

PECULIARITIES OF TEACHING HISTORY  
OF MEDICINE TO FOREIGN STUDENTS

Anzhela BIDUCHAK, Maria MANDRYK-MELNYCHUK

Higher State Educational Establishment of Ukraine  
«Bukovinian State Medical University», Chernivtsi (Ukraine)  
biduchak5@gmail.com

СПЕЦИФІКА ВИКЛАДАННЯ ІСТОРІЇ  
МЕДИЦИНИ ІНОЗЕМНИМ СТУДЕНТАМ

Анжела БІДУЧАК, Марія МАНДРИК-МЕЛЬНИЧУК

ВДНЗ України «Буковинський державний  
медичний університет», Чернівці (Україна)  
Researcher ID D-4777-2017 ORCID 0000-0003-3475-1497  
Researcher ID D-7790-2017 ORCID 0000-0001-5995-9003

**Бидучак А.С., Мандрик-Мельничук М.В. Специфика преподавания истории медицины иностранным студентам. Целью работы** являются актуальные вопросы современного значения истории медицины в системе высшего медицинского образования и формировании профессиональных компетенций будущих медицинских работников. **Научная новизна.** Авторы выделяют современные подходы к преподаванию истории медицины иностранным студентам, которые будут способствовать наиболее полному формированию профессионального мышления и развития их личностных качеств. Методы исследования. **Методология исследования.** В статье использованы описательный метод и метод сопоставления. **Выводы.** В научном исследовании рассмотрены проблемные вопросы изучения истории медицины иностранными студентами. В частности, акцентировано внимание на том, что наибольшие трудности студенты-иностранцы испытывают из-за влияния многочисленных факторов: географических, экономических, национальных, религиозных и тому подобное.

**Ключевые слова:** история медицины, студенты-медики, иностранные студенты, образовательный процесс, компетентностный подход, междисциплинарность.

**Setting the problem in general form and its connection with important scientific or practical tasks.** Training of foreign students takes an important place in the system of higher medical education in Ukraine. Teaching theoretical subjects, to which the history of medicine belongs, leads to searching for the optimal forms and methods of material presentation, checking the level of its mastering by the students. Besides, cultural, linguistic and mental factors play an important role and significantly affect the way how the material is presented, how the interdisciplinary links are made, how we appeal to the history and culture of the country from which the student came. Taking into consideration these important issues we can definitely raise the quality of education of foreigners in the medical higher educational institution.

The experience of work with foreign students indicates that this contingent of students requires special approaches to teaching. First of all, very often in the groups there are the students of different nationalities, religions, political views. They are conventionally differentiated by the level of knowledge because they were taught according to various school curricula. It complicates the work of a teacher, who, on the one hand, has to adapt the material and make it available, and on the other hand, should keep the scientific principle and fulfill the content of the discipline curricula. It

should be noted that sometimes even the simplest notions and facts cause difficulties for foreign students in perception and learning, it concerns the names, items of historical and cultural values, personal contribution of scientists to the development of medicine.

**The aim of the work** is the current issues of the modern meaning of the history of medicine in the system of higher medical education and the formation of professional competencies of future medical workers.

**Setting the main material.** The main objective of the reforms in the higher education in Ukraine is to achieve its new quality, based on an efficient network of universities that meet the internal objectives of education policy and the highest international standards<sup>1</sup>.

Creation of new directions of specialists training requires a more careful approach to drawing up a list of competencies mastered by graduates as a part of educational programs. The history of medicine is not an exception: in the present circumstances, its uniqueness as a course is much more clearly manifested. Its important feature is the interdisciplinary complex nature, which certainly makes the history of medicine indispensable in the structure of training of modern highly qualified specialist with medical education<sup>2</sup>.

