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DOI <https://doi.org/10.11603/m.2414-5998.2025.2.15493>**I. A. Prokop**ORCID <https://orcid.org/0000-0001-6683-5922>

Researcher ID Q-5670-2016

H. Ya. KituraORCID <https://orcid.org/0000-0001-7271-6364>

Researcher ID Q-5784-2016

Scopus Author 58923813500

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

SPECIFICS OF LEARNING ENGLISH MEDICAL TERMINOLOGY BY THE STUDENTS OF MEDICAL INSTITUTIONS OF HIGHER EDUCATION

I. A. Прокоп, Г. Я. Кітура*Тернопільський національний медичний університет імені І. Я. Горбачевського МОЗ України*

ОСОБЛИВОСТІ ВИВЧЕННЯ АНГЛІЙСЬКОЇ МЕДИЧНОЇ ТЕРМІНОЛОГІЇ СТУДЕНТАМИ МЕДИЧНИХ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ

Abstract. The article considers the importance of forming English language terminological competence in the students of medical institutions of higher education. The core and specifics of English language terminological competence, which is an essential component of the future specialist's professional culture, is outlined. The significance of English medical terminology for the students and specifics of its translation in abstracting English medical articles is determined. Necessity of understanding and proper interpretation of English medical terms for the formation of English communication competence in medical students as well as the need for the students to master the basic ways of formation and origin of English medical terms together with their Ukrainian versions are stressed. Special emphasis is put on term elements and word roots of Latin and Greek origin in clinical terminology that is an integral aspect of English for Specific Purposes at higher medical education institutions. In addition, the issues of English medical term system origin as related to Latin clinical terminology and developing speech concept in the process of mastering English clinical terms by the students are considered. Theoretical aspects of learning English medical terminology and formation of terminological competence are covered. Specifics of purposeful approach to learning English terminology as well as relation to Latin, formation of English terminological literacy and training of skilful medical specialists is characterized. The knowledge of English medical term system by the students of higher medical institutions has been found to form future specialist's communication and terminological competence, to develop skills and abilities enabling to form and express thoughts properly as well as to interpret and translate medical texts, to develop thinking and to meet the challenges of our time.

Key words: English medical terminology; English for Specific Purposes; term; terminological competence.

Анотація. Статтю присвячено важливості формування англomовної термінологічної компетентності у студентів медичних закладів вищої освіти. Окреслено суть та особливості англomовної термінологічної компетенції, що є важливим складником фахової культури майбутнього спеціаліста системи охорони здоров'я. З'ясовано значення англійської медичної термінології для студентів та особливості її перекладу при реферуванні англomовних медичних статей. Наголошується на необхідності розуміння та правильної інтерпретації англійських медичних термінів для формування англomовної комунікативної компетентності в студентів медичних закладів вищої освіти. Акцентується на необхідності засвоєння студентами основних способів творення й походження англomовних медичних термінів та їх перекладу українською мовою. Особливий наголос ставиться на терміноелементах та коренях латинського й грецького походження в клінічній термінології, яка є невід'ємним аспектом професійно орієнтованого навчання студентів у медичному закладі вищої освіти. Розглядаються питання походження англійської медичної терміносистеми, її зв'язок з латинською клінічною термінологією, розвитку мовленнєвого концепту в процесі засвоєння студентами англomовних клінічних термінів. Висвітлено теоретичні аспекти вивчення англomовної медичної термінології та формування термінологічної компетентності. Схарактеризовано особливості професійноорієнтованого підходу при вивченні англomовної термінології, зв'язок з латинською мовою, формування англomовної термінологічної грамотності та підготовку кваліфікованих спеціалістів медичної галузі. З'ясовано, що знання англomовної медичної терміносистеми студентами медичних закладів вищої освіти формує англomовну комунікативну та термінологічну компетентність майбутнього спеціаліста, розвиває навички та вміння, які надають можливість правильно формувати та висловлювати думку, інтерпретувати та перекладати медичний текст, розвивати мислення, а також відповідати викликам сьогодення.

Ключові слова: англійська медична термінологія; англійська мова професійного спрямування; термін; термінологічна компетентність.

Introduction. In order to succeed in their professional activity, medical specialists ought to have well-formed communication, foreign language and lexical competence. An expert possessing good communication and language skills as well as knowing special vocabulary, primarily terminology, prevails in the labour market in any field of activity. When forming foreign language communication competence at the higher medical institution, particular attention is paid to terminological literacy.

Today, the ability to use terminology properly for solving professional problems and in the process of professional competence is called terminological competence [8]. Since development and formation of the skill to understand and extract information from a special scientific text is one of the major objectives of studying English for Specific Purposes, progress in terminological competence comes to the fore and becomes one of the main challenges at the initial stage of studying at the higher medical institution.

