

UDC 378.091.12:61

DOI <https://doi.org/10.11603/m.2414-5998.2026.1.16039>

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CONTENT COMPONENT OF PSYCHOLOGICAL AND PEDAGOGICAL TRAINING OF FUTURE PHYSICIANS IN HIGHER EDUCATION INSTITUTIONS

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ЗМІСТОВИЙ КОМПОНЕНТ ПСИХОЛОГО-ПЕДАГОГІЧНОЇ ПІДГОТОВКИ МАЙБУТНІХ ЛІКАРІВ У ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

Abstract. The article presents a comprehensive analysis of the content component of the model of psychological and pedagogical training of future physicians, aimed at ensuring their holistic and professionally oriented preparation within contemporary medical education. The study examines the structural elements of the model, including fundamental biomedical training, clinical preparation, psychological and pedagogical support, interdisciplinary integration, digital competence development, and the formation of reflective competence as a core regulatory mechanism of professional growth. Particular attention is devoted to the systemic interconnection between these components, which collectively shape a multidimensional structure of professional competence. The study analyzes the key psychological and pedagogical principles, methods, and instructional approaches that contribute to the development of professional competence in medical specialists, with particular attention to competence-based, learner-centered, and practice-oriented educational frameworks. The results of the study support the premise that the systematic integration of theoretical knowledge and practical clinical skills constitutes a fundamental condition for the formation of a professionally competent physician characterized by social responsibility, ethical accountability, and adaptability within complex and dynamically evolving healthcare environments. Particular attention is devoted to the integration of theory and practice as a mechanism for fostering critical thinking, empathy, communicative competence, and professional autonomy among higher education students. The study further demonstrates the pedagogical effectiveness of the proposed content framework, revealing positive dynamics in competence development in alignment with international standards of medical education and indicating its potential applicability to other professional training contexts.

Key words: psychological and pedagogical training; medical education; content component; professional competence; knowledge integration.

Анотація. У статті запропоновано системний аналіз змістового компонента моделі психолого-педагогічної підготовки майбутніх лікарів, що забезпечує їхню всебічну та цілісну професійну підготовку в умовах сучасних трансформацій медичної освіти. Розкрито структурні складники моделі, зокрема фундаментальну, клінічну, психолого-педагогічну, міждисциплінарну та цифрову підготовку, а також формування рефлексивної компетентності як важливого механізму професійного саморозвитку. Обґрунтовано взаємозв'язок зазначених компонентів як інтегрованої системи, спрямованої на формування професійної компетентності майбутнього лікаря. Проаналізовано провідні психолого-педагогічні принципи, методи й підходи до формування компетентності медичних фахівців, серед яких компетентнісний, особистісно орієнтований, діяльнісний і практико-орієнтований підходи. Визначено роль інтеграції теоретичних знань і практичних умінь у підготовці висококваліфікованого, соціально відповідального, етично свідомого та адаптивного фахівця охорони здоров'я. Особливу увагу приділено значенню поєднання теорії і практики для розвитку критичного мислення, емпатії, комунікативної культури та професійної автономії здобувачів вищої освіти. Результати дослідження підтверджують ефективність запропонованого змістового компонента, засвідчують позитивну динаміку розвитку професійної компетентності відповідно до міжнародних стандартів медичної освіти та окреслюють можливості його масштабування на інші напрями професійної підготовки.

Ключові слова: психолого-педагогічна підготовка; медична освіта; змістовий компонент; професійна компетентність; інтеграція знань.

Introduction. The field of healthcare plays a crucial role in safeguarding public health and in promoting high ethical values and standards of care for individuals who find themselves in adverse life circumstances, particularly in situations of illness. The quality of healthcare services remains one of the most pressing contemporary challenges in Ukraine. Among the urgent tasks facing the healthcare system, the psychological preparation of medical personnel occupies a significant position. In the near future, today's medical students will engage in active professional practice and will interact directly with patients. Although the physician –patient relationship represents only one of many components of the therapeutic process, it is undeniable that the quality of this interaction is of paramount importance for patients. The requirements imposed on physicians increase substantially under such conditions. They are expected not only to perform their professional duties effectively, but also to serve as bearers of high moral values and standards of interpersonal conduct. The purposeful development of psychological readiness in future physicians implies that medical education should be oriented not solely toward the acquisition of knowledge, skills, and abilities, but also toward the multi-level development of individual psychological characteristics and capacities, as well as toward fostering the creative potential of future medical professionals. Comprehensive personal development ensures the fuller realization of professionally significant skills and enhances the ability to perform professional duties and functions effectively. Research on psychological readiness for professional activity has a long-standing tradition. However, a unified approach to understanding such concepts as professional readiness, psychological readiness, personal readiness, and competence has not yet been established in contemporary scholarly discourse.

