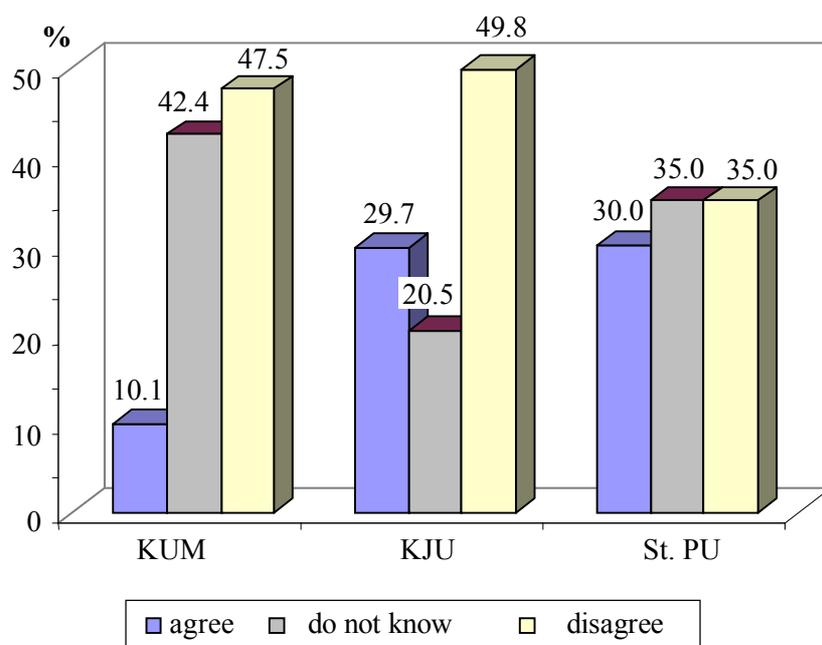


Fig. 2. The attitude of the students towards the importance of philosophy

$\chi^2=36.3$; $df=4$; $P<0.001$. KJU – Krakow Jagiellonian University; KUM – Kaunas University of Medicine; St. PU – St. Petersburg State University.

of the psychological studies for their future profession, there were no statistically significant differences among the universities. More than half of KUM and Krakow students agreed that the discipline of psychology was very important. Similar results also appeared after having estimated the responses of St. PU students. Most of them (43.3%) agreed that the studies of psychology were important (Fig. 3).

Human being is a unique object of medicine in the meaning of its individual and social integration. The importance of social and behavioral sciences in education as a foundation to medical training is increasingly appreciated (21). The teaching and practice of medicine has traditionally been founded upon a monistic, modernist, and positivistic knowledge base that is diametrically opposed to the epistemological pluralism that characterizes contemporary health and medical sociology (22). Within the last decade, the area of medical sociology has been fast growing. An increasing recognition of the importance of "social" factors associated with various illness states has ensured medical sociology a continuing place in teaching and research endeavors (23). Analyzing the attitudes of the respondents towards the importance of the discipline of sociology, statistically significant differences have been found among the universities. Students from KUM and St. PU statistically more often agreed that the discipline was important for their studies. Meanwhile, two-thirds of students from KJU

disagreed with the statement. KUM students in most cases did not give their opinion on this question (Fig. 4). This could be explained by the fact that sociology is an elective course for the students of the Faculty of Medicine. With reference to the answers of the respondents, it would be purposeful to think about sociology as a compulsory course for the students of KUM.

It is evident that an improvement of medical education towards a broader understanding of complex illnesses with their psychosocial implications must be based on philosophical and sociological issues. The requirements of modern medicine cannot just be met by adding more psychosocial content to somatic medical education or by changing the didactic approach without reflection on the underlying concepts and the relation of human being to his/her world (24).

Conclusions

1. A biomedical background is not sufficient to train tomorrow's doctors. Every decision made by a medical doctor regarding a patient is a decision based on values; the importance of education in the humanities and social sciences as a foundation to medical training is increasingly appreciated.