Rapid introduction of new technologies as well as development of diagnostic and treatment methods together with medical devices and instruments require their verbalization, thus affecting medical terminology and complicating the issue of modern specialist's terminological literacy [1].

A large amount of new vocabulary, identified with the concepts unknown to the students at the pre-clinical stage of studying is a peculiarity of learning special terminology at the higher medical institution. Mastering conceptual and terminological medical apparatus is further complicated by a number of general medical and highly specialized terms in use.

Parallel studying of English for Specific Purposes and basics of anatomical, clinical and pharmaceutical terminology at Latin classes puts an additional academic strain on medical students, therefore making necessary for the teachers of English and Latin to find ways for facilitating the study of disciplines.

A way of choice is the use of comparative tasks enabling to master medical terminology in native language as well as in Latin and English. However, this approach suggests mastering differences in writing and pronouncing terms in different languages, etc.

Development of students' terminological competence should be based on the understanding that most medical terms reflect internal relations of modern medical science and practical medicine. Another essential aspect is that the language of medicine uses the terms formed on standard terminological models for verbalization of the most valuable knowledge in terms of professional communication, related to pathological processes and conditions as well as to causes, development mechanisms and symptoms of diseases. Presented as a separate block in current research are the issues of word formation in terminology and learning to predict word meaning and to form a proper word for expressing particular mean-

ing. These issues are essential for teaching medical terminology, since vocabulary volume and versatility require systematizing of tasks and exercises.

The objective of the research is to substantiate the use of integrative approach to teaching term formation that contributes to effective learning of English at the higher medical institution by providing firm understanding of the structural specifics of modern anatomical, clinical or pharmaceutical terms.

Theoretical framework. O. S. Hrebenyuk, L. V. Zastrizhna, I. S. Kozoriz, O. B. Petrova, B. Druganova, T. Hutchinson et al. account for the bulk of research dealing with the issues of medical terminology. However, despite the amount of research available, specifics of the use of English medical terminology still requires more detailed and deeper analysis, thus proving the relevance of the article.

O. B. Petrova argues that the course of English for Specific Purposes at the medical university includes medical terminology since it is basic for professional activity. It is the learning of medical terminology that may become a positive aspect in mastering foreign language communication in specialty. Knowledge of medical terms and acquiring skills and ability to use specialized medical vocabulary for doing educational tasks aimed at further professional communication are essential for medical students in the context of learning English [4, p. 123].

Proper training of healthcare professionals as well as formation of future medics' professional English language competence and culture require the educational process at higher institutions to be focused on the future specialists' learning language competences which contribute to developing speech activities: grammar, lexical, and phonetic [8, p. 144].

As one of the most ancient professional terminologies, medical vocabulary was formed on the native linguistic basis and absorbed the achievements of the human thought throughout many centuries. Medical term system in modern English is an extensive linguistic basis, performing important functions in the field of medicine and providing scientific and professional communication.

English medical terminology is a complex and dynamic system having clear boundaries in the lexical system of the English language. High communication significance of the term system under study is confirmed by interrelation with the literature language as well as with general scientific and other terminological systems alongside with active use in different spheres of social life. Composition diversity of the English terminology in view of its origin reflects long historical process of term system development, the specificity being due to underlying Greek and Latin language basis [2].

According to O. Selivanova, the main features of the terms are "consistency, classificatory definition, pursuit of monosemanticity and specification within

term systems and of inner form clarity; strict conventionality; involvement in the concept system of a certain field; compliance to linguistic norms ... accuracy and conciseness; derivation ability; invariance as the lack of versions and synonyms; high informational content” [5, p. 618].

When studying word formation of medical terms in the English language, various methods can be used: classification and systematization (in grouping synonyms, neologisms, paronyms, etc); description on the basis of static, genetics, etymology, word formation, comparison; comparison (in comparing terminological units); numerical calculation (when determining the types of medical terms), and social typing (when studying linguistic phenomena in sociology and history) [6].

The following ways of presenting terms in the process of teaching foreign language for specific purposes are distinguished: 1) verbal introduction of new words (translation, definition through the native language; description, definition in the foreign language; contextualization, explanation through the context; semantic analysis, explanation of the meaning of word forming elements); 2) visual introduction (figures, pictures, schemes, multimedia demonstrations). The above-mentioned consistency of scientific terminology makes it possible for the student to master vocabulary as a system of interrelated terms that covers a corresponding scientific and professional field rather than a list of isolated lexical units. Simultaneous use of active technologies and interactive teaching methods in the foreign language classes with the involvement of intercultural associative connections also increases motivation ratio and mastering of knowledge by the students [7]. The foreign language communicative competence as an integrative formation of personality has a complex structure and acts as an interaction and interpenetration of linguistic, sociocultural and communicative competencies. The level of formation allows future professionals to speak foreign language effectively and associate intercultural and interpersonal communication [10, p. 100].

