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FEATURES OF THE PROFESSIONAL-PEDAGOGICAL COMPETENCE OF A MEDICAL UNIVERSITY LECTURER

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Abstract. The article analyses the features of professional and pedagogical competence of medical higher education institution lecturers in modern conditions of dynamic changes in education and increasing requirements for the quality of training future medical specialists. Key components of this competence are identified, including professional knowledge, pedagogical mastery, communication skills, emotional intelligence, and adaptability. Special attention is paid to specific aspects of medical education, such as the integration of clinical knowledge with teaching through case methods and simulation training, ethical and empathetic teaching, the use of modern technologies, the role of mentorship in forming clinical thinking, and cultural competence in the context of globalisation. Based on the analysis of literature and practices, global trends are summarised, modern challenges are outlined, and practical strategies are proposed for developing a competent lecturer capable of effectively meeting the needs of modern medicine. The conclusions emphasise the need for continuous improvement of professional and pedagogical competence to meet the requirements of modern medical education and stress the necessity of investment in the professional development of lecturers.

Key words: professional-pedagogical competence, medical education, medical university lecturer, technologies in education, empathy, mentorship.

Introduction. In today's rapidly changing world, influenced by scientific and technological progress and transformations in healthcare, the requirements for the quality of training future medical specialists are increasing (Beasley, 2024). In this context, a crucial role is played by the lecturer of a medical higher education institution, whose professional and pedagogical competence determines students' ability to effectively solve clinical tasks, implement innovative medical technologies, and adhere to the profession's ethical standards.

Training a highly qualified doctor today is a complex multi-level process that requires not only thorough professional knowledge and practical experience but also mastery of modern pedagogical methods. The conditions of constant renewal of educational paradigms, interdisciplinarity, and digitalisation require the lecturer to combine professional expertise with the effective organisation of the educational process.

Given this, the study of the professional-pedagogical competence (PPC) of medical university lecturers emerges as a relevant multi-faceted phenomenon that encompasses not only teaching students but also forming their clinical thinking, developing Soft Skills, professional self-determination, and readiness for interpersonal interaction.

The relevance of the topic is also driven by observations from educational practice: even with thorough theoretical preparation, students often experience difficulties with the practical application of knowledge, manifested in uncertainty when communicating with patients, weak clinical decision-making skills, and problems adapting to real conditions of medical practice (Lodhiya & Brahmabhatt, 2019; Challa et al., 2021; Hashemiparast et. al 2019; Durning et al., 2024). This emphasises the need for lecturers to develop not only academic but also pedagogical flexibility and the

ability to model learning situations that form critical thinking and practical competence in students.

Thus, the study of the PPC of medical university lecturers is not only scientifically justified but also practically significant. Its results can contribute to the modernisation of higher medical education, improve the quality of specialist training, and, ultimately, ensure the effective functioning of the healthcare system.

The goal of the research. The purpose of this article is to theoretically substantiate and identify unique features of the PPC of medical university lecturers, analyse current trends in its development, and develop practical recommendations for its formation.

Research methods. The study employed a complex of complementary scientific methods: theoretical analysis of scientific literature, systematisation and classification, comparative analysis, synthesis, and generalisation. The proposed set of methods allowed for a comprehensive analysis of existing scientific approaches to the problem of the PPC of medical university lecturers, identification of main trends, and formulation of promising directions for further research in this field.

Research materials – scientific publications, including monographs, articles in professional domestic and international journals, as well as dissertation research that reveals theoretical and practical aspects of pedagogical mastery of higher education lecturers, particularly in the medical field; materials devoted to models of professional competence of pedagogical workers, didactic approaches in higher medical education, methods for activating educational and cognitive activities of medical students, and the formation of their professional qualities.

