

Enhancing Medical Terminology Acquisition Through Authentic Drug Instructions For Medical Students

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Abstract: This article explores the integration of authentic drug instructions (ADIs)—real pharmaceutical leaflets written in the target language—into medical language education as a means to improve the acquisition and retention of medical terminology. Drawing on a pilot program conducted at Bukhara State Medical Institute, this study demonstrates how ADIs can support contextual learning, enhance reading comprehension, and foster deeper engagement through interactive activities like student-generated quizzes on Kahoot. Key challenges, such as linguistic complexity and student motivation, are also addressed with practical solutions. The results suggest that ADIs not only bolster vocabulary acquisition but also prepare students for real-world clinical communication and professional development.

Keywords: Medical English, medical terminology, authentic materials, drug instructions, language acquisition, English for Medical Purposes (EMP), vocabulary retention, Kahoot, contextual learning, student engagement.

Introduction: In an increasingly globalized world, proficiency in foreign languages, particularly in specialized fields like medicine, is essential for healthcare professionals. Medical students often face challenges in mastering medical terminology in a foreign language due to the complex, technical nature of the vocabulary and the need for precise understanding. One innovative approach to address this challenge is the use of authentic drug instructions—real, unmodified pharmaceutical leaflets or medication guides written in the target foreign language—as a learning tool. This article explores how authentic drug instructions can facilitate the formation of foreign language medical terminology among medical students, enhancing both their linguistic and professional competencies.

Medical terminology forms the backbone of effective communication in healthcare. For medical students learning in a foreign language, understanding and correctly using medical terms is critical for accurate diagnosis, treatment, and patient interaction. Mastery of terminology also underpins their ability to engage with international research, attend conferences, and collaborate across borders.

Traditional teaching methods for medical terminology

often rely on textbooks, glossaries, and controlled vocabulary lists, which may lack contextual richness and fail to expose students to real-world language usage. This gap can result in passive learning and limited retention.

Vocabulary knowledge plays an important role in EMP because it is based on specific terminology. According to Kondratyev (2018), there are approximately 60,000 medical words. It is required for a doctor to know medical terms of which 70 % are derived from Greek and Latin origin. Hence, it is not surprising that medical terminology is taught at several medical universities as a creditbearing course. This course can come under different names, such as “Medical terminology”, “Latin and foundations of medical terminology”, “Greek-Latin medical terminology”, “Foundations of medical terminology” in medical universities in the European Union countries (Kondratyev, 2018). Medical terminology mainly consists of prefixes, which can denote the number, measurement, location and others, suffixes, and word roots. As these words are built on affixation rules, it is of significance to know not only the word roots but also the affixes (prefixes and suffixes). In this regard, studies have considered word formation rules and suggested training learners in specific medical terminology (Antic, 2009; Pavel, 2014;

Piroozan, Boushehri, Fazeli, 2016). For example, Pastae (2017) suggested mind-mapping games for teaching prefixes. McGuire (2009) categorized terminology learning under three categories: repeatedly encountering the words, making inferences through prefixes, suffixes and roots, and memorization through medical terms.

Authentic Drug Instructions as a Learning Resource

Authentic drug instructions—also called package inserts or patient information leaflets—are official documents provided with medications, detailing usage, dosage, contraindications, side effects, and other relevant information. These documents are usually written in the language of the target audience and contain specialized vocabulary embedded within a clear, functional context. There are several advantages of using authentic drug instructions:

- 1. Contextual Learning:** Drug instructions provide real-life contexts where medical terms are naturally integrated, helping students understand their practical usage.
- 2. Exposure to Standardized Terminology:** These documents follow regulatory standards and employ consistent terminology, reinforcing correct language use.
- 3. Development of Reading Comprehension:** Students enhance their ability to comprehend complex texts, including understanding instructions critical to patient safety.
- 4. Improved Retention:** Learning terms within meaningful contexts improves memory retention compared to rote memorization.
- 5. Cultural and Regulatory Insights:** Students gain awareness of different healthcare systems and regulatory requirements, broadening their professional outlook.

Methodology for Implementing Authentic Drug Instructions in Medical Language Training includes: To effectively incorporate authentic drug instructions into the curriculum, educators can adopt the following strategies:

- 1. Selection of Materials:** Choose drug instructions that are relevant to the course content and appropriate for the students' language proficiency level. Ideally, these should cover commonly used medications and a variety of medical fields.
- 2. Pre-Reading Activities:** Introduce key vocabulary and phrases beforehand to ease comprehension. Discuss the structure of drug instructions and typical sections students should expect to encounter.
- 3. Guided Reading and Analysis:** Students read the

drug instructions, identify unfamiliar terms, and analyze the text. This can be done individually or in groups to foster collaboration.

- 4. Vocabulary Building Exercises:** Create glossaries, flashcards, or quizzes based on the terminology extracted from the drug instructions.
- 5. Practical Application:** Encourage students to summarize instructions, translate key sections, or simulate patient counseling using the terminology learned.
- 6. Integration with Clinical Practice:** Link the terminology study with clinical cases or simulations where the knowledge of drug instructions is applied, reinforcing the relevance of the material.