The aim of the article is to analyze the content component of psychological and pedagogical training of future physicians in higher education institutions. Such an analysis is intended to ensure the holistic integration of theory and practice, promote the development of key professional competencies, and foster readiness for continuous professional development.

Theoretical framework. The problem of psychological readiness of future specialists for professional activity has been repeatedly examined from both theoretical and experimental perspectives by such scholars as L. Dudikova, O. Lazurenko, I. Lembryk, S. Maksymenko, A. Nerush, N. Smila, L. Piletska, O. Syrotiuk, T. Titiiyevska, S. Trehub and M. Filonenko. Although considerable scholarly attention has been devoted to the professional development of medical personnel, it must be acknowledged that the structural components of psychological readiness of future physicians for professional activity, as well as the factors influencing their formation at

different stages of professional development, remain insufficiently specified. An analysis of contemporary scholarly works addressing readiness indicates an excessive focus on the operational and technical aspects of professional preparedness, often accompanied by an underestimation – or even neglect – of the internal psychological dimension of professional activity.

In our view, insufficient attention has been devoted to the study of social and psychological factors which not only constitute one dimension of readiness for professional activity, but in fact form its personal foundation. Particularly noteworthy is the work of O. Lazurenko, who analyzes the structure of competence of future physicians through the prism of motivational potential, communication skills, and practice-oriented educational tasks (Lazurenko, 2018, p. 72). The author emphasizes the importance of psychological and pedagogical components in shaping the physician as a professional. N. Smila conceptualizes psychological and pedagogical readiness of a physician as a set of motivational, cognitive, and communicative components that ensure effective interaction with patients and adaptation to professional demands (Smila, 2018). M. Filonenko highlights the necessity of introducing psychological foundations of professional activity into the curriculum of future physicians. This approach presupposes a synthesis of fundamental knowledge in anatomy, physiology, biochemistry, pathology, and pharmacology with the ability to apply this knowledge in clinical situations (Filonenko, 2019). L. Dudikova underscores the importance of a practice-oriented approach, which is central to the structure of modern medical education, as it involves the active participation of students in modeling professional situations in order to develop communication skills, self-regulation, and problem-solving abilities (Dudikova, 2009, p. 81).

The contemporary system of higher medical education is oriented toward the formation of comprehensive professional competence in future physicians. One of the key dimensions of this competence is psychological and pedagogical training, which ensures effective interaction between the physician and the patient, the medical team, and the broader social environment. The fundamental dimension of the content framework of such training is aimed at developing the knowledge, skills, and value orientations necessary for professional practice.

The content of psychological and pedagogical training of future physicians during the period 2019–2025 has been shaped by the transition toward a human-centered model of medicine, in which the “physician – patient” interaction is viewed as an equal partnership and dialogue. In contemporary scholarly discourse, psychological and pedagogical support is defined as a comprehensive technology

that assists the individual in addressing tasks of education, instruction, and socialization (Khallo, 2025).

Professional training of future physicians constitutes a holistic and systematically organized process. The psychological and pedagogical component performs an integrative function within the system of professional training, linking theoretical medical knowledge with practical skills of social interaction and psychological intervention (Vizniuk et al., 2022, p. 69). A distinctive feature of such training is pedagogical support, understood as a structured system of assistance and guidance provided to students within the higher education environment, which facilitates their professional self-improvement and personal development (Humeniuk, 2025, p. 48). The key aspects that determine the substantive scope and functional purpose of psychological and pedagogical training are a humanistic orientation, integrativity, a competency-based approach, and pedagogical adaptability. The humanistic orientation ensures the formation of value orientations and the awareness of the humanistic essence of professional activity (Dufynets et al, 2024). Integrativity presupposes the alignment of psychological and pedagogical requirements with the study of clinical disciplines in order to develop holistic professional thinking (Goroshkina et al, 2022, p. 53). The competency-based approach focuses on clearly defined learning outcomes, as highly qualified professionals are in demand in the contemporary labor market. Finally, pedagogical adaptability reflects the physician's ability to perform the roles of educator, mentor, advisor, and consultant for patients (Humeniuk, 2025, p. 49).

The content component of psychological and pedagogical training encompasses several key directions.

Psychological Foundations of Professional Medical Activity

The psychological foundations of professional medical activity form the basis for effective clinical practice and ensure successful interaction with patients, colleagues, and the broader social environment. This dimension of psychological and pedagogical training includes several core aspects.