Nowadays it is important to understand that when

<sup>1</sup> Hai L. A., Sukhin Yu. V., Venher V. F. "Suchasni metodyky vykladannia medychnykh dystyplin u vyshchii shkoli" [Modern methods of teaching medical disciplines in high school], *Medychna osvita* [The medical education], 2016, N. 1, P. 15-18 [in Ukrainian]; Tereshkyna O. V. "Roli ystoryy medytsyny v resheny metodolohycheskykh problem pedagogyky medytsynskoho vuza" [Role of medical history in solving methodological problems of pedagogy of medical high school], *Vestnyk novykh medytsynskykh tekhnolohiy* [Bulletin of new medical technologies], 2015, T. 22, N 1, P. 116-121 [in Russian].

<sup>2</sup> Kalashnik N. V. "Struktura mizhkulturnoi komunikativnoi kompetentnosti inozemnykh studentiv – maibutnikh medykyv" [Structure of intercultural communicative competence of foreign students - future physicians], *Naukovi zapysky Ternopil'skoho natsionalnoho pedagogichnogo universytetu imeni Volodymyra Gnatiuka. Seriya: Pedagoghika* [Scientific notes of Ternopil National Pedagogical University named after Volodymyr Hnatyuk. Series: Pedagogy], 2014, N. 3, P. 104-110 [in Ukrainian].

studying and teaching history of medicine one should be guided by the general scientific principles of historicism and systemic methods, study the works of outstanding doctors of the past, analyze the logic of continuity in the development of rational methods of cognition in medicine, use a wide range of general scientific methods of investigation.

An important aspect of work with foreign students is also the presence of an integrated methodological support (texts of lectures and presentation materials to them, methodical guidelines for seminars, questions for self-control, tests, and sets of tests for final examinations). In the teaching history of medicine the biggest effect is provided by the introduction of interactive technologies of collective-group learning, because this one is the most democratic. And instilling democratic tolerant attitude to their classmates is an important part of the educational process.

Teaching-learning process at seminars is aimed at obtaining practical skills and abilities to manage the knowledge derived from lectures and during their individual work. Practical classes begin with motivating students for studying a particular topic, determining basic level of students' knowledge, problematic aspects of the topic, their explanation and consolidation, and at the end of each class students are checked to evaluate what they have learnt (generally through oral questioning, discussions, written tasks and sometimes by testing)<sup>3</sup>.

Special attention should also be given to the formation of creative personality of the student, their self-development and self-education. Based on our own experience and verified scientific literature one can make a conclusion that the effectiveness of individual work develops when self-organization in the educational process occurs at all stages of the learning process. While organizing this work the teacher should take into consideration the group contingent, psycho-emotional differences of each student, level of motivation to study, creative potential and opportunities for self-organized cognitive activity. It is important to teach foreign students how to organize their individual work, analyze historical sources. The main objectives of this work are: consistency, preparation to carry out different types of homework, organization of repetitive activities and solving tests<sup>4</sup>.

In the work with foreign students it is reasonable to go on excursions, familiarize with museum exhibits on the history of medicine. Visiting the museum is helpful to understand the material related to the development of modern culture.

The Museum of Bukovinian State Medical University allows to generalize all the best, that was achieved over the years. Familiarity with scientific discoveries, theoretical work of researchers who have made a significant contribution into the development of health protection in Ukraine, including Northern Bukovyna in different historical periods, study the heritage of scientists and physicians, outstanding personalities, best traditions of functioning of medical institutions help to develop conscious attitude to moral and ethical principles of the medical profession in students.

Logistic equipment of classrooms for foreign students

plays an important role in the organization of educational process. For individual preparation for seminars students can freely use library funds (including electronic funds). Modern information learning environment creates the conditions for the use of modern, including computer technologies.

Modern higher education faces an acute problem of «what and how to teach» because time challenges highlighted new dimensions in this issue. The question often arises: how, when teaching, to guarantee students the opportunity to freely and constructively self-improve themselves intellectually, considering the peculiar composition of their mind, because the teacher controls the learning activities of students by creating specific conditions of the educational environment, involving them into the obligatory standards of human cognition.