Literature review. The development of the professional-pedagogical competence (PPC) of higher education lecturers, particularly in medical universities, has attracted increasing attention from researchers in recent years. The main research directions include modernisation of the educational process, implementation of innovative teaching technologies, development of soft skills in students, and improvement of pedagogical effectiveness. For instance, M. Kaminska emphasises the need for specialised pedagogical training for lecturers of medical faculties, particularly dental. She stresses the importance of integrating clinical expertise with educational technologies, with the case method taking a leading place as a means of developing critical thinking in students (Kaminska, 2025). M. Antoniuk expands this vision by substantiating the effectiveness of simulation technologies and virtual laboratories for developing practical skills in students. In his opinion, interactive methods significantly increase student engagement and contribute to deeper mastery of the material (Antoniuk, 2022). L. Sydorenko and O. Boiko interpret professional-pedagogical competence as an integration of theoretical knowledge and practical implementation, emphasising that an effective lecturer should not only master the subject but also create a productive learning environment (Sydorenko, 2020; Boiko, 2021). Special attention should be given to the works of K. Mahrlamova and A. Hohol with colleagues, who examine the importance of soft skills, intercultural communication, and emotional sensitivity in teaching practice. In particular, Mahrlamova notes empathy, ethical decision-making, and communication as key elements of pedagogical competence necessary for forming a patient-oriented approach (Mahrlamova, 2018). A. Hohol and co-authors emphasise the importance of preparing students to work in a globalised medical environment, which requires high intercultural competence from the instructor (Hohol, 2020). The Bulynins emphasise the significance of pedagogical mastery as a combination of creativity, professional knowledge, and motivational strategies that influence students' learning motivation (Bulynina, & Bulynin, 2023). M. Diachenko and S. Usenko view the lecturer as a manager of the educational process who must master digital platforms and be able to adapt learning to individual student needs (Diachenko, & Usenko, 2023). O. Kirdan considers the didactic competence of a lecturer as the ability to create an effective learning environment using interactive forms of material presentation and quality assessment of results (Kirdan, 2023).

Foreign research also demonstrates a deep interest in the topic of the PPC. The dominant themes include the standardisation of teaching competencies, evaluation of teaching effectiveness, and the

impact of pedagogical approaches on learning outcomes (Richardson et al., 2021; Brauer et al., 2023; Sorensen et al., 2019; Kuivila et al., 2020; Ghasemi et al., 2023; Herrmann-Werner et al., 2021). Considerable attention is paid to the development of lecturers' intercultural competence in the context of the globalisation of medical education.

Despite numerous developments, there remains a pressing need for a systematic generalisation of approaches and identification of the specific features of the professional-pedagogical competence inherent to lecturers of Ukrainian medical universities in conditions of modern transformations. This necessitates in-depth research on innovative methods for developing the PPC of lecturers and implementing effective international practices in the system of professional development for lecturers of medical universities in Ukraine, taking into account national educational traditions and contemporary challenges.

Results and discussion.

Theoretical foundations of professional-pedagogical competence. The professional-pedagogical competence of a medical university lecturer is a multifaceted concept that integrates knowledge, skills, and personal characteristics necessary for effective educational activities (Larina, 2024; Popelyshkina, 2022; Kryzhanovska, 2024). It involves combining professional expertise, pedagogical skills, and the ability to develop practical skills, clinical thinking, and ethical principles in students. The professional-pedagogical competence (PPC) of an instructor is based on a competency-oriented approach that emphasises the development of applied skills, not just knowledge transfer (Koliesnik, 2024; Aslamov, 2021; Kaplinskyi et al., 2022; Pashchenko, 2023). The principle of reflective practice (Schön, 1983) is also key, which involves constant self-analysis and improvement of teaching activities to adapt to the needs of students and clinical situations.

The structure of the professional-pedagogical competence of a medical university instructor consists of several key components that interact with each other and ensure the integrity of educational influence:

- professional competence (deep medical knowledge and clinical experience that is constantly updated);
- pedagogical mastery (command of teaching methods, adaptation of complex clinical material to educational needs);
- communicative competence (effective interaction with students, colleagues, and modelling of professional communication);
- emotional intelligence (recognition of students' emotional states, creation of a comfortable learning environment);
- adaptability and self-development (professional reflection, knowledge updating, and mastery of new pedagogical practices).

These components do not exist in isolation but form a complex interconnected system where strengthening one component positively affects the development of others. Such an integrated structure allows for the combination of professional medical knowledge, pedagogical mastery, communication skills, emotional intelligence, and professional reflection into a single complex necessary for effective training of future medical specialists.

