

DOI <https://doi.org/10.11603/m.2414-5998.2025.1.15365>  
УДК 378:61(477+430)(091)

**O. Y. Snitovska**

ORCID <https://orcid.org/0000-0002-3086-9503>

**T. I. Pysklyvets**

ORCID <https://orcid.org/0009-0005-2537-0897>

*Danylo Halytskyi Lviv National Medical University  
Ivan Horbachevsky Ternopil National Medical University of the Ministry of Health of Ukraine*

## PECULIARITIES OF HIGHER MEDICAL EDUCATION IN UKRAINE AND GERMANY: HISTORICAL CONTEXT

**О. Й. Снітовська, Т. І. Пискливець**

*Львівський національний медичний університет імені Данила Галицького  
Тернопільський національний медичний університет імені І. Я. Горбачевського МОЗ України*

## ОСОБЛИВОСТІ ВИЩОЇ МЕДИЧНОЇ ОСВІТИ В УКРАЇНІ Й НІМЕЧЧИНІ: ІСТОРИЧНИЙ КОНТЕКСТ

**Abstract.** The article concerns foundations of medical education in Ukraine and Germany in a historical context, which provides for the practical training of a doctor capable of independent responsible professional activity and continuous professional development, starting from medical schools, colleges, medical faculties of universities in Ukraine and to the reform of higher medical school in Germany. Attention is focused on the need for a practically oriented vector of professional training of a doctor with a special emphasis on the use of the latest technologies in the educational process, modern content of training and compliance of the teaching staff with modern world requirements for such training. A feature of the German system is a clearly expressed traditional heredity of treatment, a high level of training of medical workers and constant professional and scientific activity of a doctor.

**Key words:** medical education; practical training; clinical disciplines; educational process; medical practice; professional training of a doctor.

**Анотація.** У статті проаналізовано основи медичної освіти в Україні й Німеччині в історичному контексті, що передбачає практичну підготовку лікаря, здатного до самостійної відповідальної професійної діяльності й безперервного професійного розвитку, починаючи від медичних шкіл, колегіумів, медичних факультетів університетів в Україні й до реформи вищої медичної школи в Німеччині. Закцентовано увагу на необхідності практико зорієнтованого вектору професійної підготовки лікаря з особливим наголосом на використанні новітніх технологій у навчальному процесі, модерному змісті навчання й відповідності професорсько-викладацького складу сучасним світовим вимогам щодо такої підготовки. Особливістю німецької системи є яскраво виражена традиційна спадковість лікування, високий рівень підготовки медичних працівників і постійна фахова й наукова діяльність лікаря.

**Ключові слова:** медична освіта; практична підготовка; клінічні дисципліни; навчальний процес; медична практика; професійна підготовка лікаря.

**Introduction.** An important component of the domestic educational system is higher medical education, which is aimed at high-quality training of personnel potential in the field of health care. The main directions of reorganization of the system of higher medical education of Ukraine are determined by both domestic processes, and the choice of a European vision, and the advantages of global development, and modern challenges, including the consequences of war. Such aspects involve bringing the structure, content and quality of medical education in line with both state needs and international standards of the health care system. Modernization of the domestic

health care system, and, consequently, medical education, is complex and controversial. For many times it has undergone changes, reforms, and reorganization, which were caused by internal and external factors [1; 8].

Professional training involves solving tasks that require both the study of foreign experience and an appeal to the historical and pedagogical heritage. Such an analysis will contribute to the further development of high-quality professional education and will allow you to identify advantages and avoid miscalculations. Retrospective assessment is due to a number of factors, since today places new demands on both doctors and medical personnel of any level, and a systematic assessment of the experience of pro-

viding high-quality medical education will contribute to making effective management decisions.

**The aim** of the article is to analyze the basics-medical education in Ukraine and Germany in a historical context.

A significant contribution to the development of higher medical education in Ukraine was made by the works of M. Pirogov, V. Razumovsky, V. Florinsky. Certain issues of the development of higher medical education in different countries were covered by G. Klishch, L. Klos, N. Kuchumova, M. Kushyk, G. Palasyuk, J. Tsechmister and others; ways to improve the educational activities of students in higher medical institutions were studied by O. Bilovol, O. Volosovets, T. Demyanchuk, L. Naumov et al.