One of the tasks of modern educational process is the increase of the effectiveness of teachers' work and students' learning. The main target setting in the training process of medical university graduates is the development of a competent professional. Accordingly, it is necessary to create conditions for the formation of an active position of the student. In the process of teaching the history of medicine the lecturer poses a number of objectives related to the formation of the complex of comprehensive, professional and general professional competences in students.

The criterion for training a future specialist in a higher educational institution should be their ability to active social adaptation, independent life choice, psychological and professional readiness to practical activity of a doctor, the ability to continuous self-education and self-improvement<sup>6</sup>.

In the conditions of a gradual reduction of the classroom instructor-led course and an increase in the proportion of students' individual work, the teacher must organize the training of students in such a way that the tasks of the discipline history of medicine were completely realized.

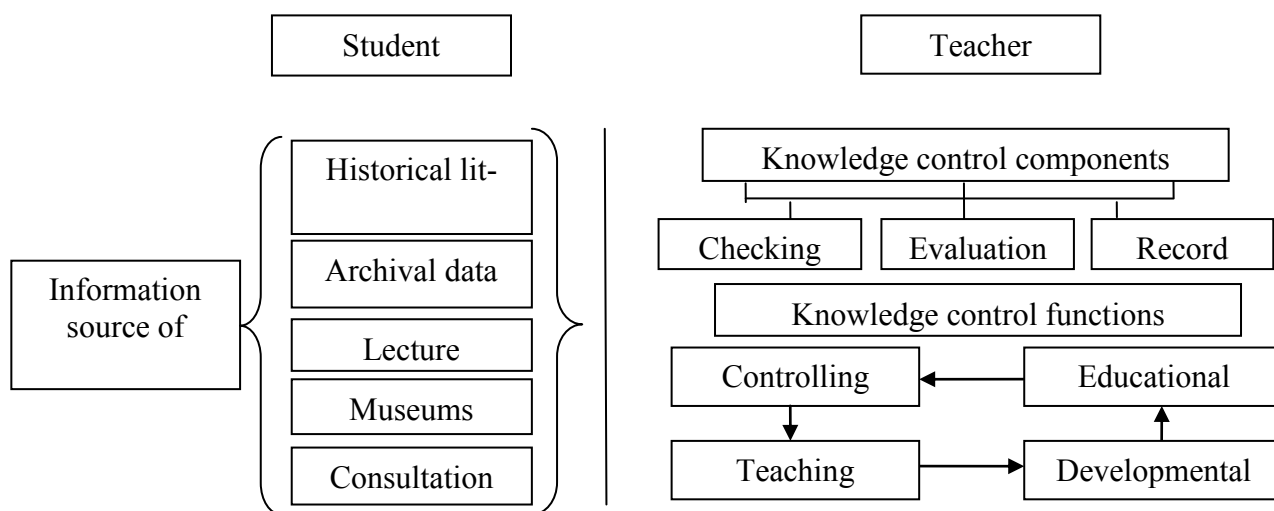
The success of teaching history of medicine and the professional training of future medical professionals is in general significantly stipulated by the fact how successfully the educational process is introduced (the basic pedagogical technologies are used and the psychological and pedagogical features of the educational process are taken into account in a medical university).

According to the standards of higher education in Ukraine, a graduate of a medical university according to the results of training must acquire knowledge, skills and habits necessary for medical, organizational, managerial and research professional activities. The principles of consciousness and activities must become essential in the training of future health professionals; they provide an active social position and successful intellectual activity, as well as the possibility of creative development in the chosen field of work. At the same time, an important role in the process of mastering the basics of professional competences belongs to the pedagogical interaction between all participants of the educational process, during which various subject-object relations are possible (Fig. 1).

<sup>3</sup> Strelnikov V. Iu., Britchenko I. H. "Suchasni tekhnolohii navchannia u vyshchii shkoli" [Modern technologies of teaching in high school], *Poltava «Puet»* [Poltava "Puet"], 2013, 309 p. [in Ukrainian].