Medical education has a number of specific features that place a special imprint on the professional-pedagogical competence of a medical university instructor. Key aspects include:

- integration of clinical experience into teaching (the lecturer demonstrates practical application of knowledge, developing students' clinical thinking);
- ethical and empathetic component (formation of moral guidelines, empathy, and readiness to work in emotionally intense conditions);
- patient orientation (teaching principles of evidence-based medicine, considering individual patient needs, developing communication skills).

The key principles in developing professional pedagogical competence are continuous learning, mastering digital tools (virtual reality, AI platforms, electronic medical simulations), and participation in professional training. Thus, PPC is a dynamic phenomenon that combines traditional pedagogical skills with the requirements of modern medical education.

Unique features of competence in medical education. The PPC of a medical university lecturer has specific characteristics determined by the requirements of medical education. It combines clinical expertise, ethical interaction, technological literacy, and an intercultural approach, developing specialists for a complex medical environment. Let's identify the key features of this competence, specifically determined by the context of the medical field:

1. *Interdisciplinary expertise.* The lecturer integrates clinical knowledge with pedagogical methods, using case methods, problem-oriented learning, and simulation training. For example, simulating emergency care on mannequins develops clinical thinking and reduces student anxiety.

2. *Ethical and empathetic teaching.* The lecturer models ethical behaviour, developing empathy and responsibility in students. Role-playing and analysis of ethical dilemmas contribute to the formation of bioethical principles.

3. *Adaptation to innovative technologies.* The use of VR, AI, and online platforms requires technical literacy and pedagogical creativity. VR simulations allow for safe mastery of surgical skills, while AI adapts tasks to the level of preparation.

4. *Role of mentor.* The lecturer accompanies students in their professional development, providing feedback and support. Individual consultations and clinical conferences form independence and psychological resilience.

5. *Cultural competence.* Preparation for working with diverse patient groups requires intercultural sensitivity. Including intercultural cases and studying medical terminology in a foreign language contribute to global mobility.

These features distinguish the PPC of a medical university lecturer, ensuring the preparation of specialists ready to work in a multicultural and technologically advanced environment.

Challenges in the development of the PPC. Despite growing attention to the formation of the PPC of medical university lecturers, in practice, its development process faces a number of systemic barriers. These challenges not only complicate the effective organisation of the educational process but also hinder adaptation to new educational standards and technologies. Their analysis allows for a deeper understanding of the reasons for the gap between students' theoretical preparation and their practical readiness for professional activity. Figure 1 presents the main groups of challenges affecting the development of the PPC of medical university instructors. They encompass both individual (psycho-emotional and qualification) and institutional (organisational, financial, technological) factors.

These challenges form a complex system of interconnected problems that require a comprehensive solution. Psycho-emotional challenges include professional burnout, stress from dual workload (clinical and pedagogical), and emotional exhaustion from working with complex medical cases. These factors directly affect the motivation and energy necessary for implementing innovative approaches to teaching.

Qualification challenges manifest in the insufficient pedagogical preparation of most medical specialists who come to teaching from clinical practice and limited mastery of modern educational methodologies and assessment tools. Often, experienced clinicians with deep professional knowledge experience difficulties structuring and transmitting their knowledge to students due to a lack of pedagogical competencies.

Organisational challenges are particularly acute in the deficit of time for planning and developing innovative educational materials, the need to combine teaching, clinical, and research activities, and frequent changes in curricula and regulatory requirements. Physician-lecturers are forced to balance academic duties and work with patients, which limits opportunities for pedagogical self-development.