**Theoretical part.** Analyzing socio-political, historical and economic factors, we pay attention to the formation of higher medical education in Ukraine and the activities of medical schools. Thus, at Lviv University, at the request of the Jesuits, in 1661, a university with a medical faculty was opened in Lviv, but at the request of the University of Krakow (due to competition) it was closed 2 years later; the medical faculty resumed its work for the second time in 1784 and was closed again in 1805. Therefore, medical education could be obtained at the medical college (*Collegium medicum*) of Lviv, where doctors, obstetricians, pharmacists and medical-surgical and obstetric schools were trained. The problem of the functioning and activity of a higher medical educational institution in Western Ukrainian lands remained relevant throughout the 19th century. Since 1894, the medical faculty has been restored at Lviv University, admission to which was limited to 5% for Ukrainians, and, accordingly, the question of organizing an autonomous higher educational institution in medicine remained open. So, in Galicia for almost the entire 19th century, there was no higher medical school, and the activity of the medical faculty of the university was determined within the educational policy of the empires. During the 25 years of its existence during the Austro-Hungarian Empire, this faculty graduated 544 doctors, among whom only 40 were Ukrainians. Ukrainians, as a rule, could work only as private doctors [4].

Some researchers have noted the fact that the level of training of surgeons and midwives in Galicia was significantly higher compared to other parts of the region, since the educational course already in the 19th century, included three main groups of disciplines: general education, professionally oriented and special. A common feature for all institutions was that a mandatory component of education was practical training. It should be noted that in these institutions teaching was carried out in Polish or German. Naturally, training was carried out using foreign-language textbooks (i.e., not

Ukrainian). At the same time, teachers of medical educational institutions were mostly appointed by county doctors and heads of hospitals, depending on the location of the schools [5].

In the eastern Ukrainian lands in the 18<sup>th</sup>–19<sup>th</sup> centuries, medical personnel were trained by the Elizabeth grad Medical and Surgical School, the Medical School at the Kyiv-Mohyla Academy, and the medical faculties of Kharkiv University and Kyiv University. Imperial University of St. Volodymyr. As M. Kushyk notes, at the beginning of the 20th century, women received higher medical education at the medical department of the higher women's courses in Kyiv (since 1907), Odessa (since 1910), etc., where training was equated to the university level [3].

The level of training in higher educational institutions has been brought to a qualitatively higher level thanks to the fruitful professional activities of both highly qualified personnel potential and the improvement of the educational process by improving curricula (consistency, accessibility, scientificity, the relationship between theory and practice), the isolation of certain subjects, the development of clinical disciplines and clinical training, participation in international conferences, congresses, symposia, scientific and methodological and clinical support (textbooks, manuals, visual aids, laboratory equipment).

The quality of training of future doctors was also influenced by the increase in the number of medical departments, the expansion of the network of middle-level medical institutions, the growth of the number of medical faculties in classical universities, the active activity of scientific medical societies. Meanwhile, active scientific research by the teaching staff and students, professional improvement and application of theoretical knowledge in practice, exchange of experience, foreign trips provided the opportunity to obtain a high professional level of medical workers. The educational process was carried out in the initial courses in German and Latin, later in Polish – in Western Ukrainian lands and in Russian – in Eastern Ukrainian lands [5].

M. Pirogov paid attention to the training of the young generation of scientists and advised to establish various medical societies, to encourage students to scientific activity, which could further contribute to the development of healthy competition among the teaching staff. Important emphasis was placed on the knowledge of European languages, since the debates during the defense were conducted in one of these languages, while the dissertation was written in Latin [3].

The activities of medical societies in the 19th and early 20th centuries contributed to the dissemination of advanced both domestic and European experience.

The present of domestic higher medical education is marked by intensive reform processes, which determine the relevance of research into the features

of functioning and reforming the system of professional training of medical personnel in developed countries of the world and Europe. The study of the experience of Germany in the field of development, formation, modern development trends, main achievements of reforming and modernization of higher medical education is of particular relevance today [2; 7]. According to German scientists (J. Brandt, M. Weggemans, S. Gysin, R. Hollekamp, R. Seifert, G.H. Kuni, U. Schagen), with the change of generations in Germany, not only the requirements for medical education were modified, but also educational standards, focused primarily on the formation of knowledge, skills and abilities in medical practice, which over time became traditional.

In the work "Reform of German Medical Education in 1953–1959" by H. Schäfer pointed out the unreadiness of Germany in the 1950s for constructive dialogue and interaction of the main subjects of higher medical education and the insufficient intensity of the clinical and practical component and its unadaptability to regulatory and legal principles [12, p. 49].

