Khallo O. E. Organizational and pedagogical conditions for implementation of the training future specialists of the medical field in higher education institutions. *Scientific Notes LSULS. Pedagogy and Psychology.* 2024. № 1 (3). P. 10–15.



UDC 61:378.016:61

This article is an Open Access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0) License (http://creativecommons.org/licenses/by/4.0/).

DOI https://doi.org/10.32782/3041-1297/2024-1-2

O. E. Khallo

Ivano Frankivsk National Medical University, Ivano-Frankivsk, Ukraine ORCID: https://orcid.org/0000-0003-3383-8486 – O. E. Khallo luska.if@gmail.com

ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR IMPLEMENTATION OF THE TRAINING FUTURE SPECIALISTS OF THE MEDICAL FIELD IN HIGHER EDUCATION INSTITUTIONS

The article analyzes scientific achievements on the problem of formation of professional competence of future specialists in the medical field. The definitions of the terms "pedagogical condition" and "organizational and pedagogical condition" have been clarified. It was established that researchers understand pedagogical conditions as an important component of the pedagogical process, which combines multi-directional measures of a pedagogical nature to achieve the defined goal. It is outlined that the introduction of innovative technologies into the process of pedagogical training of future doctors contributes to the design of the individual personal development of each student, the stimulation of educational activities by solving practical situations, ensuring the relationship of educational goals with the immediate professional and pedagogical tasks of the future doctor. It was found that the partnership interaction of a teacher and a student is the interaction of a teacher and a student who take part in the educational process on equal rights and is based on the principles of cooperation and compromise, mutual respect and complementarity, aimed at achieving common goals and forming a system of values, developing common and special competences, including professional competence. It has been established that the organizational and pedagogical conditions of professional training of future medical specialists represent a complex of interrelated and mutually determined internal and external factors that ensure the effectiveness and efficiency of the training process of future medical workers in the conditions of a higher education institution. It has been determined and substantiated that in the formation of the professional competence of future specialists in the medical field, organizational and pedagogical conditions are of great importance (partner interaction of a teacher and a student; the use of modern interactive teaching methods in the educational process; the creation of a practical activity environment for the qualitative formation of the professional competence of a medical worker).

Key words: organizational and pedagogical conditions, pedagogical conditions, professional training, specialists in the medical field, higher education institution.

О. €. Халло

Івано-Франківський національний медичний університет, Івано-Франківськ, Україна

ОРГАНІЗАЦІЙНО-ПЕДАГОГІЧНІ УМОВИ РЕАЛІЗАЦІ ПІДГОТОВКИ МАЙБУТНІХ ФАХІВЦІВ МЕДИЧНОЇ ГАЛУЗІ В ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

У статті здійснено аналіз наукових здобутків із проблеми формування професійної компетентності майбутніх фахівців медичної галузі. Уточнено дефініції понять «педагогічна умова» й «організаційно-педагогічна умова».

Установлено, що дослідники розуміють під педагогічними умовами важливий складник педагогічного процесу, що поєднує різноспрямовані заходи педагогічного характеру, для досягнення окресленої мети. Окреслено що впровадження у процес педагогічної підготовки майбутніх лікарів інноваційних технологій сприяє проєктуванню індивідуального особистісного розвитку кожного студента, стимулюванню навчальної діяльності за допомогою розв'язання практичних ситуацій, забезпеченню взаємозв'язку освітніх цілей із безпосередніми професійно-педагогічними завданнями майбутнього лікаря. З'ясовано, що партнерська взаємодія викладача та студента – це взаємодія викладача і студента, які рівноправно беруть участь у навчальному процесі, базується на принципах співпраці та компромісу,

взаємоповаги та взаємодоповнення, спрямована на досягнення загальних цілей і формування системи цінностей, розвитку загальних і спеціальних компетентностей, зокрема й професійної компетентності. Установлено, що організаційно-педагогічні умови професійної підготовки майбутніх фахівців медичної галузі являють собою комплекс взаємопов'язаних і взаємозумовлених внутрішніх і зовнішніх чинників, які забезпечують ефективність і результативність процесу навчання майбутніх медичних працівників в умовах закладу вищої освіти. Визначено й обгрунтовано, що у формуванні професійної компетентності майбутніх фахівців медичної галузі великого значення набувають організаційно-педагогічні умови (партнерська взаємодія викладача та студента; використання в навчальному процесі сучасних інтерактивних методів навчання; створення практично-діяльнісного середовища для якісного формування професійної компетентності медичного працівника).