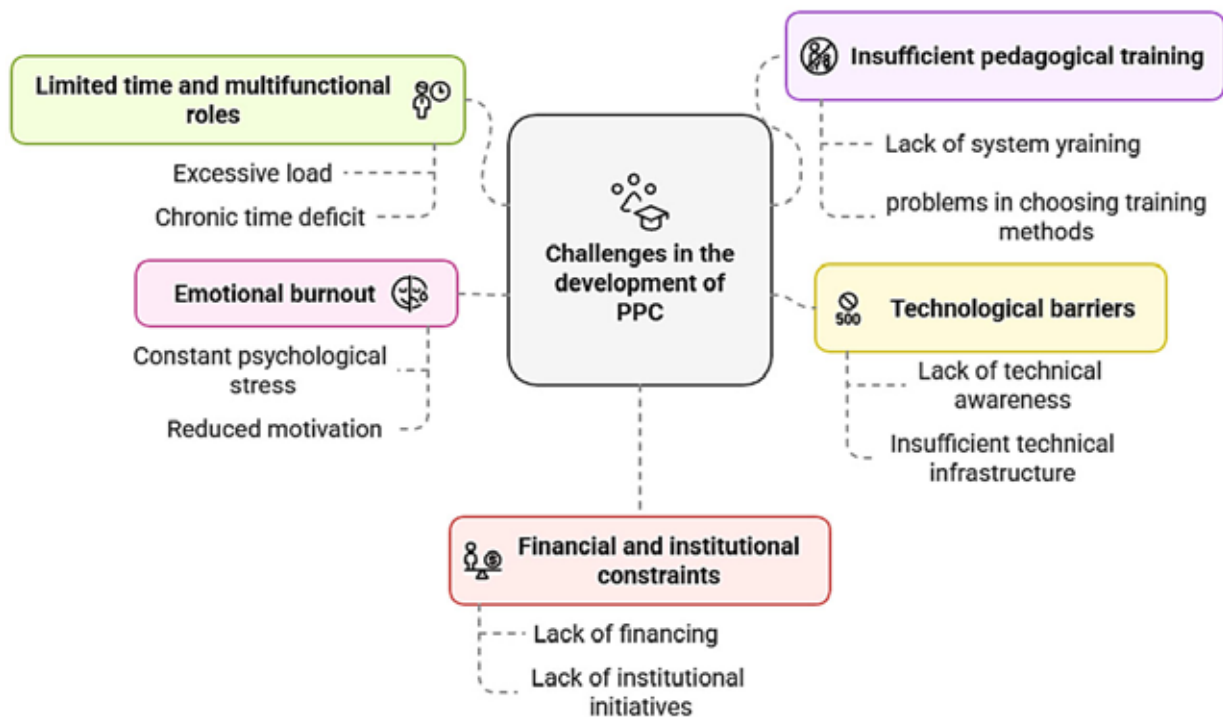


Fig. 1. Challenges in the Development of Professional-Pedagogical Competence

Financial challenges are related to insufficient material incentives for pedagogical mastery, limited resources for professional development and participation in professional conferences, and underfunding of educational innovations. This is especially noticeable in conditions of economic constraints when funding for healthcare and education is often reduced.

Technological challenges include the rapid ageing of medical and educational equipment, the digital divide between different generations of lecturers, and difficulties with implementing new simulation and digital technologies in the traditional learning process. An additional factor has been the need for rapid adaptation to distance and blended learning in modern realities.

These mutually reinforcing factors create a vicious circle that requires a comprehensive solution. To overcome the challenges, the following is proposed:

- organizational measures (creation of centres for pedagogical mastery, development of flexible schedules for instructors, mentoring programs for young educators);
- technological solutions (implementation of simulation centres, online courses for students, access to learning management systems (LMS));
- individual strategies (reflective journals, methodological seminars, microlearning through short videos of clinical skills);
- institutional support (grants for educational innovations, recognition of pedagogical achievements in career advancement, creation of professional communities).

A comprehensive approach that combines individual efforts and institutional support will help overcome barriers and improve the quality of medical education.

Modern trends and their impact on competence. Contemporary transformations in education require medical university teachers to update their PPC to align with global changes. Table 1 systematises key trends, their essence, and the requirements for lecturers.

These trends transform the lecturer's role from a knowledge transmitter to a facilitator who supports students' individual development in a multicultural and technologically developed environment.