S. Gysin, S. Neuner-Jehle, H. Kuni in the article "Stages of Medical Education" (*"Die Phasen der medizinischen Ausbildung"*) distinguishes four phases of medical education in Germany in the early 1970s: the educational process, medical practice, professional training, advanced training. The educational process, according to the curricula of that time, covered theoretical training, but included a small number of practical classes at the patient's bedside. On the other hand, the next phase – medical practice – made it possible to fully concentrate on practical training in a university hospital or in primary care hospitals. The advantage was that students could, with little effort, achieve the necessary practical training. The disadvantage was that during the practical part there was no control over the success of the implementation of practical skills. By the third phase, H. Kuni completed professional practical training in teaching hospitals for one year, culminating in a national exam, the results of which will also confirm the students' theoretical training [10, p. 106–107]. Usually, the educational process ends with obtaining a license for medical practice, and after this specialization (a new stage) begins, when it is no longer about training, but about further separate practical activity with advanced training. However, the ability to move from one level of skills to the next seemed too dubious. The main motive for this was also understandable: to get a larger number of employees with lower training costs, which was tied to paying lower-qualified specialists.

G.G. Gebert drew attention to the need for constant self-improvement of a doctor in new conditions, when medical biological sciences and information technologies were rapidly developing, changes were

taking place in the organization and functioning of the healthcare system, and emphasized the importance of undergraduate medical education as a prerequisite for obtaining proper medical practice [9, p. 139].

R.R. Seifert in his publication "Development of the professional training of junior medical personnel in Jena" (*"Die Entwicklung der MTA-Ausbildung unter besonderer Berücksichtigung von Jena"*) focuses on the opening in Jena (1912) of a training center for women who could acquire medical specialties, e.g., laboratory assistant, radiologist. Until then, such educational institutions had only functioned in Berlin and Leipzig. By 1918, 150 students had graduated from the one-year Jena courses, and more than 40 of them worked in the hospital during the war [14]. Graduates of these courses had the opportunity to be employed in hospitals within three years of completing their studies, as they received good theoretical and practical training.

The division of Germany into zones of occupation by the USSR, the USA and Great Britain and the corresponding policy, aimed at the initial stages primarily at the denazification of all spheres of life of German society, led to changes in the field of education and professional training, in particular medical. Thus, in 1949, a new Law on the Certification of Doctors (*Anordnung*) was approved in the occupation zone of the Soviet Union (*Anordnung über die Approbation der Ärzte vom 16.02.1949*), the main innovation of which was the spread of a democratic nature in the professional training of medical specialists [11]. The changes to this legislative document also concerned the extension of the study period by two semesters.

The entire subsequent policy of reforming the medical education system of the GDR was aimed at its development according to the Soviet model. A radical renewal of the medical education system in East German universities was observed after the unification of Germany [6; 13].

The interdisciplinary colloquium on professional training of medical specialists in West Germany followed the Anglo-Saxon model with its practical character. Thus, in 1970 the Law on the Certification of Doctors (*Approbationsordnung für Ärzte vom 28. Oktober 1970*), which was based on the distinction between theoretical and practical medical education and the priority of scientific and theoretical training of students, the structuring of the educational process according to clearly defined academic disciplines.

As a result of numerous attempts to improve the system of higher medical education, in 1999 the 8th amendment was introduced to the Law on the Certification of Physicians (*Achte Verordnung zur Änderung der Approbationsordnung für Ärzte vom 11.02.1999*), the purpose of which was: integration of scientific, theoretical and practical training.

Medical education in Germany, like in other European countries, is characterized by a streamlined

healthcare structure. State legislative and regulatory documents regulate the approaches and principles of the educational process in accordance with traditions and experience in the medical education sector, as well as the dynamic requirements of the healthcare system, the technical capabilities of medical practice, and the improvement of the quality of the scientific base of medical science [5].

It is worth noting some innovations in the field of higher medical education in Germany, namely, the Law on the Certification of Doctors (2002), according to which the goals of medical education are specified, aimed at both physical health of a person and mental and spiritual health. Such training is supported by the state and is carried out at medical faculties of universities [11]. Given the demographic changes in Germany, as well as epidemiological threats, new requirements are being put forward for the quality of training of doctors and medical workers.

The curricula for the training of doctors in Germany provide for a patient-oriented vector of learning, which, in turn, is reinforced by clinical and practical classes (bedside training). Such implementation and approaches to curricula are aimed at direct interaction of the doctor with the patient, observation, communication, care. Thus, in the process of communication and interaction with patients, future doctors develop a sense of responsibility for their professional activi-

ties, competence, a desire to enrich their knowledge and self-improvement. The curriculum intensifies the learning process by optimizing the environment, atmosphere and activating the independent learning activities of students. The main idea of improving the curriculum is the implementation of internationally recognized principles of constructive learning, i.e. contextuality, commutativity, interactivity, etc.

