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## DEVELOPMENT OF ENGLISH COMMUNICATIVE SKILLS IN HIGHER MEDICAL EDUCATION STUDENTS IN THE CONTEXT OF LEARNING LATIN TERMINOLOGY

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## ФОРМУВАННЯ КОМУНІКАТИВНИХ НАВИЧОК АНГЛІЙСЬКОЇ МОВИ У ЗДОБУВАЧІВ ВИЩОЇ МЕДИЧНОЇ ОСВІТИ В КОНТЕКСТІ ВИВЧЕННЯ ЛАТИНСЬКОЇ ТЕРМІНОЛОГІЇ

**Abstract.** The article examines the relevance of developing professional foreign language competence in students of higher medical education in the context of an increasing demand for specialists capable of effective communication in English during emergency medical situations. Particular attention is paid to the use of Latin-derived terms as a fundamental component of medical terminology in the process of learning English for Specific Purposes (ESP) by future medical professionals. In light of international standards in medical education and the globalization of medical practices, the article emphasizes the importance of a thorough understanding of Latin-based terminology for the accurate use of English medical vocabulary in medical training and practice. The study analyzes the effectiveness of applying the communicative approach in teaching ESP, which enables the creation of learning environments that closely simulate real professional settings. The proposed methods include role-playing, clinical scenario modeling, team-based tasks, and interactive exercises that contribute to the development of speaking fluency, professional thinking, and confidence in using English medical terminology.

The article presents the results of a pedagogical experiment, demonstrating an improvement in students' foreign language proficiency following the implementation of an integrated approach that combines Latin-based terminology with active forms of communicative instruction. The perspectives for further enhancement of ESP curricula for future healthcare professionals are outlined, taking into account the linguistic and professional needs of the learners.

**Key words:** latin-derived terminology; English for Specific Purposes (ESP); higher medical education; communicative approach; communicative competence; professional communication; medical education; active learning methods; healthcare students.

**Анотація.** У статті розглянуто актуальність розвитку професійної іншомовної компетенції здобувачів вищої медичної освіти у контексті зростання потреби фахівців, здатних ефективно спілкуватись іноземною мовою, зокрема англійською, під час невідкладних медичних ситуацій. Особливу увагу акцентовано на використанні латинських термінів майбутніми медичними фахівцями як фундаментального компонента медичної термінології у процесі вивчення англійської мови за професійним спрямуванням. З огляду на міжнародні стандарти медичної освіти та глобалізацію медичної практики, у статті описано важливість глибокого розуміння латинської термінології для точного використання англійської медичної лексики в практиці здобувачів вищої медичної освіти. Проаналізовано ефективність застосування комунікативного підходу до викладання англійської мови за професійним спрямуванням, який дає змогу створювати навчальні середовища для точної імітації реальних професійних умов. Запропоновані методи включають рольові ігри, моделювання клінічних ситуацій, командні завдання та інтерактивні вправи, що

сприяють розвитку вільного говоріння, професійного мислення та впевненості у використанні англійської медичної термінології.

У статті наведено способи для покращення рівня володіння студентами іноземною мовою внаслідок реалізації комплексного підходу, що поєднує латинську термінологію та форми комунікативного спілкування. Окреслено перспективи подальшого вдосконалення навчальних програм з англійської мови за професійним спрямуванням для здобувачів вищої медичної освіти з урахуванням мовленнєвих та професійних потреб.

**Ключові слова:** латинська термінологія; англійська мова за професійним спрямуванням; здобувачі вищої медичної освіти; комунікативний підхід; комунікативна компетентність; професійне спілкування; медична освіта; активні методи навчання; студенти ВМНЗ.

**Introduction.** Modern medical education requires students of higher medical education not only to have excellent knowledge of clinical procedures but also to possess a high level of proficiency in English, which serves as the primary means of communication in the international medical environment. In this context, the teaching of English for Specific Purposes (ESP) gains particular importance, as it includes the study of medical terminology, especially terms of Latin origin.