Ключові слова: організаційно-педагогічні умови, педагогічні умови, професійна підготовка, фахівці медичної галузі, заклад вищої освіти.

Introduction. The renewal and modernization of higher medical education in Ukraine is determined by society's needs for competent specialists, taking into account progressive ideas and inventions in the medical field on a global scale and optimizing the conditions of professional education of future medical specialists. The diversity of the professional activities of medical workers, which requires students to master professional knowledge and skills at a high level, also requires the readiness of graduates of higher medical education to create optimally effective conditions for professional interaction with the environment. The issue of high-quality training of highly qualified medical specialists is a priority, since the quality of providing medical care to the population depends on it. An indispensable component of the process of training future specialists in the field of medicine is organizational and pedagogical conditions as a set of measures and means, necessary circumstances, rules that ensure the effectiveness of the formation of professional competence of future doctors.

The aim of the article is a justification for the implementation of organizational and pedagogical conditions for the professional training of future specialists in the medical field in higher education institutions.

Analysis and discussion. The problem of professional training of future specialists in the medical field is not new. It should be noted that separate scientific approaches to the consideration of the essence and content of professional and pedagogical activity are highlighted in the works of O. Akimov, M. Kozyar, N. Nychkalo, S. Sysoev, and others. A number of scientists L. Kaskov, S. Novikova, O. Khmil, N. Yanko, N. Morgun define modern approaches to the educational process of training highly professional specialists in the medical field and emphasize the importance of professionally oriented communicative training of future doctors (N. Kalashnik, N. Logutina). Considerable attention is paid to the training of future medical workers, in particular: problems of content, methods, forms of education and education of future specialists (Y. Voronenko, I. Palamarenko, L. Sydorchuk, M. Timofieva, N. Khadzhinova, Y. Tsekhmistr,

V. Shakhov and etc.).

Scientists [7] believe that a modern doctor should have the appropriate professional training, knowledge and ability to adequately assess the patient's condition, as well as possess certain moral and ethical qualities, communication skills, be tactful, polite, tolerant, benevolent.

However, despite a wide range of research in the field of training future specialists in the medical field in a higher education institution, the problem of organizational and pedagogical conditions for the formation of professional competence of medical workers remains insufficiently resolved.

Let's consider the interpretation of the concept of "pedagogical condition" and "organizational and pedagogical condition" by scientists. Thus, S. Honcharenko notes that "pedagogical conditions are a complex of objective possibilities of content, forms, methods, techniques and material and spatial environment aimed at solving the pedagogical tasks" [4].

According to O. Brazhnich, pedagogical conditions are defined as "<...> a complex of objective possibilities of content, methods, organizational forms, and material possibilities for the implementation of the pedagogical process, which ensures the successful achievement of the set goal" [1].

Guided by the results of O. Chepka's research, the organizational and pedagogical conditions of professional training of future specialists can be defined as: macro conditions (society's order for the training of specialists); mezzo conditions (professional orientation); micro-conditions (individualization of education, creative development of personality) [2].

Therefore, scientists distinguish organizational and pedagogical conditions in accordance with their influence on the formation of professional competences, the organization of the educational process in higher education institutions and the specific situation.