Table 1

**Modern Trends and Their Impact on the Content and Structure
of Professional-Pedagogical Competence**

Trend	Essence of the phenomenon	Requirements for the lecturer
Digitalization of education	Implementation of online learning, digital platforms, and simulations	Digital literacy, ability to create online courses, and work with virtual environments
Personalized learning	Focus on the individual needs of students	Diagnosing learning needs, adapting materials, using AI for personalization
Globalization of medical education	Preparing students for work in an international environment	Intercultural competence, proficiency in English, knowledge of international approaches
Integration of Artificial Intelligence	Use of AI in simulations and adaptive learning	Ability to use AI tools and automated services in education
Focus on Soft Skills	Development of communication, emotional intelligence, and teamwork	Teaching Soft Skills through case studies and role-playing, facilitating group activities

Development of practical recommendations for building the professional-pedagogical competence (PPC) of medical university lecturers. In the context of modern transformations in higher medical education, special importance is given not only to the theoretical understanding of the PPC of teachers but also to the development of practical tools for its targeted formation. Based on the results of the study, analysis of current challenges and trends, as well as the synthesis of best practices from national and international experience, a system of practical recommendations has been proposed. This system covers key areas for the development of pedagogical mastery of medical university lecturers. The recommendations are grouped by areas of action and presented in a table for ease of application in practical activities (Table 2).

These recommendations will contribute to improving the quality of education, strengthening lecturers' professional identities, and preparing specialists for modern challenges.

Conclusions and prospects for further research. The professional-pedagogical competence (PPC) of a medical university lecturer is a multifaceted phenomenon that combines professional knowledge, pedagogical skills, communication, emotional intelligence, and technological literacy.

Table 2

**Practical Recommendations for Building the Professional-Pedagogical Competence
of Medical University Lecturers**

Area of action	Recommended content	Forms of implementation/examples
Institutional support	Providing conditions for the pedagogical growth of lecturers	Centres for pedagogical excellence, professional development programs with a medical focus
Continuous professional development (CPD)	Lifelong learning throughout the career	Online courses, international exchanges, individual educational plans
Mentoring and coaching	Support for young lecturers	Mentoring programs within departments, interdepartmental methodological groups
Development of Soft Skills	Forming communication and emotional intelligence	Facilitation training, simulations of interpersonal situations
Digitalization and technical support	Integration of modern educational technologies	Training teachers to use LMS, VR/AR, development of digital clinical cases
Reflection and self-development	Self-assessment and improvement of personal practice	Keeping reflective journals, group discussions of situations

Its uniqueness stems from the integration of clinical experience, ethical sensitivity, simulation-based learning, mentoring, and cultural competence. The development of PPC is hindered by barriers such as time constraints, insufficient pedagogical training, technological difficulties, emotional burnout, and limited institutional support. To overcome these, comprehensive strategies are needed: professional development programs, mentoring, digitalisation of education, reflective practice, and inter-departmental collaboration. In the context of transformations in medical education, institutions must create a supportive environment for pedagogical growth through access to resources, innovations, and professional communities. Particularly important are the development of soft skills, personalised learning, and the implementation of digital tools (VR, AI).

Prospects for further research should focus on studying the impact of digital technologies on the quality of medical education and the emotional well-being of lecturers and students in hybrid and distance learning environments. Separate attention should also be given to issues of developing pedagogical resilience, fostering a culture of institutional support, and evaluating the effectiveness of pedagogical innovations in the medical field.

References:

1. Aslamov, O.O. (2021). Profesiino-pedahohichna kompetentnist pedahohiv [Professional and pedagogical competence of teacher]. Proceedings from: VII Mizhnarodna naukovo-praktychna internet-konferentsiia "Kryterii ta yakosti profesionalizmu sered pedahohiv. Psykholoho-pedahohichni aspekty navchannia doroslykh v systemi neperervnoi osvity" – *The VII International Scientific and Practical Internet Conference "Criteria and qualities of professionalism among teachers. Psychological and Pedagogical Aspects of Adult Learning in the System of Continuing Education"*. (pp. 119–122). Bila Tserkva: BINPO DVNZ UMO [in Ukrainian].
2. Bulynina, O.D., & Bulynin, V.O. (2023). Znachennia pedahohichnoi maisternosti vykladachiv medychnykh navchalnykh zakladiv [The importance of pedagogical skills of teachers of medical educational institutions]. *Scientific research in the modern world: Proceedings of the 7th International scientific and practical conference*, (pp. 277–283). Toronto [in Ukrainian]. URL: <https://sciconf.com.ua/vii-mizhnarodna-naukovo-praktychna-konferentsiya-scientific-researchin-the-modern-world-4-6-05-2023-toronto-kanada-arhiv/>
3. Hohol, A.M., Pankevych, A.I., & Kolisnyk, I.A. (2020). Mizhnarodna profesiina kompetentnist likaria: problemy i perspektyvy pry vykladanni khirurhichnoi stomatolohii [International professional competence of a doctor: problems and prospects in teaching surgical dentistry]. *Suchasna medychna osvita: metodolohiia, teoriia, praktyka – Modern medical education: methodology, theory, practice: Proceedings of the All-Ukrainian educational and scientific conference with international participation*, (pp. 49–51). Poltava [in Ukrainian].
4. Diachenko, M.S., & Usenko, S.H. (2023). Rol vykladacha zakladu vyshchoi medychnoi osvity yak menedzhera navchalnoho protsesu [The role of a teacher of a higher medical education institution as a manager of the educational process]. *Aktualni pytannia pedahohiky vyshchoi medychnoi osvity – Topical issues of pedagogy of higher medical education: Proceedings of the All-Ukrainian scientific and practical conference with international participation*, (pp. 61–62). Kharkiv [in Ukrainian]. URI <https://repo.knmu.edu.ua/handle/123456789/32850>
5. Kaminska, M.V. (2025). Formuvannia profesiino-pedahohichnykh kompetentnostei vykladachiv stomatolohichnoho fakultetu vyshchykh medychnykh navchalnykh zakladiv [Formation of professional and pedagogical competences of teachers of the dental faculty of higher medical educational institutions]. *Formuvannia profesiinoi kompetentnosti vykladachiv zakladiv vyshchoi osvity v konteksti suchasnykh suspilnykh vyklykiv – Formation of professional competence of teachers of higher education institutions in the context of modern social challenges: Proceedings of the All-Ukrainian scientific and pedagogical advanced training*, (pp. 88–90). Lviv URL: https://www.researchgate.net/profile/Olena-Sinkarova/publication/389642308_Profesijne_samovdoskonalenna_fahivciv_zakladiv_visoi_osviti/links/