First, psychological readiness for professional activity requires that future physicians possess a high level of self-awareness and emotional stability. This presupposes the development of self-regulation and the ability to control one's emotions in stressful situations; the capacity to make prompt decisions under time constraints; and the ability to engage in self-correction and critical reflection on one's professional behavior (Syrotiuk, 2017, p. 148).

Second, understanding the psychological state of the patient is essential, as effective medical care is impossible without consideration of individual psychological characteristics. This includes assessing the patient's emotional condition and behavioral pat-

terns; identifying levels of anxiety, fear, and other psychological responses to illness; and developing the ability to adapt communication strategies according to the patient's individual needs.

Third, communicative skills and empathy constitute an indispensable part of professional medical practice. The development of psychological competence in this domain involves fostering active listening skills, the ability to ask clarifying questions, and sensitivity to non-verbal cues; cultivating empathy as the capacity to understand and share the patient's emotional experience; and mastering effective techniques of psychological support, motivation, and counseling.

Fourth, coping with professional stress and preventing burnout represent critical elements of psychological preparation (Trehub et al, 2022, p. 175). The medical profession is associated with a high level of stress; therefore, training should include the acquisition of self-regulation and psychological coping strategies, the development of time-management skills, and the formation of a reflective and constructive approach to professional challenges and crisis situations.

Finally, the development of critical thinking is fundamental to medical decision-making. Critical thinking enables physicians to analyze clinical situations, assess risks, and make evidence-based decisions. This involves examining psychological and behavioral factors that influence decision-making processes; evaluating alternative courses of action and anticipating their consequences; and applying psychological models of behavior to predict the reactions of patients and colleagues.

Pedagogical Foundations of Professional Training

The pedagogical foundations of psychological and pedagogical training for physicians are aimed at developing the capacity for learning, self-improvement, and patient education. They encompass several key aspects. First, methodological training is essential, as future physicians must possess foundational pedagogical knowledge that enables them to organize the learning process both for themselves and for their patients. This includes knowledge of contemporary teaching methods and their practical application; understanding psychological and pedagogical principles of motivation and learning facilitation; and the ability to adapt educational materials to the individual needs of students or patients (Lembryk & Piletska, 2021, p. 69).

Another critical component is patient education and disease prevention. Pedagogical preparation equips physicians with the skills necessary to conduct educational and preventive interventions. This involves explaining principles of a healthy lifestyle to patients; instructing them in the proper use of medications and medical devices; and employing

interactive and visual teaching methods to enhance patient understanding and adherence to medical recommendations.

The incorporation of psychological and pedagogical approaches in medical training fosters the development of pedagogical competencies among future physicians. These include providing mentorship and support to junior colleagues, employing active learning techniques such as case studies, discussions, and role-playing exercises, and developing the ability to critically evaluate the educational process and make adjustments to their own training.

Finally, the development of self-directed learning skills constitutes a fundamental aspect of physicians' pedagogical competence. This involves the capacity for self-analysis and evaluation of one's professional practice, the utilization of modern educational technologies to enhance qualifications, and the cultivation of a sustained interest in scientific advancements and innovations in medicine.

Interdisciplinary Integration

Interdisciplinary integration ensures the combination of psychological, pedagogical, and clinical knowledge, contributing to the comprehensive development of future physicians. One of the primary components of this approach is the integration of theoretical knowledge. Future physicians must learn to apply knowledge from multiple disciplines in practical settings, to combine psychological and pedagogical understanding with anatomy, physiology, and clinical subjects, and to employ psychological models for the analysis of clinical situations (Filonenko, 2019). They must also develop the ability to conduct comprehensive assessments of patients, taking into account physical, psychological, and social factors. Another essential component involves the development of critical thinking and clinical skills. The integrative approach promotes the analytical and clinical abilities of medical students by facilitating problem-based learning, enhancing their capacity to make evidence-based decisions, evaluate alternative treatment methods, anticipate outcomes, and cultivate interdisciplinary thinking in team-based medical practice.

Equally important within interdisciplinary integration is the preparation for interpersonal and interprofessional collaboration. A competent physician must interact effectively with patients, colleagues, and other professionals, demonstrating teamwork and collaborative decision-making skills, applying communication strategies within interdisciplinary teams, adapting professional behavior to diverse social and cultural contexts, and utilizing innovative technologies, including simulation models, virtual trainers, interactive knowledge-sharing platforms, case-based learning tools, and digital resources for continuing professional development and self-directed learning.

In Ukraine, the content framework for the train-

ing of future physicians is strictly regulated by the *Standard of Higher Education of the Second (Master's) Level in Medicine (specialty 222 "Medicine")*, approved by the Ministry of Education and Science Order No. 1197 of November 8, 2021 (On approval of the higher education standard in specialty). This document reflects the results of extensive work by scientific-methodological commissions and leading healthcare specialists.

