

N. O. Fedchyshyn

ORCID <http://orcid.org/0000-0002-0909-4424>

N. I. Yelahina

ORCID <https://orcid.org/0000-0002-5423-8327>

Ivan Horbachevsky Ternopil National Medical University of the Ministry of Health of Ukraine

TRAINING OF MEDICAL TRANSLATION SPECIALISTS: CHALLENGES OF THE TIME

Н. О. Федчишин, Н. І. Єлагіна

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

ПІДГОТОВКА ФАХІВЦІВ МЕДИЧНОГО ПЕРЕКЛАДУ: ВИКЛИКИ ЧАСУ

Abstract. The article examines the specific features of professional training for specialists in medical translation within the modern educational space, in the context of intensified international educational and medical cooperation, which has led to an increasing demand for highly qualified medical translators. The study analyzes the competence-based approach to translator training (including linguistic, communicative, and professional domain-specific competences), the distinctive features of medical terminology, and the necessity of interdisciplinary integration of linguistic, philological, and medical education as one of the key tasks of contemporary linguistic training. This integration involves combining linguistic knowledge with medical terminology, Latin, and the fundamentals of bioethics and clinical communication. The article highlights the importance of developing in future translators a solid foundation of terminology in medicine; skills in oral and written translation of specialized texts (instructions, medical reports, protocols, scientific articles); the enhancement of communicative competence for effective interaction with patients, doctors, and researchers; as well as the ability to work with professional sources, databases, and electronic medical resources. The main directions for improving educational programmes for future translators in the field of medicine are defined.

Key words: medical translation; professional training; competence; medical terminology; interdisciplinary approach.

Анотація. У статті розглянуто особливості професійної підготовки спеціалістів медичного перекладу в сучасному освітньому просторі в контексті активізації міжнародних освітніх і медичних контактів. Проаналізовано компетентнісний підхід до навчання перекладачів (мовна, комунікативна та професійно-галузева компетентності), специфіку медичної термінології, а також необхідність міждисциплінарної інтеграції мовної, лінгвістичної та медичної підготовки як одного із ключових завдань сучасної лінгвістичної освіти (поєднання лінгвістичних знань із медичною термінологією, латинською мовою, основами біоетики та клінічної комунікації). Розкрито необхідність формування у майбутніх перекладачів термінологічної бази медицини; навичок усного та письмового перекладу спеціалізованих текстів (інструкцій, медичних звітів, протоколів, наукових статей); розвитку комунікативної компетентності майбутніх перекладачів для роботи з пацієнтами, лікарями, науковцями; уміння працювати з фаховими джерелами, базами даних і електронними медичними ресурсами. Визначено основні напрями вдосконалення освітніх програм для майбутніх перекладачів у галузі медицини.

Ключові слова: медичний переклад; професійна підготовка; компетентність; медична термінологія; міждисциплінарний підхід.

Introduction. In today's globalized world, numerous international interactions occur daily across various spheres of life, creating an ever-growing need for interlingual and intercultural mediation – either direct or remote – facilitated by professional interpreters and translators. This situation necessitates the training of specialists capable of serving as mediators in intercultural communication. Educational systems in most countries, including Ukraine, have faced this challenge of the twenty-first century and

have made significant efforts to adapt to it promptly and effectively. The efficiency of these changes can be measured, at least in part, by the increasing number of educational institutions that train translators and interpreters in specific national contexts (Bondarenko & Bondarenko, 2023; Dyachenko, 2017).

Theoretical Background of the Problem. The development of translator training in higher education institutions has given impetus to the evolution of translation didactics. Numerous foreign scholars

have contributed to the formation and establishment of this pedagogical field.

Methodology and Methods. In the course of the study, a range of research methods was employed, including analysis, synthesis, comparison, and generalization of academic and educational sources – both domestic and international – in order to determine the requirements for translation teachers and to clarify the conceptual and categorical framework of the study. Additionally, observation, questionnaires, and surveys were used to identify challenges in the professional development of translation instructors.