<sup>4</sup> Adamenko O. V., Razoronova M. V. "Analiz tematychnoho spektra dysertatsiinykh doslidzhen z pytani pidgotovky inozemnykh studentiv v Ukraini (1990–2009 rr.)" [Analysis of the thematic spectrum of dissertation researches on the training of foreign students in Ukraine (1990-2009)], *Visnyk Dnipropetrovskoho universytetu ekonomiky ta prava imeni Alfreda Nobelia: Ser. Pedagoghika i psykholohiia* [Bulletin of the Alfred Nobel University of Economics and Law of Dnipropetrovsk: Ser. Pedagogy and psychology], 2011, N. 1, P. 5–9 [in Ukrainian].

<sup>5</sup> Antonova K. V. "Vplyv dystsyplin humanitarnogo bloku na protses adaptatsii inozemnykh studentiv na pochatkovomu etapi navchannia u medychnykh universytetah Ukrainy" [Influence of disciplines of the humanitarian bloc on the process of adaptation of foreign students at the initial stage of studying at medical universities of Ukraine], *Pedagoghichnyi dyskurs* [Pedagogical discourse], 2012, N. 12, P. 6–10 [in Ukrainian].



**Fig. 1.** Teaching and pedagogical technologies and control in the process of studying history of medicine

The history of medicine as a science and subject of teaching is of great importance for the upbringing of the future doctor, the formation of style of scientific thinking and ethics, the expansion of the general cultural and medical outlook, through analysis of sources we have to make up the idea of medicine as a science that has undergone a complex evolution over millennia.

Teaching history of medicine involves the following objectives:

- 1) study of the actual data from the past of history of medicine;
- 2) development of historical thinking in the understanding of the processes of medical notions formation, skills of treatment, the basics of hygiene, inventions, technologies for better mastering special medical knowledge;
- 3) raising the sense of humanism, honor and dignity of the doctor based on the study of the experience of world and domestic medicine, its positive traditions, familiarity with the life and merits of its best representatives;
- 4) raising the qualities of a moral and ethical nature, that contribute to the formation of a physician of a new generation.

The existing diversity of ideas about teaching and upbringing of personality in the conditions of modern education can be summarized as follows: the forms of education should be rebuilt in accordance with the students' emotional sphere, the specifics of the educational material perception, their interests and rights. Among the psychologically oriented methodological models are those applied in the practice of learning<sup>6</sup>. There are several methodical models, built

on the basis of psychological mechanisms of student development: free, personal, developing, activating, forming, enriching<sup>7</sup>.

All of the above models form a peculiar hierarchical ladder, depending on the balance of two components: the level of freedom of subjective choice of the student and the number of steering influences. Respectively, the «free model» meets the criterion of «the maximum of freedom of subjective choice – the minimum of steering influences», and the «forming model» corresponds to the criterion of «the minimum of freedom of subjective choice – the maximum of steering influences». Each model affects the effectiveness of learning in its own way, since on the first place there is a student as a subject of activity, and the main pedagogical efforts are directed towards his professional and personal development<sup>8</sup>.

The motivation of students to study is a guarantee of their solid knowledge. The effectiveness of learning is ensured by a number of general didactic principles and application of an optimal set of methods. The process of obtaining knowledge in the history of medicine by foreign students – the future doctors is first of all, based on the implementation of the general-didactic principle of systematicity and consistency. This principle implies that the formation of knowledge, skills and abilities takes place in a certain order, systematically, when each element of the educational material is logically linked to all others, and new knowledge appear on the basis of information learned earlier<sup>9</sup>. Thus, interdisciplinary and cross-disciplinary connections are carried out (Fig. 2).

<sup>6</sup> Kozlova H.M. "Metodyka vykladannia u vyshchii shkoli" [Teaching method in high school]: navch. posib, Odesa ONEU, 2014, 200 p. [in Ukrainian].

