MEDICAL TERMINOLOGY COMPETENCIES IN NURSING: EDUCATIONAL CHALLENGES AND CLINICAL PRACTICE

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Abstract: In contemporary healthcare, the role of nurses has evolved significantly, requiring enhanced professional competencies including mastery of specialized medical terminology for effective interdisciplinary communication and accurate documentation. This necessity underlies the present study.Purpose: Latin-based medical terminology constitutes the foundation of professional communication in healthcare. Nurses actively use specialized terminology in their daily practice both for interdisciplinary communication and for maintaining medical documentation. The present study aims to analyze the role and practical application of Latin medical terminology in nursing practice and to emphasize its significance for professional competence across various clinical departments. Materials and Methods: The study includes an analysis of the medical terminology curriculum for nursing students at Bulgarian medical universities, a systematic review of terminology usage requirements in the clinical environment based on professional healthcare experience, and an assessment of terminological needs across different fields of nursing practice (surgical, pediatric, intensive care, etc.).Results: Nursing education provides basic terminological knowledge that students apply in diverse clinical contexts. Daily nursing practice requires active command of anatomical, clinical, and pharmaceutical terminology for: professional communication during rounds and shift handovers; accurate completion of medical documentation (admission registers, temperature/resuscitation charts, ward round notebooks, hemotransfusion documentation, etc.); correct understanding of medical orders and prescriptions; and the performance of nursing procedures. Terminological competence directly affects the quality of professional communication, patient safety, and the professional identity of nurses. Conclusion: Latin medical terminology remains an essential professional tool not only for nurses but also for all healthcare professionals. The study highlights the practical importance of education in Latin language and medical terminology, as well as the need for continuous professional development in this field, particularly with regard to the most frequently used clinical terms in medical documentation and interdisciplinary communication. Recommendations: It is recommended that medical terminology curricula incorporate more clinical case studies and practical examples drawn from medical documentation. Continuous professional development programs focusing on specialized clinical terminology should be provided and made accessible to practicing nurses across all healthcare institutions and clinical settings.
Keywords: medical terminology, Latin, nursing, clinical practice, medical documentation

1. INTRODUCTION

The contemporary healthcare system requires nurses to possess not only clinical competencies and technical skills, but also highly developed abilities in professional communication and medical documentation management. Nurses function as a crucial link in the interdisciplinary team, participating in patient care coordination, information exchange during ward rounds, shift handovers, and maintaining comprehensive medical records (Smith & Jones, 2020). This multifaceted role demands command of specialized medical language that facilitates precise communication and ensures patient safety. Latin-based medical terminology has historically established itself as the universal language of medicine, transcending linguistic and geographical boundaries (Thompson, 2019). The acquisition and proper understanding of medical terminology is an important factor in the education of students at medical universities and serves as a prerequisite for mastering the other disciplines included in the curriculum of medical specialties, as emphasized by Mirchev and Oprova (2024, p. 275). Despite the dominance of national languages in clinical practice, Latin terminology remains indispensable for several key functions: standardization of anatomical nomenclature according to *Terminologia Anatomica*, international communication in scientific publications and clinical case presentations, precise documentation of diagnoses according to the ICD-10 classification, as well as writing pharmaceutical prescriptions in accordance with established conventions (Dirckx, 2006; Wulff, 2004). For nurses, terminological competence extends beyond the boundaries of academic knowledge and becomes an essential professional tool applied daily in various clinical contexts. They must accurately document patient conditions in epicrises, maintain detailed records in admission registers and ward notebooks, interpret physician orders containing Latin abbreviations and terminology, and communicate effectively using anatomical and clinical terms in professional interactions (Garcia et al., 2021). The quality of this terminological foundation directly impacts professional credibility, the effectiveness of interdisciplinary collaboration, and ultimately patient safety outcomes.

In Bulgarian medical universities, nursing students receive formal education in Latin language and medical terminology, which typically comprises 30 academic hours within the curriculum. As Mirchev (2019b) concludes, "nurses, midwives, and other specialties with similar Latin language curriculum hours experience difficulties primarily in mastering the grammatical material, which is absolutely necessary for the correct use of anatomical and clinical terminology" (p. 447). This educational foundation aims to provide future nurses with the necessary terminological knowledge for their professional practice. However, the relationship between academic preparation and the diverse terminological requirements of clinical reality deserves systematic examination.
Aim of the study: The present study aims to analyze the role and practical application of Latin medical terminology in nursing practice, to examine the terminological requirements across various clinical specializations, and to emphasize the significance of terminological competence for professional nursing practice in the contemporary healthcare environment.