The aim of the article is to identify the main challenges and trends in the training of medical translation specialists within the context of modern labour market demands and the ongoing development of the medical field as well as to propose an algorithm for potential formats of training medical translation specialists.

Results. In the field of translator training, there is a pressing need to systematize accumulated experience using empirical research methods in order to identify trends and specific features in the preparation of such specialists within the education system (Holovatska, 2023; Skyba, 2014).

An analysis of translation-oriented educational programmes – such as *Business Communication and Translation*, *Applied Linguistics: Medical Translation (English)*, *Specialized Translation: English, German*, and others – offered to students in domestic higher education institutions demonstrates that Ukraine has a limited number of specialized programmes for training specialists in domain-specific translation. Historically, students enrolled in pedagogical institutes and universities receive training in their chosen field supplemented by an additional qualification as a teacher, while prospective translators rarely receive formal instruction in translation theory and practice.

A review of the current situation in faculties of foreign languages and relevant departments indicates that teaching staff either hold a degree in foreign philology but lack professional training in translation and, according to their foundational education, do not possess the specialized knowledge, skills, or competencies in translation didactics, or hold a degree in pedagogy and have been trained to teach foreign languages but lack professional preparation in translation studies Bihych & Strilets, 2020; Levitska, 2015; 2020; Reinke, 2013).

Frequently, tasks involving different types of translation are assigned to language teachers. A common misconception in society is that translation requires nothing more than fluency in a foreign language. Consequently, teachers without formal translator training often believe that translation consists merely of substituting words from one language for words in another, and some even work in translation

agencies under this assumption (Guslenko, 2021). In reality, such individuals often lack a holistic understanding of translation as a complex professional activity.

Our voluntary survey of specialists working in translation agencies revealed that only one-fifth of translators hold relevant diplomas. The situation is particularly critical in the context of medical translation, which requires profound domain-specific knowledge. Medical translators must adhere to a precise document structure and demonstrate familiarity with medical terminology, abbreviations, and conventions. The quality of medical translation directly affects patient–doctor communication, the accuracy of treatment prescriptions, and treatment efficacy. Correct translation of medical terminology impacts multiple areas, including research, surgical procedures, and documentation of disease progression.

Conversely, inaccurate medical translation poses a potential threat to human health and life. The main risks associated with poor translation in medical practice include misinterpretation of diagnostic results, which may lead to inappropriate therapeutic interventions; incorrect diagnoses; and the administration of improper treatment (Katar, 2019). These dangers underscore the necessity for medical texts to be translated by specialists with relevant education in medical terminology or practical experience in the healthcare sector.

Discussion. The landscape of translation theory and practice in the twenty-first century has changed dramatically and continues to evolve rapidly, both in terms of quantity, quality, and timelines, as well as in the tools and resources employed by contemporary translators. Notably, both written and oral translation have become highly technological activities, requiring translators to possess advanced digital skills and technical knowledge (Malik, 2021).

Medical translation occupies a unique position among specialized fields of translation, as it combines complex terminology, a high degree of responsibility for accuracy, and domain-specific knowledge in medicine (Williams, 2009). The training of medical translators is particularly relevant for the higher education system in Ukraine, as effective mastery of this profession requires not only linguistic competence but also professional and medical expertise.

It follows that the preparation of translators capable of meeting modern global standards necessitates updated training requirements. Existing curricula are insufficient, leaving translators without the necessary knowledge and skills to address contemporary challenges. For instance, medical translation requires deep knowledge and practical competence in the relevant field (Kuzenko, 2017).

Some Ukrainian universities, translator associations, private translation agencies, and mass online education projects offer short-term courses aimed at

enhancing translation skills. However, only a limited number provide modules for those seeking to specialize in translation studies. Short-term professional development courses typically account for no more than three ECTS credits (approximately 90 hours), with a maximum of 54 contact hours – insufficient for training highly qualified translators. These courses may address specific, practical tasks encountered in translation work, such as performing different types of written or oral translation. Modern information technologies and computer-assisted translation (CAT) tools are increasingly integrated into translation training, which is essential, yet alone insufficient for preparing competent translators. Consequently, current Ukrainian programmes for generalist translator training do not fully meet the goal of producing highly specialized professionals. Elective modules in medical, technical, or other specialized translation of 24 contact hours, as well as short-term professional development courses, are insufficient to address this gap, indicating a limitation in the Ukrainian higher education system regarding effective training formats for domain-specific translators.