Challenges and Solutions

- 1. Complexity of Language:** Drug instructions often contain dense and technical language, which may overwhelm beginners. Solution: Scaffold learning by simplifying initial texts and gradually increasing complexity. Use glossaries and teacher support to clarify difficult concepts.
- 2. Limited Student Motivation:** Some students may find reading drug instructions tedious or irrelevant. Solution: Emphasize the practical importance of these texts in real clinical settings. Use interactive activities and real-life scenarios to maintain engagement.
- 3. Variations in Terminology Across Languages:** Differences in medical terms and naming conventions can confuse students. Solution: Highlight equivalent terms in students' native languages and explain nuances. Provide comparative glossaries to support understanding.

Case Study: Application in a Medical English Course

At Bukhara State Medical Institute, a pilot program integrated authentic English drug instructions into the Medical English curriculum for medical students. Over a semester, students worked with selected drug leaflets, participated in vocabulary-building workshops, and engaged in role-plays simulating patient consultations.

Outcomes:

- Improved reading comprehension scores in standardized tests.
- Enhanced vocabulary retention demonstrated in quizzes.
- Positive student feedback on relevance and usefulness.

This experience underlines the potential of authentic materials to bridge language learning with professional medical training.

Kahoot Project: One of the interactive activities implemented in the class was through the online tool, called Kahoot (www.kahoot.com). This is a game-based learning platform and has been successfully implemented in schools and educational institutions. The students already had some prior experience in using the Kahoot platform in their other lessons. Usually, teachers prepared quizzes, and students answered test questions using the Kahoot platform. However, in this study, the students prepared their quizzes. The purpose was to engage the students in producing test questions and actively exploring the chapters/words rather than being passive receivers. For this project, students were assigned reading chapters on a specific body system and preparing online quiz tests with 30 questions. After I checked their assignments, the quiz tests were used for revision purposes in the class. Hence, the test questions were projected on the whiteboard, and the students used their mobile phones to answer the questions. For this, students installed the Kahoot app on their mobile phones and gained access to quiz tests with the code that I provided. At the end of the activity, Kahoot automatically provided the scores. After each project, students discussed the questions and shared their reflections on these projects.

CONCLUSION

The use of authentic drug instructions is a valuable method for forming foreign language medical terminology among medical students. By providing contextualized, standardized, and practical language input, these materials enhance both linguistic proficiency and professional readiness. Educators are encouraged to incorporate authentic drug instructions into language curricula to better prepare future healthcare professionals for effective communication in diverse medical environments.

The use of authentic drug instructions in medical language instruction offers a highly effective, context-rich approach to mastering medical terminology. By situating vocabulary within real-life clinical documents, students are better able to understand, retain, and apply complex medical terms. The pilot program at Bukhara State Medical Institute highlighted the pedagogical value of integrating ADIs, particularly when paired with interactive tools like Kahoot that promote active learning. While challenges such as the complexity of technical language and variations in terminology exist, they can be mitigated through strategic scaffolding and comparative analysis. Ultimately, incorporating authentic materials into medical language curricula not only strengthens linguistic skills but also aligns closely with the practical demands of modern healthcare communication.

REFERENCES

1. Abidova, M. I. Teaching a foreign language in medical universities based on international training programs / M. I. Abidova. — Text: direct // Young scientist. — 2020. — № 13 (303). — Pp. 203-205.
2. Bloor, M., & Bloor, T. (1986). *Language for specific purposes: Practice and theory* (occasional paper no. 19). Dublin: Trinity College.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
4. Chen, B. (2009). A Critical Review of Needs Analysis Studies in Foreign Language Teaching Abroad. *Foreign Language Teaching and Research*, 41(2), 125-130.
5. Davidov, M. A. (2020). Biology of flowering and fruiting of *Amaranthus cruentis* L. and *A. Hybridus* L. under conditions of Uzbekistan.-2000.
6. Davies W, Fraser S, Lauer J, Howell P. English for medical purposes: teaching an intensive English course to third-year medical students. Hiroshima University: Institute for Foreign Language Research and Education. 2013.
7. Dudley-Evans T., St John M. *Developments in ESP: A multi- disciplinary approach*. Cambridge: Cambridge University Press, 1998. 301 p.
9. Federal state educational standard of higher professional education in the field of training (specialty) 060101 "Medical business" (qualification (degree) "Specialist").
10. Ferguson. G (2013). *English for Medical Purposes*. In Paltridge, B., & Starfield, S. (Eds.), *The Handbook of English for Specific Purposes*. London: Wiley-Blackwell, 243.
11. Foster P. Task-based Learning and Pedagogy // *ELT Journal* 53 (1999) No. 1. P. 69-70.
12. Frinculescu IC. *The physiology of English as a lingua franca in medicine*. 2009.
13. Hutchinson T, Waters A. *English for specific purposes*. Edinburgh: Cambridge University Press; 1987.
14. McCullagh M. *Good Practice. Communication Skills in English for Medical Practitioner* / M. McCullagh, R. Wright. — Cambridge: Cambridge University Press, 2008.