2. MATERIALSAND METHODS

This study uses a qualitative analytical approach combining curriculum and documentation analysis with observation in a real clinical setting. The methodology comprises three complementary components that provide comprehensive information on the need for terminological knowledge in nursing practice. First, an analysis of the educational documentation was carried out, which included a detailed study of the Latin language and medical terminology curricula for nursing students at several Bulgarian medical universities. The analysis focused on the structure, content, and scope of the Latin language and medical terminology courses with a 30-hour curriculum, as well as on the distribution of teaching hours between anatomical, clinical and pharmaceutical terminology, and the methodological approaches used in teaching specialized terminology. Based on professional experience in the field of healthcare and actual clinical observation, a systematic review of the requirements for the use of terminology in various clinical departments was conducted. This component involved observing the daily activities of nurses in a variety of clinical settings, including surgical wards, pediatric wards, intensive care units, obstetrics wards, and internal medicine wards. Particular attention was paid to clinical situations requiring a good knowledge of specialized terminology—participation in multidisciplinary consultations, professional communication with doctors and healthcare specialists, interpretation of medical prescriptions, and practices for preparing and drafting documents.

3. RESULTS AND DISCUSSION

The medical terminology curriculum for nursing students at Bulgarian medical universities follows a standard framework of 30 academic hours, 2 ECTS credits, which are taught through seminars, usually during the first semester of the first academic year. This educational model reflects the national recognition of the enormous importance of Latin medical terminology as a foundation for professional nursing education. The curriculum covers three main components: anatomical nomenclature in accordance with Terminologia Anatomica, clinical terminology (including diagnostic formulations), and pharmaceutical terminology necessary for the correct interpretation of medical prescriptions. An analysis of the curriculum content at several medical universities (Medical University – Plovdiv, Medical University – Pleven, Medical University – Varna, Veliko Tarnovo branch) shows a consistent emphasis on the grammatical basics necessary for the accurate formation and understanding of terms. Within the 30-hour course, approximately 40% of the training is devoted to morphology (first to fifth declension), 30% to the formation of clinical terms using Greek word-forming elements, and 30% to practical application in an anatomical and clinical context. This distribution gives priority to functional competence over comprehensive grammar teaching, recognizing the practical nature of knowledge of Latin terminology in medical practice. However, the relationship between the educational perspective and the terminological needs of clinical reality requires critical discussion. As Mirchev (2019a) notes, "Latin, like any other language, cannot be understood without grammar and rules for forming terms. If these rules are mastered, even new terms can be understood" (p. 9). This observation highlights a fundamental contradiction: although 30 hours provide the necessary basic training in medical Latin and terminology, the complexity of the grammatical structures that underlie the accurate use of terminology remains a challenge for students who subsequently go on to various clinical departments, but also for teachers who must find a balance in teaching specialized terminology. Medical practice requires active mastery of Latin terminology in a variety of clinical areas, each of which has its own specific terminological needs. Clinical practice in healthcare facilities shows that nurses regularly encounter specific terminology used in surgical, pediatric, intensive care, obstetric, and inpatient departments, which they must understand accurately. Medical documentation is a key area where terminology competence directly affects the quality of work. Nurses regularly fill out patient admission records, maintain temperature and resuscitation charts, document their observations in visitation logs, and record procedures such as blood transfusions.. All types of medical documentation require precise use of diagnostic