2. Having estimated the attitudes of medical students towards the importance of the humanities and social sciences, we may state:

2.1. The students of Krakow Jagiellonian University and St. Petersburg State University more often

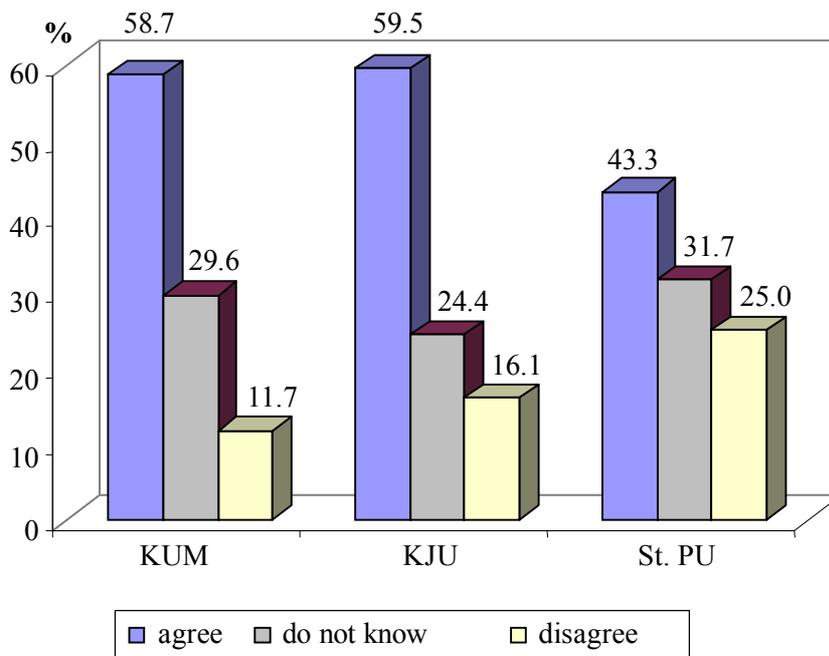


Fig. 3. The attitude of the students towards the importance of psychology
 $\chi^2=8.8$; $df=4$; $P=0.065$. KJU – Krakow Jagiellonian University;
 KUM – Kaunas University of Medicine; St. PU – St. Petersburg State University.

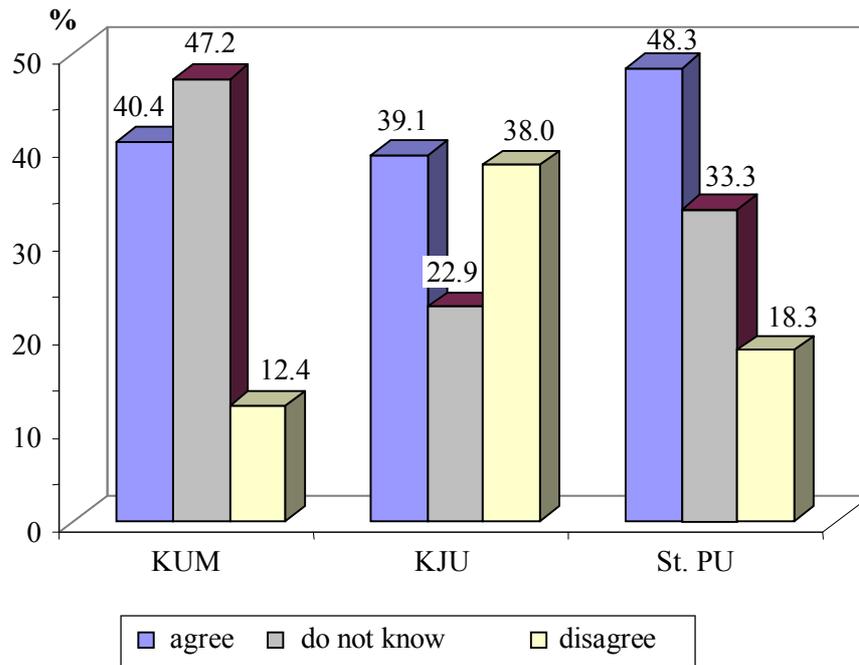


Fig. 4. The attitude of the students towards the importance of sociology

$\chi^2=43.8$; $df=4$; $P<0.001$. KJU – Krakow Jagiellonian University;
KUM – Kaunas University of Medicine; St. PU – St. Petersburg State University.

agreed that ethics and philosophy were important for their studies.