<sup>7</sup> Mandryk-Melnichuk M.V. "Zastosuvannia pryntsyviv istorychnoho osmyslennia mynulogo do vykladannia istorii medytsyny" [Application of the principles of historical comprehension of the past to the teaching of the history of medicine], *Suchasni pidkhody do vyshchoi medychnoi osvity v Ukraini: materialy XIV Vseukr. nauk.-prakt. konf. z mizhnar. uchastiu, prysviachenoi 60-richchuu TDMU (Ternopil, 18–19 trav. 2017 r.): u 2 t. / Ternop. derzh. med. un-t imeni I. Ya. Horbachevskogo, Ternopil: TDMU* [Modern approaches to higher medical education in Ukraine: materials XIV. Allukr. sci. pract. conf. from international Participation dedicated to the 60th anniversary of the TDMU (Ternopil, 18–19 May 2017): 2 t. / Ternopil. state honey. Untitled I. I. Gorbachevsky, Ternopil: TDMU], 2017. T. 2, P. 86–87 [in Ukrainian].

<sup>8</sup> Tiuryna O.V. "Prepodavanye ystoryy medytsyny kak sredstvo vospytaniya studentov" [Teaching the history of medicine as a means of educating students], *Vestnyk Yvanovskoi medytsynskoi akademii* [Bulletin of the Ivanovo Medical Academy], 2011, T. 16, N 1, P. 67–70 [in Russian].

<sup>9</sup> Bilyk O.M. "Sotsializatsiia inozemnykh studentiv yak pedagogichna problema" [Socialization of foreign students as a pedagogical problem], *Visnyk Kharkivskoi derzhavnoi akademii kultury* [Bulletin of Kharkiv State Academy of Culture], 2014, Vyp. 43, P. 281–289 [in Polish].