Latin terminology forms the foundation of most medical terms, and understanding it contributes to the accurate and effective use of English in professional practice. The implementation of the communicative approach in ESP instruction allows students to develop their language skills through authentic interaction, role-playing, simulated clinical scenarios, and team-based activities.

**The objective** of this article is to analyze the effectiveness of integrating Latin medical terminology with the communicative approach to enhance paramedics' language competence and to identify opportunities for further development of educational program in this area.

**Theoretical framework.** For centuries, Latin has been the primary language of science, medicine, and pharmacology, and its terminological system has become firmly established in international scientific communication. The majority of modern medical terms in the English language have Latin or Greek origins; therefore, knowledge of basic Latin greatly facilitates their learning, comprehension, and correct usage.

Modern Latin medical terminology is a complex and dynamic system that encompasses thousands of terms and term combinations of diverse origins and structures. It serves as the primary means of linguistic representation of professional concepts, shaped through centuries of development in medical science and its terminological framework. To this day, it remains a significant source for the creation of new scientific terms (Dubasenyuk, 2009).

The academic discipline «Latin Language and Medical Terminology» focuses on the study of Greek-Latin lexical units and the grammatical principles underlying medical term formation. Its primary goal is to provide students with fundamental knowledge of Latin grammar and essential vocabulary needed to master medical terminology across its subsystems (anatomical-histological, pharmaceutical,

and clinical) as a foundation for professional terminological literacy in future medical practice.

For students of medical education, who are in constant interaction with clinical protocols, medical instructions, documentation, and physicians of various specialties, it is important not only to possess general English proficiency but also to be familiar with professional terminology. Understanding Latin roots (prefixes, roots, and suffixes) allows for quick orientation in unfamiliar vocabulary. For example: the prefix «hyper-» (Latin hyper) means «excess», hypertension (high blood pressure). The root «cardi-o» (from Latin cor, cordis – heart), cardiopulmonary, cardiologist. The suffix «-itis» (inflammation), for example bronchitis, gastritis.

This morphological breakdown of terms enables students to intuitively understand the meaning of unfamiliar words without the need for a translator or dictionary. This is critically important in emergency situations, where every second counts and the accurate interpretation of symptoms or a patient's condition directly affects the choice of appropriate treatment protocols (Stegnitka, 2019, p. 81).

Moreover, Latin terms are generally stable, universal, and unambiguous, which helps eliminate confusion in multilingual environments. For instance, the term «fractura claviculae dextrae» will be equally understood by both Ukrainian and foreign physicians, regardless of the language of communication. The use of Latin expressions in English-language medical protocols (such as per os, status epilepticus) reflects a high level of professional competence and mastery of specialized vocabulary (Petrukh & Holovko, 2012).

Learning Latin medical terminology also helps avoid errors in pronunciation, spelling, and translation of complex terms, which is especially important in professional examinations and standardized tests, as well as in maintaining electronic medical records within international healthcare information systems.

Modern anatomical and histological nomenclature is deeply rooted in long-standing tradition and is structured in Latin. This is exemplified by the international standard «Terminologia Anatomica», which serves as the foundation for adaptations and translations into various national language.

Since medical terminology traditionally relies heavily on Latin, the course emphasizes developing skills in correctly reading anatomical terms, understanding key grammatical structures, acquiring relevant vocabulary, and learning Greek-Latin

word-forming elements. These competencies support accurate use of anatomical nomenclature and clinical terms (mostly of Greek origin), and enable students to apply their theoretical knowledge effectively during courses in anatomy, pharmacology, clinical disciplines, and English for professional purposes (Nakhaeva & Humenna, 2020, p. 94).