**Conclusions.** The current stage of development of medical education in Germany is marked by the active implementation by higher medical schools of experimental curricula, the possibility of which is provided for by the new regulatory framework. The general goal of experimental curricula is to test new ideas and opportunities for improving medical education, which will contribute to the normalization of the educational load on students and strengthening their autonomy in organizing the educational process, integrating the stages of medical education, increasing the practical component of education, in particular through early contacts with patients and interdisciplinary organization of content and structuring of disciplines into integrated thematic blocks or modules according to the principle of “organ – system – function – pathology” in order to form students' systemic thinking as the basis for making adequate decisions in further clinical activities at the postgraduate stage.

### List of literature

1. Андрейчин С.М., Качор В.О. Медична освіта у Словацькій республіці. Тернопіль : ТДМУ «Укрмедкнига», 2006. 247 с.
2. Кучумова Н.В. Розвиток системи вищої медичної освіти у німецькомовних країнах (друга половина ХХ – початок ХХІ століття) : автореф. дис. ... канд. пед. наук : 13.00.01 / Дрогоб. держ. пед. ун-т ім. Івана Франка. Дрогобич, 2012. 20 с.
3. Кушик М.Л. Дидактичні основи фахової підготовки студентів у медичних навчальних закладах України (друга половина ХІХ – початок ХХ ст.) : автореф. дис. ... канд. пед. наук : 13.00.04 / Черкаський національний ун-т ім. Богдана Хмельницького. Черкаси, 2009. 20 с.
4. Саварин Т.В. Організація медичної освіти на західноукраїнських землях у другій половині ХVІІІ–ХІХ ст. *Медична освіта*. 2017. № 4. С. 119–126. DOI: <https://doi.org/10.11603/me.2414-5998.2017.4.8287>.
5. Федчишин Н.О., Бичок А.В. Концепт забезпечення якості вищої медичної освіти: досвід України й традиції Німеччини. *Якість вищої медичної освіти (до 60-річчя ТДМУ)* : монографія / А.В. Вихрущ, І.М. Кліщ, Н.О. Федчишин та ін.; за ред. А.Г. Шульгая, Н.О. Федчишин. Тернопіль : ТДМУ, 2017. С. 158–177.
6. Aurich H. Stand und Probleme des Medizinstudiums in DDR. *Medizinische Ausbildung*. 1990. № 7 (2). S. 134–139.
7. Fedchyshyn N., Klishch H., Yelagina N. Quality improvement through quality audit in

Austrian higher education. *Медична освіта*. 2017. № 2 (74). С. 153–157. DOI: <https://doi.org/10.11603/me.2414-5998.2017.2.7921>.

8. Fedchyshyn N.O., Shulhai A.H., Shevchuk O.O., Ilkiv O.P., Shuminska O.B. Mentoring in Medical Science: the Experience of German-speaking Countries. *Медична освіта*. 2024. № 1 (103). С. 5–9. DOI: <https://doi.org/10.11603/m.2414-5998.2024.1.14575>.

9. Gebert G. Die Reform der Ausbildung zum Arzt. *Medizinische Ausbildung*. 1994. № 11 (2). S. 138–148.

10. Gysin S., Neuner-Jehle S., Kuni H. Die Phasen der medizinischen Ausbildung. *Zeitschrift für Pädagogik*. Weinheim ; Berlin ; Basel : Beltz, 1971. № 10. S. 105–108.

11. Gysin S., Neuner-Jehle S. Überlegungen zur Zukunft der medizinischen Ausbildung. 2023. URL: <https://econtent.hogrefe.com/doi/epdf/10.1024/1661-8157/a004024>.

12. Schäfer H. Studienreform in der deutschen Medizin 1953–1959. *Medizinische Ausbildung*. 1998. № 15. S. 47–50.

13. Schagen U. Reformen auf dem Papier – Studium der Humanmedizin in der Bundesrepublik Deutschland seit 1970. *Jahrbuch für kritische Medizin*. 2013. № 37. S. 7–23. URL: [https://www.med.uni-magdeburg.de/jkmg/wp-content/uploads/2013/03/JKM\\_Band37\\_Kapitel03\\_Schagen.pdf](https://www.med.uni-magdeburg.de/jkmg/wp-content/uploads/2013/03/JKM_Band37_Kapitel03_Schagen.pdf).

14. Seifert R. Die Entwicklung der MTA-Ausbildung unter besonderer Berücksichtigung von Jena. 2019. URL: <https://dvta.de/historie-der-mta-ausbildung>.