- 67caed8832265243f5835af7/Profesijne-samovdoskonalenna-fahivciv-zakladiv-visoi-osviti.pdf#page=88
6. Kaplinskyi, V.V., Pinaieva, O.Yu., & Pachevska, A.V. (2022). Vzaiemozviazok mizh poniattiamy «profesionalizm», «profesiino-pedahohichna kompetentnist» ta «pedahohichna maisternist» vykladacha vyshchoi shkoly [Interrelation between the concepts of ‘professionalism’, ‘professional and pedagogical competence’ and ‘pedagogical skill’ of a higher education teacher]. *Science, innovations and education: problems and prospects* : Proceedings from the 14th International scientific and practical conference , (pp. 213–218). Tokyo, Japan [in Ukrainian]. URL: <https://sci-conf.com.ua/xiv-mizhnarodna-naukovo-praktichnakonferentsiya-science-innovations-and-education-problems-and-prospects-25-27-08-2022-tokio-yaponiya-arhiv/>
 7. Kirdan, O. (2023). Dydaktychna kompetentnist maibutnikh vykladachiv zakladiv vyshchoi osvity: sutnist, formuvannia, rozvytok [Didactic competence of future teachers of higher education institutions: essence, formation, development]. *Problemy pidhotovky suchasnoho vchytelia – Problems of modern teacher training*, 2(28), 84–91 [in Ukrainian].
 8. Koliesnik, T.V. (2024). Profesiino-pedahohichna kompetentnist vykladacha: suchasni vyklyky [Professional and pedagogical competence of the teacher: modern challenges]. Profesiinyi rozvytok, udoskonalennia zahalnykh i profesiinykh kompetentnostei vykladachiv vyshchoi shkol – Professional development, improvement of general and professional competences of higher school teachers: Proceedings of the All-Ukrainian scientific and pedagogical advanced training, (pp. 64–65). Lviv – Torun: Liha-Pres [in Ukrainian].
 9. Kryzhanovska, A.V., Bolshakova, T.V., & Sokolov, O. (2024). Psykholohichna kharakterystyka akmeolohichnoho komponentu pedahoiichnoi diialnosti vykladacha ZVO [Psychological characteristics of the acmeological component of the pedagogical activity of a university teacher]. *Visnyk KhNPU imeni H.S. Skovorody. Psykholohiia – Bulletin of H.S. Skovoroda Kharkiv National Pedagogical University. Psychology*, 70, 49–65 [in Ukrainian].
 10. Larina, T.V. (2024). Profesiino-pedahohichna mobilnist vykladacha v konteksti kreatyvnosti [Professional and pedagogical mobility of a teacher in the context of creativity]. *Naukovi zapysky. Serii: Pedahohichni nauky – Scientific notes. Series: Pedagogical sciences*, 216, 351–357 [in Ukrainian]. DOI: <https://doi.org/10.36550/2415-7988-2024-1-216-351-357>
 11. Mahrlamova, K. (2018). Kliuchovi profesiino-pedahohichni kompetentnosti vykladachiv vyshchych medychnykh navchalnykh zakladiv [Key professional and pedagogical competences of teachers of higher medical educational institutions]. *Naukovyi visnyk Melitopolskoho derzhavnogo pedahohichnoho universytetu – Scientific Bulletin of Melitopol State Pedagogical University*, 1, 202–206 [in Ukrainian]. URL: http://nbuv.gov.ua/UJRN/Nvmdpu_2018_1_33
 12. Petrushanko, T.O., Ilenko, N.M., Ilenko-Lobach, N.V. [ta in.]. (2022). Formuvannia profesiinoi kompetentnosti maibutnikh likariv-stomatolohiv [Formation of professional competence of future dentists]. *Aktualni pytannia lnhvistyky, profesiinoi lnhvodydaktyky, psykholohii i pedahohiky vyshchoi shkoly – Topical issues of linguistics, professional linguodidactics, psychology and pedagogy of higher education*: Proceedings of the VII International scientific and practical conference, (pp. 190–193). Poltava [in Ukrainian]. URI: <https://repository.pdmu.edu.ua/handle/123456789/19987>
 13. Popelyshkina, A.V. (2022). Profesiino-pedahohichna kompetentnist pedahoha [Professional and pedagogical competence of a teacher]. Proceedings from: *Suchasni tendentsii pidhotovky maibutnikh uchyteliv trudovoho navchannia ta tekhnolohii, pedahohiv profesiinoi osvity i fakhivtsiv obrazotvorchoho ta dekoratyvnogo mystetstva: teoriia, dosvid, problem – Modern trends in the training of future teachers of labour training and technology, vocational education teachers and specialists in fine and decorative arts: theory, experience, problems* (Vols. 5), (pp. 51–53). Vinnytsia: Mercury-Podillya LLC [in Ukrainian]. URI: <http://dspace.pnpu.edu.ua/handle/123456789/20603>
 14. Silkova, O.V., Makarenko, V.I., & Makarenko, O.V. (2022). Suchasni metody vykladannia y navchannia v medychnii osviti [Modern methods of teaching and learning in medical education]. *Suchasni trendy rozvytku medychnoi osvity: perspektyvy i zdobutky – Modern trends in the development of medical education: prospects and achievement*: Proceedings of the Educational and scientific confer-