The situation in other countries, particularly in Western Europe, differs. Attention is given to the training of translators in specialized domains or, at minimum, to the enhancement of the competencies they must acquire. K. Reiss asserts that «the different areas of competence or expertise required to be a competent translator trainer include professional translation practice» (Reiss&Vermeer, 2014).

Thus, what competences should translation specialists acquire? It should be noted that professional translation practice is understood by the author as a key competence encompassing several sub-competences, including organizational, interpersonal, instructional, contextual (or professional), and instrumental (Weber et al., 2016).

This perspective aligns with the classification of translator competencies developed by the EMT (European Master's in Translation) expert group, proposed by the Directorate-General for Translation of the European Commission for 2018–2024. It includes field competence, interpersonal competence, organizational competence, instructional competence, and assessment competence. The overlap between these classifications reflects the similarity of tasks that translators must perform and the practical requirements of their profession. Professional standards define the knowledge expected of specialists competent in both general translation and specific scientific, technical, or professional domains. Thus, a translation instructor must understand the organization of the translation profession, its trends, and the professional requirements for translators.

Formal training of professional translators and interpreters in Germany began only after World War II, following the Nuremberg Trials, which high-

lighted the indispensability of highly skilled interpreters and translators in the legal domain (Amelina & Tarasenko, 2014). Translator training in Germany lasts a minimum of four years, with a rigorous schedule. The profession can be pursued at state universities, specialized higher education institutions, private educational establishments, and translation courses. Applicants to state universities must demonstrate strong language proficiency from secondary education. German training is less academic and more flexible than Ukrainian programmes, tailored to individual student needs, aligning with European labour market requirements and practical professional challenges. Professional training in Germany aims to develop knowledge and skills beyond translation, including independent text production (technical, scientific-popular, journalistic), text evaluation and review, text editing, pre- and post-editing for machine translation, consultation on linguistic, cultural, and intercultural issues, and layout preparation. Therefore, in the German system of translator training, the professional profile includes various specialized fields of activity such as terminology expert, radio and television broadcasting specialist, print media expert, lexicography specialist, business correspondence specialist in the field of foreign economic activity, printing consultant, and computer linguistics expert (Ivanytska, 2015; Meyer, 2024).

The curriculum for translator training in Germany is oriented towards philological education in two foreign languages, with the additional requirement of selecting one area of translation specialization (technology, law, medicine, or economics). Consequently, accuracy and precision in translating medical materials are of particular importance. This is especially relevant in the development of treatment protocols, where it is essential to ensure the consistency of medications and clinical research data with industry standards and regulatory requirements (Meyer, 2024; Voithl, 2024). The majority of clinical research materials are written in English, although a considerable number are also produced in German, French, Spanish, and other languages. All such materials require high-quality translation; therefore, this work can be entrusted only to experienced professionals specializing specifically in clinical research. A general translator or one without relevant specialization cannot perform such translations at the required level, and their work is likely to contain errors and inaccurate formulations or terminology, potentially leading to serious medical and legal consequences.

The use of a verified and effective translation methodology, along with attentiveness and precision in handling terminological systems, are the key qualities of a professional translator of medical materials (Guslenko, 2021).

Medical translation encompasses a wide range of texts – from drug instructions and scientific articles

to clinical reports and medical protocols. Its main characteristics are accuracy, unambiguity, and compliance with medical standards. Any translation error may lead to serious consequences; therefore, the translator's professional ethics and responsibility are of paramount importance (Begma, 2012; Bogush et al., 2019).