Within the framework of the pilot experiment, in order to identify the organizational and pedagogical conditions that contribute to the qualitative formation of the professional competence of the future medical worker, a student questionnaire was conducted. 104 first-year students of the Ivano-Frankivsk National Medical University, studying in the specialty 222 "Medicine" and 228 "Pediatrics", participated in the study. Respondents were asked to express their attitude regarding the use of interactive learning methods in the educational process, the need for partnership with the teacher, and the importance of forming practical skills and abilities in the learning process.

The results of our research showed that 78.5% support the use of modern interactive learning methods in the educational process, as it allows future professionals to develop teamwork experience and also improves the positive atmosphere in the team. Among the respondents, 51,25% believe that they have no problems in the partnership between a teacher and a student, while the other half have certain difficulties that may be related to the formation of experience that will be necessary in further professional interaction with colleagues. More than half of the students (70,25%) are of the opinion about the creation of a practical activity environment that allows the learning process to be as close as possible to real practical situations, and will also contribute to the acquisition of competencies that are necessary for the performance of professional activities.

Considering this and based on the results of the analysis of the scientific literature on the research problem, we singled out the following basic organizational and pedagogical conditions that contribute to the qualitative formation of the professional competence for the future medical worker: partnership interaction between the teacher and the student; the use of modern interactive teaching methods in the educational process; creation of a practical activity environment for the qualitative formation of the professional competence of a medical worker. Let's briefly analyze each of the conditions we have singled out.

In our opinion, the partnership between a teacher and a student is an important pedagogical condition for the formation of the professional competence of a future medical worker. Subjects of "teacher – student" interaction have their own characteristics (psychological, functional, and emotional), the worldview of each participant is formed in certain environmental conditions, taking into account life and professional experience, social status, etc.

The activity of the teacher is multifaceted. According to scientists (H. Taktashov, N. Grona, O. Homozov, O. Suprun, I. Kozynska) it combines educational, professional, scientific and social components; acts as a consultant; provides

psychological and emotional support and encourages scientific or educational activities; provides conditions for successful communication, etc. [9].

H. Kopyl, believes that a student should also be a subject of the educational process, take an active part in all types of university activities, be involved in research work, choose the means and methods of performing tasks, independently make decisions in the solution certain problems, carry out communication and interpersonal interaction in a team, express own ideas and opinions [5].

V. Yurchenko (2020) notes that the professional training of teachers should be implemented in the conditions of personal-oriented learning, which involves mutual respect and mutual responsibility, cooperation, mutual exchange of some functions and duties

In the "teacher - student" system, educational activity is a process of acquiring professional knowledge and practical skills. The teacher must create situations that will be relevant for the professional and life experience of students, model real problems, promote the mastery of new ways of thinking that would ensure the formation of professional competencies. Instead, the student must analyze and solve certain professional tasks, while forming certain professional experience. The interaction between a teacher and a student requires partnership relations, the creation of conditions for the manifestation, cognitive activity. Such cooperation will contribute to the formation of experience, which will be necessary in further professional interaction with colleagues.

We believe that the partnership between a teacher and a student is an interaction between a teacher and a student who take part in the educational process on equal terms and is based on the principles of cooperation and compromise, mutual respect and complementarity, aimed at achieving common goals and forming a system of values, developing general and special competences, professional competence. This condition involves the implementation of counseling, mentoring and joint activities. The implementation of this condition will ensure: the acquisition by the future medical worker of experience that contributes to the development of the ability to work in a team, while at the same time self-realization and showing heuristic abilities to improve professional skills; readiness for professional cooperation; development of skills of optimal behavior of a team member in the process of implementing professional technologies of training organization.

The next condition for the successful formation of professional competence is the use of interactive

methods in the professional training of future specialists in the medical field.

The use of interactive methods in the professional training of future specialists in the medical field promotes interpersonal interactions between the participants of the educational process "teacher – student" and "student – student", involves all students in educational and cognitive activities, promote the development of critical thinking, stimulate cooperation, tolerance and mutual assistance, provide an opportunity to realize the students' need for constructive communication.