## References

1. Andreichyn, S.M., & Kachor, V.O. (2006). *Medychna osvita u Slovatskii respublitsi* [Medical education in the Slovak Republic]. Ternopil: TDMU "Ukrmedknyha", 247 s.
2. Kuchumova, N.V. (2012). *Rozvytok systemy vyshchoi medychnoi osvity u nimetskomovnykh krainakh (druha polovyna XX – pochatok XXI stolittia)* [Development of the system of higher medical education in German-speaking countries (second half of the 20th – beginning of the 21st century)]: avtoref. dys. ... kand. ped. nauk: 13.00.01 Drohob. derzh. ped. un-t im. Ivana Franka. Drohobych, 20 p.
3. Kushyk, M.L. (2009). *Dydaktychni osnovy fakhovoi pidhotovky studentiv u medychnykh navchalnykh zakladakh Ukrainy (druha polovyna XX – pochatok XXI stolittia)* [Didactic foundations of professional training of students in medical educational institutions of Ukraine (second half of the 19th – beginning of the 20th century)]: avtoref. dys... kand. ped. nauk: 13.00.04. Cherkaskyi natsionalnyi un-t im. Bohdana Khmelnytskoho. Cherkasy, 20 p.
4. Savaryn, T.V. (2017). *Orhanizatsiia medychnoi osvity na zakhidnoukrainskykh zemliakh u druhii polovyni XVIII – XIX st* [Organization of medical education in Western Ukrainian lands in the second half of the 18th – 19th centuries]. *Medychna osvita – Medical education*. 4. P. 119–126. DOI: <https://doi.org/10.11603/me.2414-5998.2017.4.8287>.
5. Fedchyshyn, N.O., & Bychok, A.V. (2017). *Kontsept zabezpechennia yakosti vyshchoi medychnoi osvity: dosvid Ukrainy y tradytsii Nimechchyny* [The concept of quality assurance in higher medical education: the experience of Ukraine and the traditions of Germany]. V kn.: *Yakist vyshchoi medychnoi osvity (do 60-ty richchia TDMU): monohrafiia* / [Vykhruhch A.V., Klishch I.M., Fedchyshyn N.O. ta in.]; za red. A.H. Shulhaia, N.O. Fedchyshyn. Ternopil: TDMU, P. 158–177.
6. Aurich, H. (1990). Stand und Probleme des Medizinstudiums in DDR. *Medizinische Ausbildung*. 7(2). P. 134–139.
7. Fedchyshyn, N., Klishch, H., & Yelagina, N. (2017). Quality improvement through quality audit in Austrian higher education. *Medychna osvita – Medical education*. 2 (74). P. 153–157. DOI: <https://doi.org/10.11603/me.2414-5998.2017.2.7921>.
8. Fedchyshyn, N.O., Shulhai, A.H., Shevchuk, O.O., Ilkiv, O.P., & Shuminska, O.B. (2024). Mentoring in Medical Science: the Experience of German-speaking Countries. *Medychna osvita – Medical education*. 1 (103). P. 5–9 DOI: <https://doi.org/10.11603/m.2414-5998.2024.1.14575>.
9. Gebert, G. (1994). Die Reform der Ausbildung zum Arzt. *Medizinische Ausbildung*. 11 (2). P. 138–148.
10. Gysin, S., Neuner-Jehle, S., & Kuni, H. (1971). Die Phasen der medizinischen Ausbildung. *Zeitschrift für Pädagogik*. Weinheim; Berlin; Basel: Beltz, 10, P. 105–108.
11. Gysin, S., & Neuner-Jehle, S. (2023). Überlegungen zur Zukunft der medizinischen Ausbildung. Retrieved from <https://doi.org/10.1024/1661-8157/a004024>.
12. Schäfer, H. (1998). Studienreform in der deutschen Medizin 1953–1959. *Medizinische Ausbildung*. 15. P. 47–50.
13. Schagen, U. (2013). Reformen auf dem Papier – Studium der Humanmedizin in der Bundesrepublik Deutschland seit 1970. *Jahrbuch für kritische Medizin* 37, 7–23. Retrieved from [https://www.med.uni-magdeburg.de/jkmg/wp-content/uploads/2013/03/JKM\\_Band37\\_Kapitel03\\_Schagen.pdf](https://www.med.uni-magdeburg.de/jkmg/wp-content/uploads/2013/03/JKM_Band37_Kapitel03_Schagen.pdf).
14. Seifert R. (2019). Die Entwicklung der MTA-Ausbildung unter besonderer Berücksichtigung von Jena. Retrieved from <https://dvta.de/historie-der-mta-ausbildung>.

Отримано 25.03.2025

Електронна адреса для листування: [fedushunno@tdmu.edu.ua](mailto:fedushunno@tdmu.edu.ua)