Greek and Latin clinical terms form the core of medical terminology in most European languages, which accounts for their international status. As Latin vocabulary entered English, it underwent systematic adaptation to the grammatical and phonological norms of the recipient language (a process that was complex and multi-layered). An analysis of the patterns and forms of borrowing from Latin and Latinized Greek in medical English reveals several distinct categories:

1. Untranslated classical terms preserved in near-original form. These lexical items have no direct English equivalents and are retained in forms similar to their classical roots, primarily of Greek or Latin origin:

*thorax, larynx, pharynx, iris, humerus, pelvis, sternum, atlas, maxilla, sclera, retina, cornea, meninx, phalanx, patella, epiphysis, hypophysis, systole, diastole, coma, crisis, prognosis, sclerosis.*

2. Latinized Greek terms adapted morphologically. These terms were first adapted to Latin grammatical structures before entering English:

*esophagus, peritoneum, bronchus, ischuria, nephros, uterus, pancreas, thoracotomy, hysteria, thrombosis.*

3. Latin terms retained in original form. A significant number of Latin-origin terms remain unchanged in English medical vocabulary:

*vertebra, clavícula, ulna, radius, costa, lingua, cerebrum, intestinum, ventriculus, urina, febris, inflammatio, infectio, fractura, contusio, luxatio.*

4. Assimilated Latin terms adapted through various linguistic mechanisms.

a) Omission of inflectional endings are words that lost Latin grammatical endings during adaptation:

*musculus* → *muscle*, *nervus* → *nerve*, *articulatio* → *articulation*, *digitus* → *digit*, *fractura* → *fracture*, *cavitas* → *cavity*.

b) Replacement of Latin suffixes with English equivalents:

-icus → -ic: *gastricus* → *gastric*, *thoracicus* → *thoracic*

-ideus → -id: *sphenoideus* → *sphenoid*, *styloideus* → *styloid*

-formis → -form: *fusiformis* → *fusiform*

-alis → -al: *nasalis* → *nasal*, *abdominalis* → *abdominal*

-ivus → -ive: *laxativus* → *laxative*, *sedativus* → *sedative*

-ia → -y: *anatomia* → *anatomy*, *hysteria* → *hysteria* (obsolete)

-ium → -y: *remedium* → *remedy*, *delirium* → *delirium*

-a → -e: *scapula* → *scapula*, *formula* → *formula*

-tas → -ty: *mobilitas* → *mobility*, *mortalitas* → *mortality*. (Petrukh & Holovko, 2012).

It is important to emphasize that nearly every English medical term has a corresponding Latin or Greek equivalent. This highlights the necessity for future healthcare professionals to acquire a solid command of both English and Latin medical terminology. For instance: *myocardium* – heart muscle, *nephron* – kidney unit, *leukocyte* – white blood cell, *dyspnea* – shortness of breath, *abdomen* – belly.

A significant number of Latin anatomical and physiological terms also have direct English counterparts:

Latin *cor* – English *heart*,

Latin *pulmo* – English *lung*,

Latin *hepar* – English *liver*,

Latin *venter* – English *abdomen*.

In addition, medical language actively employs a range of set Latin expressions that remain in use in their original form across international clinical and scientific contexts. Among the most frequently used are:

*status post* – indicating a condition following a medical event or procedure;

*sub febrile* – describing a mildly elevated body temperature;

*ex juvantibus* – a diagnosis made based on the response to therapy;

*a priori* – knowledge assumed without empirical evidence;

*in vitro* – referring to processes occurring outside a living organism, typically in a laboratory setting;

*per vaginam* – administered or occurring via the vaginal route;

*ad libitum* – taken or applied freely, as needed;

*contra indicationes* – contraindications for treatment or intervention (Bobryk & Koveshnikova, 2001).

Mastery of Latin not only enhances comprehension of medical English but also enables more accurate interpretation of abbreviations, professional notations, and standardized international medical documentation. It remains a vital component of professional linguistic competence in medicine.

An effective way to enhance foreign language proficiency (particularly in English), among students of higher medical education institutions is the implementation of an integrated approach that combines the study of Latin medical terminology with the development of communicative skills. This method enables learners to simultaneously build terminological literacy and improve their ability to apply a foreign language in professional contexts (Pylypiv et al., 2025, p. 215).