I. Melnychuk, says that the use of interactive teaching methods allows for the formation of teamwork experience in future specialists, contributes to the improvement of a positive atmosphere in the team, the formation skills for effective solving of assigned tasks, taking into account the thoughts and ideas of each team member [6].

According to P. Sikorskyi (2003), in the training of future medical workers, it is advisable to use learning technologies, the productivity of which "is caused by their problematization, structural filling with techniques of logical thinking (analysis, synthesis, comparison, summarization, generalization, systematization, induction, deduction, analogy) and is enhanced by internal activity coefficient" (p. 96). The author believes that they should be distinguished by the intensive presentation of material, cognitive and emotional activity of students, constant self-control, dialogicity, problematic nature. Effective means of pedagogical training of future family doctors are the use of innovative sources of educational information (Internet, electronic educational resources, databases.

I. Hevko (2018) emphasizes that the use of interactive methods makes it possible to bring the learning process as close as possible to real practical situations. At the same time, the teacher acts as a consultant, moderator, and the student has the opportunity to analyze and discuss the situation with others.

T. Rudnytska and L. Chornobryva (2020) believe that the transition to a qualitatively new level of training of professional medical personnel is possible through the introduction of active forms for learning into pedagogical practice. Among them, an important role is given to simulation methods. Scientists divide simulation methods into game and non-game. Game methods are based on game elements, combine the principle of modeling and the principle of problematic future professional activity. Scientists include simulation exercises, the method of specific situations and technological trainings as non-game simulation methods. Their value lies in modeling real objects and situations without performing role functions.

T. Rudnytska and L. Chornobryva propose to use the method of simulation modeling in the training of future specialists in the medical field, which allows you to consolidate knowledge on models that simulate processes that would occur in reality. Scientists believe that the implementation of such learning technologies allows acquiring the necessary practical and theoretical knowledge without harming human health. This system allows you to start with simple manipulations and later practices actions in simulated clinical situations.

The use of interactive methods in the training of future medical workers allows to form their professional competence. Such methods include discussions and "brainstorming", which allow participants to think, analyze, talk in detail about their own conclusions, and listen to various opinions of others.

The brainstorming method is carried out in several stages. First, the teacher outlines the problem, formulates the question. Then students express their ideas and proposals, and accept any answers, even unusual and sometimes erroneous ones, the main thing is that there are many of them, so that they are not discussed and explained. At the next stage, each of the proposed ideas is analyzed, discussed, explained, substantiated and the best options for solving the problem are chosen.

In practical classes on histology, students are offered to provide as many different options of ideas as possible to the given problem. An example of a question can be: "What is the reaction of cells to external stimuli?", "What research methods should be used in histology?", "What research should be done on the structure of tissues and organs when studying histological preparations?".

The topics of the case studies are usually focused on solving situations by the method of group teamwork. This method forms in students such qualities as sociability, the ability of interpersonal interaction, develops analytical abilities. The teacher forms certain tasks (cases) for small groups of students, and students must familiarize themselves with the content of the case, carry out an independent scientific search for information to complete the task. Completed tasks are presented, discussed and errors are analyzed with the whole group. In practical lessons in Histology, cytology and embryology cases can have the following content: "Prepare theses for participation in a student scientific conference", "Develop a presentation for a conference report", "Formulate questions and define tasks for independent work on the topic "Cell therapy as one of the directions of regenerative of medicine"".

The next condition for the qualitative formation of the professional competence of

future specialists in the medical field, which is aimed at the formation of practical skills, is the creation of a practical activity environment. The result of the implementation for this condition is the acquisition by future medical workers of a system of competencies that are necessary for the performance professional activities, in particular: diagnostics, forecasting, self-improvement and self-development, professional interaction, etc. A modern doctor must have appropriate professional training, knowledge and ability to adequately assess the patient's condition, as well as possess certain moral and ethical qualities, communication skills, be tactful, polite, tolerant, and benevolent.