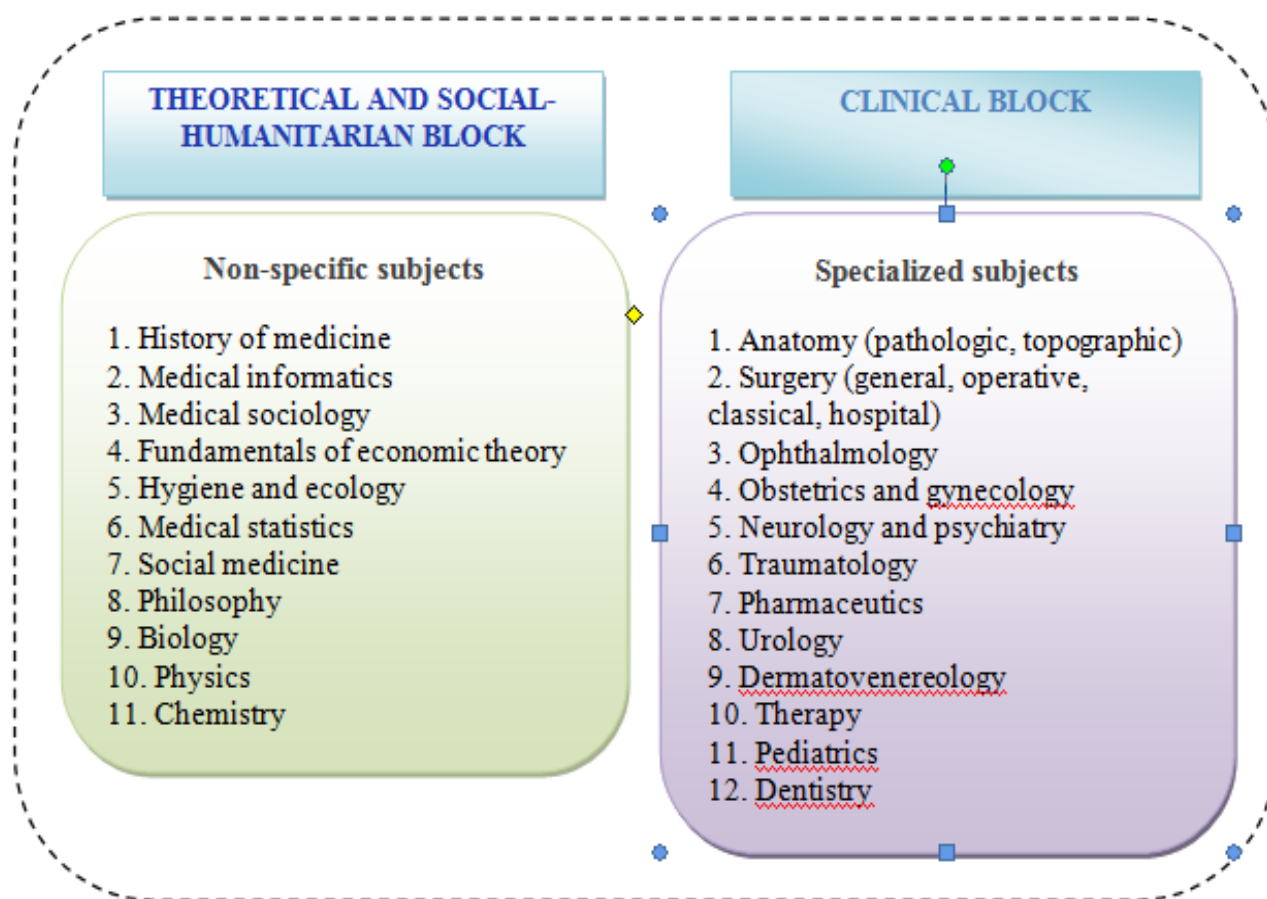


Fig. 2. Cross-disciplinary integration of the subject «History of Medicine»

The concept of teaching «History of Medicine» in medical universities is also based on theoretical and methodological principles and fundamentals of historical education, which, in their turn, are determined by general methodological, philosophical-educational and philosophical-historical principles that corresponds to the modern stage of the methodological reflection of science<sup>10</sup>. Consequently, the purpose of this conception is creation of the mechanism for the holistic perception of history by foreign medical students, transformation of this discipline into the effective tool for the development of a modern physician. The form of new material introduction, the source base allows to create a clear idea about the historical origins of medicine appearance, the factors that influenced it a great deal during all epochs. It is very important to correctly place the emphasis when familiarizing students with the evolution of the moral and ethical and legal principles of the physician's activities. All this allows to create in the complex certain prototype of the newest doctor who meets the modern challenges, applies innovations, but does not neglect the cultural heritage of humanity of past ages.

The teacher uses the principle of historicism, which provides a clear statement of phenomena and events in

chronological order, in accordance with the periodization of world history; secondly, the socio-natural, civilization and cultural-psychological principles make it possible to systematize historical facts, events, phenomena in concrete-historical and comparative-historical perspectives; thirdly, in the dialogue of people of different cultures and civilizations, the interactions between them, the principles and approaches of social and historical anthropology are used. Due to them, students comprehensively perceive the history of medicine, its diversity in different times, its versatility and uniqueness.

The acceleration of the rhythm of modern life requires from the graduate to be able to orientate in a changing environment, to adapt quickly to it, that is why traditional approaches to the training of medical students are no longer able to fully perform their functions, and therefore it is natural that the prominent place in the higher educational establishments is occupied by the technologies, directed not as much to giving knowledge, as to developing skills and abilities to acquire them on their own.