Structural and semantic models comprised of Greek and Latin term element, which are used in modern international medical terminology, are vividly revealed in clinical terminology, e.g., Ukrainian terms: *абсцес, запам, сназм*; Latin terms: *abscessus, gastritis, spasmus*; English terms: *abscess, gastritis, spasm, etc*.

Learning of the medical terminology is more effective if the students are proposed to learn frequency patterns of term formation and structural elements which are regularly used for creation of the terms on the models. These Greek and Latin morphemes and blocks of morphemes were given a special name – term elements. The more particular they are, the more significant role they play in the medical

terminology. No matter whether term elements are learned in Latin or Ukrainian transcription, they are international and maintain terminological meaning. Knowledge of term elements minimum will enable to isolate them among terms and, by combining their meanings, to determine the overall meaning of many medical terms, e.g., knowing the root elements of Greek origin: *cephal(o)* – (head), *neur(o)* – (nerve), *cardi(o)* – (heart), *-algia* – (pain); semantic structure of the following terms can be understood: *cephalgia* (Latin), *cephalgia* (English); *cardialgia* (Latin), *cardialgia* (English); *myalgia* (Latin), *myalgia* (English); мышечная боль – *neuralgia* (Latin), *neuralgia* (English). Obviously, it is much easier to learn 200 most frequent term elements than hundreds thousands of clinical terms.

Derived terms made on standard models best meet the needs of modern international scientific medical community. For example, the most productive word forming models of single-word suffixal derivatives in Latin clinical terminology are those with suffixes *it(is)*, *-oma*, *-os(is)*. These suffixes are traditionally used for creating Latin medical terms which have become international. Here are the versions of their borrowing in Ukrainian and English: *bronchitis* (Latin), *bronchitis* (English); *carcinoma* (Latin), *carcinoma* (English); *stenosis* (Latin), *stenosis* (English). The major requirement to the medical term system as well as to the other existing terms is clear and unambiguous definition without synonymous line and discrepancies within terminological field. Nevertheless, synonymous form is a wide-spread phenomenon in the medical terminology which is still in the active phase of formation [9].

Modern scientific medical literature contains a number of terms which have appeared in recent years that can be somewhat problematic in translation. The first difficulty comes from a certain disorder of the medical terminology that is revealed in a great number of synonyms, while the second one is associated with the abundance of Greek and Latin terms in English medical vocabulary [3, p. 52].

Terminological competence develops integrally and in parallel with lexical one, the latter developing according to certain principles: collective interaction; integrativity (special disciplines, Latin and English); uniformity of learning speech activity and professional thesaurus; thematic conditioning; maximum approach to the conditions of real communication; consideration of didactic and psychological specifics of students [6]. Quantitatively, in the scientific texts the number of terms surpasses the other types of specialized vocabulary. On the average, terminological vocabulary usually accounts for 15-20 percent of the general vocabulary. To make an adequate translation, a modern medical specialist should possess knowledge of word forming and morphological structure of medical terms. Medical terminology is the most

specific vocabulary layer, significantly different from generally accepted language due to its structural, semantic, word forming, and stylistic specifics, thus resulting in the fact that terminology occupies a peculiar and relatively isolated place in the lexical system of the language [3, p. 52].

Familiarization with special terminology with the aim of its successful mastering should not be restricted to its presentation, explanation of word formation, use and connotation specifics. The teacher should constantly control how correctly students understand the meaning of terms in different professional and cultural contexts. Besides, selection of proper translation equivalents should be demanded.

Conclusions and Research Prospects. Thus, development of terminological competence is impossible without understanding that each branch of medical knowledge and each language possess nomination traditions as well as the set of linguistic forms, ways and methods of term modelling. When searching for the ways of terminological competence development at the higher medical institution, special

attention should be given to the integration principle in the organization of training. Besides, time and meaningful inter-subject relations should be taken into account, and attention to revealing semantic connections between sections and themes of linguistic and profile disciplines as well as to the integration of linguistic and special knowledge should be paid.

Formation and development of English medical and clinical terminology results from centuries-old history of medicine evolution and from versatile sources of replenishing its vocabulary. Introduction of the terms through the mediation of Greek and Latin is a direct reflection of the influence on the formation and development of medical language.

Undoubtedly, considered theoretical and practical aspects of learning English term system and formation of specific English communication in medical specialists do not exhaust all the depth of forms and methods of professional proficiency. Still, many issues of mastering and use of medical terms in professional communication are to be developed both on the theoretical and practical level.

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

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