- ence with international participation, (pp. 268–270). Poltava [in Ukrainian] URL: <https://repository.pdmu.edu.ua/server/api/core/bitstreams/fd12ac96-6189-486e-aac2-7db55e7474b8/content>
15. Beasley, M. (2024). *2025 Vision: The Future of Medical Education* [in English]. URL: <https://www.linkedin.com/pulse/2025-vision-future-medical-education-malcolm-beasley-tb1re/> (дата звернення 02.05.2025).
 16. Brauer, S, Kettunen, J, Levy, A, Merenmies, J, & Kulmala, P. (2023). The educational paradigm shift-a phenomenographic study of medical teachers' experiences of practices. *BMC Med Educ*, 23(1), 29 [in English]. DOI: 10.1186/s12909-023-04013-w.
 17. Challa, KT, Sayed, A, & Acharya, Y. (2021). Modern techniques of teaching and learning in medical education: a descriptive literature review. *MedEdPublish*, 21, 10–18 [in English]. DOI: 10.15694/mep.2021.000018.1.
 18. Durning, SJ, Jung, E, Kim, DH, & Lee, YM. (2024). Teaching clinical reasoning: principles from the literature to help improve instruction from the classroom to the bedside. *Korean J Med Educ*, 36(2), 145–155 [in English]. DOI: 10.3946/kjme.2024.292.
 19. European Commission: Directorate-General for Education, Youth, Sport and Culture, Key competences for lifelong learning: Publications Office (2019) [in English]. URL: <https://data.europa.eu/doi/10.2766/569540>
 20. Ghasemi, S, Bazrafkan, L, Shojaei, A, Rakhshani, T, & Shokrpour, N. (2023). Faculty development strategies to empower university teachers by their educational role: A qualitative study on the faculty members and students' experiences at Iranian universities of medical sciences. *BMC Med Educ*, 23(1), 260 [in English]. DOI: 10.1186/s12909-023-04209-0.
 21. Hashemiparast, M, Negarandeh, R, & Theofanidis, D. (2019). Exploring the barriers of utilizing theoretical knowledge in clinical settings: A qualitative study. *Int J Nurs Sci*, 6(4), 399–405 [in English]. DOI: 10.1016/j.ijnss.2019.09.008.
 22. Herrmann-Werner, A, Erschens, R, Zipfel, S, Loda, T. (2021). Medical education in times of COVID-19: survey on teachers' perspectives from a German medical faculty. *GMS J Med Educ*, 38(5), 93 [in English]. DOI: 10.3205/zma001489.
 23. Kuivila, HM, Mikkonen, K, Sjögren, T, Koivula, M, Koskimäki, M, Männistö, M, Lukkarila, P, & Kääriäinen, M. (2020). Health science student teachers' perceptions of teacher competence: A qualitative study. *Nurse Educ Today*, 84, 104210 [in English]. DOI: 10.1016/j.nedt.2019.104210.
 24. Lodhiya, KK, & Brahmabhatt, KR. (2019). Effectiveness of Collaborative Versus Traditional Teaching Methods in a Teaching Hospital in Gujarat. *Indian J Community Med*, 44(3), 243–246 [in English]. DOI: 10.4103/ijcm.IJCM_378_18.
 25. Niemtchenko, I., Liakhovskiy, V., Lisenko, R., Krasnov, O.G., & Ryabushko, R. (2023). Profesiina kompetentnist vykladacha vyshchoho medychnoho navchalnoho zakladu – vahomyi pokaznyk yoho profesiino-pedahohichnoi diialnosti [The professional competence of a teacher of a higher medical educational institution is a significant indicator of his/her professional and pedagogical activity]. *Aktualni problemy suchasnoi medytsyny: Visnyk Ukrainiskoi medychnoi stomatolohichnoi akademii – Actual problems of modern medicine: Bulletin of the Ukrainian Medical Stomatological Academ*, 23(4), 277–280 [in Ukrainian]. DOI: <https://doi.org/10.31718/2077-1096.23.4.277>
 26. Richardson, D, Kinnear, B, Hauer, KE, Turner, TL, Warm, EJ, Hall, AK, Ross, S, Thoma, B, & Van Melle, E. (2021). ICBME Collaborators. Growth mindset in competency-based medical education. *Med Teach*, 43(7), 7510757 [in English]. DOI: 10.1080/0142159X.2021.1928036.
 27. Schön, D.A. (1992). *The reflective practitioner: How professionals think in action*. London: Routledge [in English]. DOI: <https://doi.org/10.4324/9781315237473>
 28. Sorensen, J, Norredam, M, Suurmond, J, Carter-Pokras, O, Garcia-Ramirez M, & Krasnik, A. (2019). Need for ensuring cultural competence in medical programmes of European universities. *BMC Med Educ*, 19(1), 21 [in English]. DOI: 10.1186/s12909-018-1449-y.