We rely heavily on the use of interactive methods during seminars on the history of medicine. During the traditional seminar the student sometimes answers the question, looking into the notebook<sup>11</sup>. Most students at this time either

<sup>10</sup> Mandryk-Melnychuk M.V. "Zastosuvannya pryntsyviv istorichnoho osmyslennia mynulogo do vykladannia istorii medytsyny" [Application of the principles of historical comprehension of the past to the teaching of the history of medicine], *Suchasni pidkhody do vyshchoi medychnoi osvity v Ukraini: materialy XIV Vseukr. nauk.-prakt. konf. z mizhnar. uchastiu, prysviachenoj 60-richchuu TDMU (Ternopil, 18–19 trav. 2017 r.): u 2 t. / Ternop. derzh. med. un-t imeni I. Ya. Gorbachevskogo, Ternopil: TDMU* [Modern approaches to higher medical education in Ukraine: Materials XIV. All-Ukr. sci. and pract. conf. from international Participation dedicated to the 60th anniversary of the TDMU (Ternopil, 18-19 May 2017): 2 t. / Ternopil. state medical university. named by I. I. Gorbachevsky, Ternopil: TDMU], 2017. T. 2, P. 86–87 [in Ukrainian].

<sup>11</sup> Vasylieva O.V. "Suchasni aspekty vyhovnoi roboty z inozemnyimi studentamy u vyshchykh medychnykh navchalnykh zakladakh Ukrainy" [Modern aspects of educational work with foreign students in higher medical educational institutions of Ukraine], *Humanitarni*

are preparing for the next question, or do not pay attention to this issue at all. The effectiveness of the seminar decreases – less than half of the students are questioned, some of them can add to their colleague. Anyway this leads to the passivity among the main part of the academic group<sup>12</sup>. In our opinion, one of the varieties of the interactive seminar may be a «question-answer» seminar. The teacher puts questions of non-reproductive nature, formulating them in such a way that students are not able to answer using quotations from their notes or a textbook. In this cooperation, students and teachers' relationships are provided at the partnership level and friendship. The teacher can demonstrate and develop the abilities – he/she acts as an organizer, consultant, etc. At the same time, the experience of the learner is the central source of learning cognition<sup>13</sup>.

The following principles lie in the basis of modern interactive training:

a) the direct participation of each student in the class, it obliges the teacher to make each of them an active seeker of ways and means of solving a particular problem;

b) mutual informational, spiritual enrichment: the educational process must be organized in such a way that its participants have an opportunity to exchange life experiences and information received;

c) personally oriented learning.

The competence of students, formed by interactive learning, expands the boundaries of cognitive abilities, contributes to the analysis and application of the information received during the learning process, and greatly contributes to the accumulation of skills in future professional medical activities. There appears deep inner motivation, students begin to make important decisions and develop their professional medical skills with pleasure.

**Conclusion.** In order to successfully build a teaching-learning process, factors that have an impact on the educational system should be considered: geographical, economic, national, historical, cultural and religious, that is of special value for each person. Undoubtedly, to take into account all the elements, appropriate training of the teacher, his self-education, and relevant knowledge is necessary. So every ethnic group has its own methods and approaches in the pedagogical process, which must be taken into account in the educational process when teaching foreign students.

**Бідучак А.С., Мандрик-Мельничук М.В. Специфіка викладання історії медицини іноземним студентам. Метою роботи є актуальні питання сучасного значення історії медицини в системі вищої медичної освіти та формуванні професійних компетенцій майбутніх медичних працівників. Наукова новизна.** Автори виділяють сучасні підходи до викладання історії медицини іноземним студентам, які будуть сприяти найбільш повному формуванню професійного мислення і розвитку їх особистісних якостей. **Методологія дослідження.** У статті використано описовий метод і метод зіставлення. **Результати дослідження.** Проаналізовано внутрішньодисциплінарні та міждисциплінарні

зв'язки історії медицини, які викладаються у вищій школі, що має значення у формуванні серед іноземних студентів стилю наукового мислення і етики, розширення загальнокультурного і медичного кругозору, завдяки опрацюванню джерел скласти уявлення про медицину як науку, що пройшла складну еволюцію упродовж тисячоліть. Історія медицини як наука, що вивчає розвиток медичної теорії і практики, тісним чином пов'язана з розвитком суспільства, зміною суспільно-економічних формацій, історією культури народів. Вивчаючи минуле медицини, ми можемо оцінити досягнення сучасної медицини і простежити перспективи її розвитку. Знання історії медицини має велике значення для формування світогляду майбутнього лікаря, збагачуючи його теоретичними знаннями, умінням аналізувати події, що відбуваються, виховання почуття гуманізму та патріотизму. **Висновки.** У науковому дослідженні розглянуто проблемні питання вивчення історії медицини іноземними студентами. Зокрема, акцентовано увагу на тому, що найбільші труднощі студенти-іноземці відчувають через вплив численних факторів: географічні, економічні, національні, релігійні тощо.