A qualified medical translator must possess the following competences:

- linguistic competence – a high level of foreign language proficiency and knowledge of translation strategies;
- terminological competence – the ability to work with medical terminology, abbreviations, and Latinisms;
- subject-matter (medical) competence – understanding the fundamentals of anatomy, physiology, pathology, and related fields;
- information and technological competence – proficiency in the use of electronic dictionaries and computer-assisted translation tools;
- communicative competence – the ability to engage in intercultural interaction effectively.

The modern methodology of training medical translators is based on competence-oriented and interdisciplinary approaches. The curricula are designed to integrate courses from both linguistic and medical domains, including «Practical Course of English for Medicine, Dentistry, and Pharmacy», «Fundamentals of Medicine for Translators», «Practice of Oral and Written Translation in the Field of Medicine», «Medical Terminology», «Translation of Scientific and Technical Texts», «Fundamentals of Terminology Studies», «Latin Language», «Language Technologies in eHealth», «International Standards for Translating Medical Documentation», and «Terminological Coding». Since terminology represents one of the most dynamic and flexible layers of a language's lexicon, its composition is constantly evolving – through the loss of certain words, semantic shifts, or the introduction of new terms (Voitl, 2024). Contemporary medical terminology is the result of a long historical evolution of global medical science. Regardless of the language in which medical terminology is used, it contains a substantial proportion of lexical and word-forming units that share a common linguistic origin, as well as similar structural models. This can be explained by the extensive and long-lasting influence of the two classical languages of the ancient world – Latin and Ancient Greek – on medical terminology over the centuries. Medical terms are characterized by features such as the presence of specific meaning, abstraction, lack of expressiveness, monosemy, absence of emotional connotation, correlation with specialized concepts, stylistic neutrality, and strict logicity (Katar, 2019). Structurally, terms can be divided into three groups: (1) simple terms consisting of a single word;

(2) complex terms composed of two or more components; (3) and phraseological terms. Consequently, the translation of medical terminology constitutes a challenging aspect of translation studies, as the transfer of these units requires careful attention. Medical terms may be borrowed simultaneously by several languages from a single source or undergo multiple intermediate stages of sequential borrowing within a particular linguistic chain. In this context, it is crucial not merely to render information into another language but also to convey the original ideas accurately and clearly. When the target language lacks the necessary lexical equivalents, translators often bear responsibility for creating suitable lexical correspondences (Voitl, 2024). The translation of medical terminology involves the use of various translation transformations – morphological, lexical, syntactic, and grammatical. One of the transformations applied in medical terminology translation is calquing, which refers to the literal translation of a term into the target language. In other words, this transformation can be regarded as word-for-word translation. Since most medical terms originate from Latin and Greek, many of them are translated through transcoding, used to convey terms that lack direct equivalents but remain intelligible to the target audience. In the training of medical translators, the use of authentic materials (medical articles, clinical protocols, instructions), the case study method, simulation-based learning, and the integration of IT tools (CAT systems, glossaries) have proven to be particularly effective.

Such specialists translate medical documents from one language into another and work with various materials and records related to healthcare, medical research, regulatory documentation, and clinical protocols. Medical translation is a highly specialized field that requires several essential skills, including excellent linguistic proficiency, precision, and a solid knowledge base in biology, medicine, anatomy, and chemistry (Meyer, 2024).

The shortage of medical translators persists in Ukraine due to the limited number of specialized academic programmes, insufficient practical training within higher education institutions, and the absence of unified standards for terminological translation (Katar, 2019).

The training of medical translation specialists is a complex and multifaceted process that necessitates the integration of linguistic, professional, and technological components. The formation of a competent medical translator is possible only through the implementation of interdisciplinary education, the continuous modernization of curricula, and close collaboration with healthcare professionals.

Conclusions. Therefore, the training of medical translators should integrate language study with specialization in the medical field, whether through university education, specialized training, or continuing education – such as attendance at a medical university

followed by practical experience as a translator. Key aspects of training should include mastery of medical terminology, awareness of cultural nuances, proficiency in translation techniques, and competence in translation software. Professional recognition often requires passing examinations or obtaining state-recognized qualifications. Credentials confirming such qualifications typically fall under the concept of certification. However, different certificates may reflect varying levels of expertise, and in some cases, certificates for medical translation overlap with those for oral medical interpreting.