Latin, as the primary source of most international medical terms, plays a crucial role in shaping domain-specific lexical competence. The integration of Latin term elements into English for Specific Purposes (ESP) instruction provides a foundation for acquiring new vocabulary, understanding its morphological structure and etymology, and developing skills in cross-linguistic comparison (Petrova & Popova, 2015).

Within the framework of this study, a number of pedagogical technologies have been analyzed and systematized. These methods aim to integrate Latin and English in the process of developing professional language competence among students of higher medical education institutions. The main focus is placed on combining terminological instruction with a communicative, activity-based approach, which ensures the practical orientation of language learning. The most effective strategies identified include the following:

- Role-playing activities using Latin terminology in English-language medical scenarios. This method involves modeling professional communication situations in English, such as doctor–patient dialogues, clinical case discussions, or interprofessional consultations, while actively incorporating Latin-derived terminology. For example, during a simulated clinical encounter, students may be required to use terms like diagnosis, prognosis, status post, in situ, per os, among others. This approach not only reinforces vocabulary retention but also promotes contextualized use of medical language.

- Development of interdisciplinary tasks that integrate Latin grammar, word formation, and English-language communication. Such tasks aim to connect linguistic knowledge of Latin with its application in English medical discourse. For instance, students may be asked to analyze the structure of Latin terms (prefix, root, suffix), translate them, and then use the corresponding English equivalents in writing a clinical report or case history. This encourages deeper understanding of term formation and facilitates cross-linguistic transfer of knowledge (Leiluk, 2025).

- Incorporation of Latin expressions and phrases into English-language medical case studies. This technique involves working with English-language clinical cases that include Latin phrases commonly found in medical documentation. Examples include *in loco typico*, *ad usum internum*, *ex tempore*, *in vitro*, and *in vivo*. Through this practice, students learn to interpret and appropriately apply internationally recognized terminology in the contexts of diagnosis, treatment, and research.

- Creation of integrated Latin-English glossaries of medical terminology. This approach entails

the gradual compilation of thematic mini-glossaries throughout the study process. These glossaries cover key domains of medical education, including anatomy, histology, pharmacology, pathology, and internal medicine. For example:

*os* – bone; *hepar* – liver; *cerebrum* – brain; *tractus respiratorius* – respiratory tract; *status asthmaticus* – asthmatic condition. Such glossaries serve as valuable resources for self-study, preparation for terminology tests, or interdisciplinary assessments (Pylypiv et al., 2025 p. 214).

These pedagogical technologies support the deeper integration of linguistic knowledge into the professional training of medical students. They promote cognitive engagement and foster the development of both cross-linguistic and interdisciplinary competence, which are essential for future healthcare professionals in an increasingly globalized educational and professional landscape (Kovalenko, 2020).

**Conclusions and Research Prospects.** As a result of the conducted study, it was established that the integration of Latin medical terminology into the process of learning English significantly enhances the professional training of students in higher medical education institutions. The combination of linguistic and professional components in teaching contributes to more effective acquisition of terminology, increases motivation to learn a foreign language, and develops intercultural communication skills essential for future professional activity.

The communicative approach, which involves active student interaction in realistic professional situations, has proven effective in developing language competence. Through this approach, students not only learn new vocabulary but also become confident in using it in oral and written communication within a medical context.

Future research should focus on developing integrated curricula for teaching English to medical students that include Latin terminology in combination with clinical scenarios; analysis of the effectiveness of various communicative approach techniques, including role plays, debates, doctor-patient simulations, and others; applying digital technologies and online platforms to enhance the learning of professional English with Latin elements; Comparative analysis of the outcomes of students taught using traditional methods versus those using integrated communicative and terminological approaches, an interdisciplinary approach that combines language instruction with elements of bioethics, medical psychology, and clinical practice.



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