terminology, anatomical references, and procedural definitions. For example, in surgical practice, medical documentation must accurately reflect conditions such as gangrenous appendicitis, hydrocele, or testicular retention. Terminological errors can lead to misunderstandings when transferring patients between nurses, incomplete medical records, and potential risks to patient safety. According to Mirchev and Oprova (2023), "Latin medical terminology is characterized by precision and universality and should therefore be present in medical documentation" (p. 238). Professional communication during multidisciplinary discussions and shift handovers depends largely on the precise and correct use of terminology. Nurses must understand and apply anatomical terms when discussing patients' conditions with physicians, interpret diagnostic terminology when receiving medical instructions, and communicate effectively using clinical vocabulary during consultations. Such communication takes place in real clinical situations where terminological precision is crucial. For example, reporting dyspnoea cum cyanosi ("dyspnoea with cyanosis") ensures accurate clinical understanding rather than vague colloquial descriptions. Correct and fluent use of clinical terminology by healthcare professionals—physicians or nurses—represents a key factor in building trust between professionals and patients, which in turn increases the effectiveness of healthcare provision (Mirchev, 2025, p. 65). In the context of pharmacology, interpreting prescriptions and medical orders also requires competence in pharmaceutical nomenclature, knowledge of Latin abbreviations (bis in die, ter in die, quantum satis) and recognition of dosage forms (solutio, suspensio, unguentum). Although national languages are increasingly used in modern prescription practice, Latin abbreviations and international non-proprietary names (INN) – often of Latin origin – continue to be widely used. Different nursing specialties use different terminological "databases." Operating room nurses need to be familiar with the terminology of surgical instruments and the names of procedures. Nurses in intensive care units need terminology related to vital functions, invasive procedures, and complex pathophysiological conditions. Pediatric nurses encounter age-specific conditions and terminology related to development. Maternity nurses must master extensive obstetric and gynecological terminology from the prenatal to the postnatal context. Therefore, each specialty imposes specific terminological requirements that go beyond the scope of the basic 30-hour course. If we focus on academic training and clinical practice, we will see that there is a significant difference between the two. The standard 30-hour course provides basic knowledge, but the broad scope and complexity of terminology in clinical practice pose significant challenges. The curriculum successfully introduces students to basic grammatical structures, basic anatomical vocabulary, and the principles of clinical term formation. Students acquire knowledge of noun declensions, agreement rules, and about 300–400 frequently used terms in anatomical and clinical contexts. At the same time, clinical practice requires the recognition and correct use of dozens of terms in different situations. The transition from the educational environment to clinical practice often reveals gaps in terminological training. Newly graduated nurses often encounter unfamiliar terms in specialized departments, experience difficulties with complex diagnostic constructions composed of multiple word-forming elements, and encounter difficulties in accurately documenting conditions that go beyond the scope of the core curriculum. This gap does not necessarily indicate shortcomings in the structure of the curriculum, but rather reflects the objective complexity of preparing students for the extensive terminological spectrum of modern medicine within a limited number of teaching hours.

The distribution of hours between Latin ethics and medical terminology represents a pragmatic balance between basic knowledge and the general limitations of the curriculum. However, recognition of this difference highlights the need for continuous professional development in the field of medical terminology throughout the career of nurses. It is noteworthy that medical, dental, and pharmacy students at Bulgarian medical universities study 60 academic hours with 6 ECTS credits in Latin and medical terminology—twice as many hours as those allocated to nursing students. This more extensive training reflects the central role of Latin in anatomical, clinical, and pharmaceutical nomenclature and in the practice of prescribing medications. Although nurses and doctors have different professional profiles, the ratio of hours allocated to them raises questions about the optimal level of medical terminology training for health professionals who have similar responsibilities in terms of documentation and professional communication. Several approaches could increase the effectiveness of medical terminology training and support the development of competence in practice.

When teaching Latin, prioritizing the most commonly used terminology in medical practice can increase the practical usefulness of the course. Including real examples from clinical documentation, diagnostic formulations related to common conditions, and terminology from typical clinical cases ensures that students are exposed to material that is directly applicable in real medical practice. This approach is also supported by Milanov and Mirchev in their textbook, which is intended for medical professionals with limited knowledge of Latin (Milanov & Mirchev, 2024). The integration of clinical cases that require terminological interpretation provides training in a context that is relevant to professional application. Organizing training from basic anatomical terminology to increasingly complex models of clinical word formation allows students to build competencies in a systematic way. Early emphasis on recognizing and understanding terms can precede their active use, given that passive terminological knowledge often