References

1. Amelina, S., & Tarasenko, R. (2014). Peculiarities of information technology training of MPs in higher educational institutions of Germany. *Higher School*, 8, 94–100.
2. Begma, Yu. (2012). Complex translation transformations as a way to achieve adequacy of translation of English literary texts into Ukrainian. *Language and Culture*, 15 (7), 464–468.
3. Bihych, O. & Strilets, V. (2020). Potential for the use of ICT in teaching scientific and technical translation. *Information Technologies and Learning Tools*, 76 (2), 86–95.
4. Bogush, A., Korolova, T. & Popova, O. (2019). Teaching machine translation to the students majoring in the Humanities. *Information Technologies and Learning Tools*, 71(3), 122–136.
5. Bondarenko, O. & Bondarenko, K. (2023). Professional profile of a translator-localizer in Ukrainian translator training programs. *Scientific notes. Series: Philological Sciences*, 1 (204), 13–23.
6. Dyachenko, M. (2017). Theoretical principles of the formation of professional competence of future translators. *Internauka. Series: Pedagogical Sciences*, 1 (23), 53–56.
7. Guslenko, I. (2021). Professional competence of a translator in teaching editing written translation in the context of forming critical thinking. *Ukrainian Pedagogical Journal*, 1, 43–51.
8. Holovatska, Yu. (2023). Content and structural components of readiness of future translators for localization. *Higher Education of Ukraine*, 4, 94–100.
9. Ivanytska, M. (2015). *The personality of the translator in Ukrainian-German literary relations*. Chernivtsi: Knygy-XXI, 604. 133.
10. Katar, B. (2019). *Dolmetschen im medizinischen Bereich*. Verlag: IZMIR, 152.
11. Kuzenko, G. (2017). The cultural aspect of translation in interlingual communication. *Internauka*, 2 (24), 22–26.
12. Levitska, N. (2015). The problem of professional training of translators in theoretical and pedagogical research. *Young Scientist*, 7 (22), 57–60.
13. Malik, G. (2021). Pragmatics and Translation: Didactic Aspects. *Pedagogy of Creative Personality Formation in Higher and General Schools*, 77 (2), 84–92.
14. Meyer, B. Wir brauchen Regeln für Sprachmittlung im Gesundheitswesen (23. Januar 2024). Retrieved from: <https://www.magazin.uni-mainz.de/wir-brauchen-regeln-fuer-sprachmittlung-im-gesundheitswesen/>
15. Reinke, U. (2013). State of the Art in Translation Memory Technology. *Translation: Computation, Corpora, Cognition*, 3 (1), 27–48.
16. Reiss K., & Vermeer, H. (2014). Towards a general theory of translational action: Skopos theory explained. Trans. C.Nord. Abingdon, Routledge Publ., 240.
17. Skyba, K. (2014). Peculiarities and essence of translator training in Canadian universities. *Youth and Market*, 3 (110), 88–92.
18. Voitl, P. (2024). Übersetzungsprogramme in der medizinischen Praxis: Chancen und Herausforderungen. *Monatsschrift Kinderheilkunde*, 2, 97–98.
19. Williams, M. (2009). Translation quality assessment. *Mutatis mutandis*, 2 (1), 3–23.
20. Weber, H., Holtel, M., Pilz, S., Pivernetz, K., Poimann, H., Rode, S., Schwäbe, N., Stapenhorst, K. (2016). Dolmetschen für Patienten. Retrieved from: <https://dr-stefan-pilz.de/uploads/2016/04/Arbeitshilfe-bessere-Kommunikation-03-Dolmetschen-fuer-Patienten-15-04-16.pdf>

Електронна адреса для листування: fedushunno@tdmu.edu.ua

Стаття надійшла 04.10.2025
Статтю прийнято 08.11.2025
Стаття опублікована