**Ключові слова:** історія медицини, студенти-медики, іноземні студенти, освітній процес, компетентнісний підхід, міждисциплінарність.

*Анжела Бідучак – кандидат медичних наук, асистент кафедри соціальної медицини та організації охорони здоров'я ВДНЗ України «Буковинський державний медичний університет». Автор понад 60 праць наукового та навчально-методичного характеру, з яких 2 монографії, 7 навчально-методичних посібників. Наукові інтереси: профілактика хронічних неінфекційних захворювань, історія медицини, конфліктологія.*

*Anzhela Biduchak – Candidate of Medical Sciences, assistant of the Department of Social Medicine and Public Health of the Higher State Educational Establishment of Ukraine "Bukovinian State Medical University", Chernivtsy. Is the author of more than 60 works of scientific and educational-methodical nature, including 2 monographs, 7 scientific-methodical manuals. Research interests: prevention of chronic non-communicable diseases, history of medicine, conflictology.*

*Марія Мандрик-Мельничук – доктор історичних наук професор кафедри соціальної медицини та організації охорони здоров'я ВДНЗ України «Буковинський державний медичний університет». Автор понад 150 праць наукового та навчально-методичного характеру, у тому числі 4 монографії, 1 посібник, 8 навчально-методичних посібників. Наукові інтереси: історія медицини, методика викладання історії медицини, всесвітня історія.*

*Maria Mandrik-Melnichuk – Doctor of Historical Sciences, Professor of the Department of Social Medicine and Public Health of the Higher State Educational Establishment of Ukraine "Bukovinian State Medical University", Chernivtsy. Is the author of more than 150 works of scientific and educational-methodical nature, including 4 monograph, 1 textbook, 8 scientific-methodical manuals. Research interests: history of medicine, methods of medical history, universe of history.*

**Received:** 02.04.2019

**Advance Access Published:** June, 2019

© A.Biduchak, M.Mandrik-Melnichuk, 2019

*ta sotsial'ni nauky: problemy ta perspektyvy v konteksti globalizatsiyi. Zbirnyk konferentsiy Mizhnarodnoyi nauково-praktychnoyi konferentsiyi (28.01.2015, Velykobrytaniya, London), Tsentr naukovykh i praktychnykh doslidzhen' [Humanities and social sciences: problems and prospects in the context of globalization. Collection of Conference Papers of International Scientific-Practical Conference (28.01.2015, the United Kingdom, London), Centre for Scientific and Practical Studies], 2015, P. 16–20 [in English].*

<sup>12</sup> Filonenko M.M. "Metodyka vykladannia u vyshchii medychnii shkoli na zasadakh kompetentnysnogo pidhodu" [Methodology of teaching in a higher medical school based on a competency approach], Kyiv: Vyd-vo "Tsentr navchalnoi literatury" [Kiev: View "Center for Educational Literature"], 2016, 87 p. [in Ukrainian].

<sup>13</sup> Chechkov O.V., Tyshchenko E.M. "Rol medytsyny v sotsyalno-gumanytarnom obuchenii vracha" [The role of medicine in the social and humanitarian training of a doctor], *Materyaly IX Mezhdunarodnoi nauchno-metodycheskoi konferentsiyi «Perspektyvy razvytyia vysshei shkoly»*, Grodno, 5-6 maia [Proceedings of the IX International scientific and methodological conference "Prospects for the development of higher education", Grodno, May 5-6], 2016, P. 207–209 [in Poland].