develops before active use in a professional context. The development and provision of specialized terminological resources—specialty-based glossaries, digital applications for term verification, and online learning modules—can support both initial learning and subsequent professional needs. Contemporary technologies enable interactive and searchable resources that surpass the limitations of traditional printed materials. Regardless of the growing trend toward digital healthcare and multilingual resources, Latin will continue to provide a reference framework for maintaining linguistic accuracy and supporting interdisciplinary collaboration (Mirchev, 2025, p. 64). Since terminological competence also develops through clinical exposure, workplace-based learning strategies are essential. Orientation programs for newly employed nurses that include terminology review tailored to the specific department, mentorship practices, and unit-based glossaries can facilitate the transition from classroom learning to clinical reality. Providing opportunities for continuing education in Latin and medical terminology for practicing nurses will meet the real needs for continuous improvement of skills in the proper use of clinical terminology. Short-term courses focused on specialized medical terminology, workshops discussing common challenges in working with medical documentation, and periodic retraining courses can support the sustainable development and improvement of nurses. Despite developments in healthcare and the increasing use of national languages in the clinical environment, medical Latin terminology retains key functions that guarantee its fundamental role. International terminological standardisation, provided by the Latin language, facilitates professional communication across language barriers, ensures accurate anatomical and pathological descriptions without ambiguity, and guarantees continuity with the long-standing scientific tradition in medicine. For nurses, mastery of this terminology is not simply an academic achievement, but a vital professional tool necessary for safe and effective practice and for adequate participation in interdisciplinary teams providing health care.

4. CONCLUSION

Latin medical terminology remains an essential professional tool for nurses and all healthcare professionals in modern clinical practice. Despite the continuous development of healthcare and the increasing use of national languages in medical documentation, the standardized Latin-based terminology framework continues to perform key functions: it facilitates accurate interdisciplinary communication, ensures the international standardization of medical nomenclature, and maintains continuity with accumulated scientific knowledge in the field of medicine. This study examines the role and practical application of Latin medical terminology in nursing practice, analyzing both the training provided in universities—curricula and textbooks—and the requirements for the use of terminology in different clinical departments. The analysis shows that the standard 30-hour course included in nursing education at Bulgarian medical universities provides basic training in anatomical, clinical, and pharmaceutical terminology. This educational foundation successfully introduces students to core grammatical structures, fundamental anatomical vocabulary, and the principles of clinical term formation. However, the breadth and complexity of terminological requirements in clinical reality—including those in surgery, pediatrics, intensive care, obstetrics, and internal medicine—significantly exceed what can be comprehensively mastered within the limits of a 30-hour introductory course. In everyday practice, nurses encounter dozens of specialized terms used in medical documentation, interdisciplinary communication, pharmaceutical contexts, and specialty-specific clinical situations depending on the profile of the department. This gap between academic preparation and clinical requirements does not reflect a weakness of the curriculum; rather, it highlights the vast scope of medical terminology and the practical limitations of introductory instruction within the broader nursing curriculum. Recognition of this gap emphasizes the critical need for continuous professional development in medical terminology throughout nurses' professional careers. Terminological competence is not a static skill acquired solely during initial education, but a dynamic professional capacity that develops and is refined through clinical experience, workplace learning, and continuing education. Therefore, health institutions and educational structures must collaborate to support the sustainable development of medical Latin terminology training through appropriate programs tailored to specific clinical departments, mentoring programs that provide guidance on terminology usage, access to specialized reference resources, and periodic training focused on relevant terminology within the dynamic clinical environment. Optimizing Latin terminology training within existing curricula can increase its effectiveness by prioritizing the most commonly used terminology in general medical practice. The inclusion of real-life examples from clinical documentation and case studies, the application of modern teaching methods (from recognition to active use of terms), and the use of digital technologies to provide interactive learning resources and easily accessible reference tools will also contribute to the full acquisition and application of medical terminology. Such approaches increase the practical usefulness and effectiveness of Latin terminology training, while recognizing that full mastery of terminology develops through continuous professional development.

The importance of Latin medical terminology for the professional development of nurses goes beyond the need for functional communication and is closely linked to their professional identity and authority within the

interdisciplinary team in the clinical department. A good command and use of clinical terminology allows nurses to participate fully in clinical discussions, accurately document the condition of patients, correctly interpret diagnostic information, and communicate effectively with doctors and other medical professionals. Terminological competence is therefore not just technical knowledge, but an essential component of nurses' professional qualifications that directly affects patient safety, quality of care, and professional recognition.

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