The use of a practical activity environment allows the learning process to be brought as close as possible to real practical situations. The teacher performs the function of organizer, moderator, consultant, and the student turns into a subject of learning who not only learns information, but also analyzes it, interprets it, discusses it and explains it to others [3].

Therefore, the outlined organizational and pedagogical conditions for the formation professional competence of future specialists in the medical field will contribute to the effective and successful formation of professional competence for future doctors.

Conclusions. Professional development specialists in the medical field is a long and systematic process; it is carried out throughout the entire professional activity of a specialist and consists in the constant improvement of professional competences. implementation of organizational pedagogical conditions (partner interaction between a teacher and a student; the use of modern interactive teaching methods in the educational process; the creation of a practical and activity environment for the qualitative formation of the professional competence of a medical worker) will contribute to the achievement of a high level of quality of medical education, which will enable future doctors to quickly join the professional activity, constantly interact with the environment, show proper competence, be ready to act correctly in difficult professional situations.

We see the prospect of further research in the development of a model for the formation of professional competence among future specialists in the medical field in the process of their professional training.

Bibliography:

- 1. Бражнич О. Педагогічні умови диференційованого навчання учнів загальноосвітньої школи : дис. ... канд. пед. наук : 13.00.07. Кривий Ріг, 2001.
- 2. Чепка О. Професійна підготовка майбутніх учителів початкових класів в умовах навчального

- комплексу «педагогічний комплекс педагогічний університет» : автореф. дис. ... канд. пед. наук : 13.00.04. Черкаси, 2010.
- 3. Гевко I. Використання інтерактивних технологій в освіті. *Наукові записки Національного педагогічного університету імені М. П. Драгоманова*. Серія «Педагогічні науки». 2018. Вип. 139. С. 53–60. URL: http://dspace.tnpu.edu.ua/handle/123456789/13381.
- 4. Гончаренко С. Методологічні характеристики педагогічних досліджень. Вісник Національної академії педагогічних наук України. 1993. Вип. 3. С. 11–23.
- 5. Копил X. Педагогічні аспекти суб'єктсуб'єктних відносин на заняттях іноземної мови в роботах деяких західних науковців. Педагогіка формування творчої особистості у вищій і загальноосвітній школах. 2020. Вип. 68 (2). С. 28–33.
- 6. Мельничук І. Використання інтерактивних методів навчання у підготовці майбутніх педіатрів до роботи в команді. *Медична освіта*. 2020. Вип. 4. С. 43–46.
- 7. Шевчук Т., Хлієстова С. Науково-теоретичні основи формування соціокомунікативної компетентності майбутніх лікарів у процесі вивчення природничих дисциплін. *Проблеми та досягнення медичної науки та освіти:* колективна монографія. Рига, Латвія: Балтія, 2020, С. 412–430.
- 8. Сікорський П. До проблеми класифікації методів навчання. *Вісник Львівського універси- тему*. Серія «Педагогічна». 2003.
- 9. Особливості застосування інтерактивних, високотехнологічних інформаційних та дистанційних методів при вивченні дисципліни «Внутрішня медицина» в умовах змішаного навчання / Г. Такташов та ін. Український журнал медицини, біології та спорту. 2020. Вип. 5 (27). С. 298–304.
- 10. Юрченко В. Взаємини «викладач студент» як чинник формування «Я-концепції» майбутнього педагога. Вчені записки Таврійського національного університету імені В. І. Вернадського. Серія «Психологія». 2020. Вип. 31 (70). С. 68–78.