2.2. The importance of psychology science was emphasized by the students of all universities.

2.3. The importance of the discipline of sociology for the future studies was more often agreed by the students of Kaunas University of Medicine and St. Petersburg State universities.

Studentų medikų požiūris į humanitarinių ir socialinių mokslų studijas

Irayda Jakušovaitė, Aurelija Blaževičienė

Kauno medicinos universiteto Filosofijos ir socialinių mokslų katedra

Raktažodžiai: mediko ugdymas, medicinos humanitarizacija, medicinos socializacija, studentų medikų požiūris.

Santrauka. Darbo tikslas. Išanalizuoti Kauno medicinos universiteto, Krokuvos Jogailos universiteto ir Sankt Peterburgo valstybinio universiteto studentų medikų požiūrį į humanitarinių ir socialinių dalykų studijas.

Tyrimo medžiaga ir metodai. Tyrimas atliktas 2004–2005 mokslo metais trijuose universitetuose: Kauno medicinos universitete, Krokuvos Jogailos universitete, Sankt Peterburgo valstybiniame universitete. Tyrime dalyvavo 447 trečiojo, ketvirtojo ir penktojo kurso studentai medikai, kurie buvo išklause humanitarinių ir socialinių dalykų bloką. Tiriamųjų apklausai naudotas klausimynas, sudarytas remiantis R. D. Stenbergo darbais apie mąstymo būdus, orientuotus į pažinimą, veiklą ir asmenybę. Straipsnyje pateikiama tyrimo medžiaga apie studentų požiūrį į humanitarinių ir socialinių mokslų vaidmenį profesijai.

Rezultatai. Išanalizavus Kauno medicinos universiteto, Krokuvos Jogailos universiteto ir Sankt Peterburgo valstybinio universiteto medicinos požiūrį į filosofijos, etikos, sociologijos, psichologijos mokslų reikšmę, nustatyta statistiškai reikšmingų skirtumų tarp trijų universitetų. Studentai etikos ir sociologijos disciplinas laiko svarbiomis jų būsimajai profesijai. Filosofijos discipliną labai svarbia savo būsimajai profesijai laiko Krokuvos ir Sankt Peterburgo universiteto studentai, o didžioji dalis Kauno medicinos universiteto studentų šiuo klausimu neturėjo nuomonės. Vertinant studentų požiūrį į psichologijos disciplinos svarbą, statistiškai

reikšmingų skirtumų tarp universitetų nenustatyta. Visų universitetų studentai šią discipliną laikė svarbia savo būsimajai profesijai.

Išvados. Įvertinus medicinos studentų požiūrį į humanitarinių ir socialinių mokslų reikšmę, galima teigti, jog Krokuvos ir Sankt Peterburgo medicinos universitetų studentai statistiškai reikšmingai dažniau teigė, kad etikos ir filosofijos disciplinos yra svarbios jų studijoms; psichologijos mokslo svarbą būsimajai profesijai pripažino trijų universitetų studentai; sociologijos disciplinos reikšmingumą tolesnėms studijoms statistiškai reikšmingai dažniau įvardijo Kauno medicinos universiteto ir Sankt Peterburgo valstybinio universiteto studentai.

Adresas susirašinėti: A. Blaževičienė, KMU Filosofijos ir socialinių mokslų katedra, A. Mickevičiaus 9, 44307 Kaunas
El. paštas: blazeviciene@yahoo.com

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