The Standard establishes explicit requirements regarding the scope of knowledge and mandatory competencies for graduates. Specifically, masters in medicine are expected to possess a solid understanding of the structure of professional activity and the ability to practice in contexts that require ongoing knowledge updating and integration (On approval of the higher education standard in specialty). A crucial requirement is the capacity for autonomous professional learning, which directly relates to the pedagogical culture of the specialist.

One key innovation of the Standard is the mandatory use of simulation-based teaching methods. At least 50% of classroom hours in clinical disciplines must be dedicated to practical skills acquisition, including the use of diagnostic equipment at the patient's bedside or in training centers (On approval of the higher education standard in specialty). This approach requires medical faculty to be proficient in contemporary pedagogical techniques and psychological strategies for supporting students in the high-stress conditions of simulated clinical scenarios (Zlyvkov & Lukomska, 2019).

The content of psychological preparation encompasses not only the study of patients' psychological or mental processes but also the in-depth development of the physician's own personality. The formation of professional identity occurs throughout the entire period of medical education (Marcus, 1999, p. 192). In this context, emotional intelligence emerges as a critical clinical competency. In contemporary medical discourse, emotional intelligence is not considered a "soft skill" but rather a vital clinical tool (The Emotional Intelligence Advantage). It enables physicians to balance the "art" and "science" of medicine, integrating both cognitive and emotional aspects of patient care. A lack of emotional awareness can lead to flawed clinical decisions and suboptimal treatment outcomes.

The content framework development of emotional intelligence includes self-awareness and self-regulation, understood as the ability to recognize and manage one's emotional states, which underpins stress resilience and burnout prevention; empathy and compassion, reflecting the ability to understand patients' perspectives and respond to their emotional needs, thereby strengthening the therapeutic alliance; and social skills, encompassing teamwork, coordination with colleagues, and conflict management under high-pressure conditions (Maity et al, 2025).

A patient-centered approach constitutes a fundamental value in modern medicine. Patient-centeredness requires specific content within psychological and pedagogical training (Zlyvkov & Lukomska, 2019). This approach is based on recognizing the patient as an active participant in the treatment process, whose needs, values, and preferences are central (Cao et al., 2025). Training in this area is implemented through integrated disciplinary study, such as case-based learning in immunology courses, where patient-centered elements are combined with the study of complex biological mechanisms (Cleveland & Sletten, 2025), and through communication psychology, including active listening techniques, skills for history-taking, and conflict-free interaction in clinical settings (Cleveland & Sletten, 2025).

Psychological and pedagogical training is realized through concrete curricula, the content of which is continuously updated to meet contemporary educational and professional requirements.

Conclusions and research prospects. The foundational training within the content component of psychological and pedagogical preparation is an integral part of developing highly qualified physicians. It ensures the integration of psychological and pedagogical knowledge with clinical practice and fosters professional competence, as well as the communicative and emotional skills necessary for effective performance in the modern healthcare system. The implementation of innovative teaching methods and the systematic integration of substantive knowledge enhance the quality of future specialists' training. The content component of psychological and pedagogical preparation is characterized by a high

degree of dynamism and practical orientation. It supports the development of students' ability to adapt to the dynamic conditions of medical practice, fosters advanced ethical and communicative competence, facilitates the integration of theoretical knowledge and practical skills in everyday clinical work, and promotes the development of critical thinking and self-reflection.

To further improve the training system, it is recommended to integrate psychological and pedagogical tasks across all clinical disciplines and to establish programs for psychological support to preserve the mental health of future physicians in conditions of war. Psychological and pedagogical preparation should become a cross-cutting element of the educational process, ensuring the formation of physicians as holistic, harmonious, and socially responsible professionals.

Funding. None.

Conflict of Interest. Author Nadiya Fedchyshyn serves as the Editor-in-Chief of the journal. Nadiya Fedchyshyn had no involvement in the peer-review process or in the editorial decision-making regarding this manuscript. The manuscript was handled by an independent editor in accordance with the journal's standard peer-review procedures.

Author Contributions. Nadiya Fedchyshyn – Conceptualization, Methodology, Writing – Original Draft, Project Administration.

Malte Brinkmann – Data Curation, Writing – Review & Editing, Supervision.

Authors approved the final version of the manuscript.

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Дата першого надходження статті до видання: 06.01.2026
 Дата прийняття статті до друку після рецензування: 10.02.2026
 Дата публікації (оприлюднення) статті: 26.03.2026



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