References:

- 1. Brazhnych, O. (2001). Pedahohichni umovy dyferentsiiovanoho navchannia uchniv zahalnoosvitnoi shkoly [Pedagogical conditions of differentiated education of secondary school students]. (dys. ... kand. ped. nauk: 13.00.07). Kryvyi Rih [in Ukrainian].
- 2. Chepka, O. (2010). Profesiina pidhotovka maibutnikh uchyteliv pochatkovykh klasiv v umovakh navchalnoho kompleksu "pedahohichnyi kompleks pedahohichnyi universytet" [Professional training of future primary school teachers in the conditions of the educational complex "pedagogical complex pedagogical university"]. (avtoref. dys. ... kand. ped. nauk: 13.00.04). Cherkasy [in Ukrainian].
- 3. Hevko, I. (2018). Vykorystannia interaktyvnykh tekhnolohii v osviti [Use of interactive technologies

- in education]. *Naukovi zapysky Natsionalnoho pedahohichnohouniversytetuimeniM.P.Drahomanova*. Seriia "Pedahohichni nauky", Vyp. 139, s. 53–60. URL: http://dspace.tnpu.edu.ua/handle/123456789/13381 [in Ukrainian].
- 4. Honcharenko, S. (1993). Metodolohichni kharakterystyky pedahohichnykh doslidzhen [Methodological characteristics of pedagogical research]. *Visnyk APN Ukrainy*, Vyp. 3, s. 11–23 [In Ukrainian].
- 5. Kopyl, Kh. (2020). Pedahohichni aspekty subiekt-subiektnykh vidnosyn na zaniattiakh inozemnoi movy v robotakh deiakykh zakhidnykh naukovtsiv [Pedagogical aspects of subject-subject relations in foreign language classes in the works of some Western scientists]. *Pedahohika formuvannia tvorchoi osobystosti u vyshchii i zahalnoosvitnii shkolakh*, Vyp. 68 (2), s. 28–33 [in Ukrainian].
- 6. Melnychuk, I. (2020). Vykorystannia interaktyvnykh metodiv navchannia u pidhotovtsi maibutnikh pediatriv do roboty v komandi [The use of interactive teaching methods in the preparation of future pediatricians for team work]. *Medychna osvita*, Vyp. 4, s. 43–46 [In Ukrainian].
- 7. Shevchuk, T., & Khliiestova, S. (2020). Naukovoteoretychni osnovy formuvannia sotsio-komunikatyvnoi kompetentnosti maibutnikh likariv u protsesi vyvchennia pryrodnychykh dystsyplin [Scientific and theoretical
 - © О. €. Халло 2024.

Науково-методична стаття.

Надійшла до редакції 30.09.2024. Прийнято до публікації 31.10.2024.

- foundations of the formation of socio-communicative competence of future doctors in the process of studying natural sciences]. Problemy ta dosiahnennia medychnoi nauky ta osvity: Kolektyvna monohrafiia. Ryha, Latviia: Baltiia, s. 412–430 [in Ukrainian].
- 8. Sikorskyi, P. (2003). Do problemy klasyfikatsii metodiv navchannia [To the problem of classification of teaching methods]. *Visnyk Lviv. un-tu. Seriia pedahohichna* [in Ukrainian].
- 9. Taktashov, H., Hrona, N., Homozova, O., Suprun, O., & Kozynska, I. (2020). Osoblyvosti zastosuvannia interaktyvnykh, vysokotekhnolohichnykh informatsiinykh ta dystantsiinykh metodiv pry vyvchenni dystsypliny "Vnutrishnia medytsyna" v umovakh zmishanoho navchannia [Peculiarities of the use of interactive, high-tech information and distance methods in the study of the discipline "Internal Medicine" in the conditions of mixed education]. *Ukrainskyi zhurnal medytsyny, biolohii ta sportu,* Vyp. 5 (27), s. 298–304 [in Ukrainian].
- 10. Yurchenko, V. (2020). Vzaiemyny "vykladach student" yak chynnyk formuvannia "Ya-kontseptsii" maibutnoho pedahoha ["Teacher student" relationships as a factor in the formation of the "self-concept" of the future teacher]. *Vcheni zapysky TNU imeni V. I. Vernadskoho. Seriia: psykholohiia,* Vyp. 31 (70), s. 68–78 [in Ukrainian].