MONOSEMY AND POLYSEMY OF MEDICAL TERMS IN ENGLISH AND UZBEK

Qurbonova Sabina Nurali qizi

Denau Institute of Entrepreneurship and Pedagogy Master's student of the faculty of philology,foreign languages and literature Email: qurbonovas99@gmail.com Phone: (97) 534 98 02 https://orcid.org/0009-0002-9891-4574

Abstract: *Using corpus findings, descriptive analysis, and contemporary literature, this paper investigates monosemous and polysemous phenomena in medical terminology in both Uzbek and English. The role of borrowing and internationalisms in Uzbek medical lexis, the cognitive mechanisms that result in polysemy in specialized lexis (metaphor, metonymy, generalization, and specialization), corpus-based evidence on the frequency and management of polysemous items, and implications for terminography, translation, and medical communication are all covered. Key findings show that Uzbek exhibits a combination of monosemous internationalisms and polysemous local and Russian-derived terms, whereas English medical terminology contains many polysemous items due to long-term lexicalization and metaphorical extension. The study ends with useful suggestions for lexicography, terminological standardization, and educational resources for translators and healthcare professionals.*

Keywords: *monosemy, polysemy, medical terminology, English, Uzibek, terminography, loanwords, corpus, translation.*

INGLIZ VA O'ZBEK TILLARIDAGI TIBBIY TERMINLARNING MONOSEMIYA VA POLISEMIYA XUSUSIYATLARI

Annotatsiya: *Korpus natijalari, tavsifiy tahlil va zamonaviy ilmiy adabiyotlarga tayangan holda ushbu maqola ingliz va o'zbek tillaridagi tibbiy terminologiyada kuzatiladigan monosemiya va polisemiya hodisalarini o'rganadi. Tadqiqotda o'zbek tibbiy leksikasida xalqaro atamalar va olinma so'zlarning tutgan o'rni, tibbiy terminlarda polisemiya yuzaga kelishiga sabab bo'luvchi kognitiv mexanizmlar (metafora, metonimiya, umumlashuv va ixtisoslashuv), polisems terminlarning korpus asosidagi qo'llanish chastotasi va ularni boshqarish strategiyalari yoritilgan. Natijalar shuni ko'rsatadiki, o'zbek tilida xalqaro atamalarning ko'pi monosemik bo'lsa-da, mahalliy va rus tilidan kirgan ko'plab terminlar polisemiya xususiyatiga ega. Ingliz tilida esa uzoq tarixiy taraqqiyot va metaforik kengayish natijasida polisemiya juda keng tarqalgan. Maqola yakunida leksikografiya, terminologik standartlashtirish hamda tarjimonlar va tibbiyot mutaxassislari uchun ta'limiy resurslar bo'yicha amaliy tavsiyalar beriladi.*

Kalit so'zlar: *monosemiya, polisemiya, tibbiy terminologiya, ingliz tili, o'zbek tili, terminografiya, olinma so'zlar, korpus, tarjima*

МОНОСЕМИЯ И ПОЛИСЕМИЯ МЕДИЦИНСКИХ ТЕРМИНОВ В АНГЛИЙСКОМ И УЗБЕКСКОМ ЯЗЫКАХ

Аннотация: *Опираясь на данные корпусного анализа, описательный метод и современную научную литературу, данная статья исследует моносемию и полисемию в медицинской терминологии английского и узбекского языков. Рассматривается роль заимствований и интернационализмов в узбекской медицинской лексике, когнитивные механизмы, лежащие в основе полисемии терминов (метафора, метонимия, генерализация и специализация), а также корпусные данные о частотности и функционировании полисемичных единиц. Полученные результаты показывают, что в узбекском языке международные термины преимущественно моносемичны, тогда как локальные и русскоязычные заимствования нередко обладают полисемией. В английском языке полисемия широко распространена благодаря длительной исторической лексикализации и метафорическому расширению значений. В заключение представлены практические рекомендации для лексикографии, терминологической стандартизации, а также образовательных ресурсов для переводчиков и медицинских специалистов.*

Ключевые слова: *моносемия, полисемия, медицинская терминология, английский язык, узбекский язык, терминография, заимствования, корпус, перевод*

INTRODUCTION

Conceptual precision is the ideal goal of medical specialized communication. However, lexical phenomena like polysemy—a single lexical item with several related senses—are frequent and can have an impact on patient safety, comprehension, and translational accuracy. According to Bergen's saying, terminologists frequently aim for monosemy (single, stable sense), but in reality, many medical terms either exhibit domain-specific polysemy or coexist with common meanings in English and other languages .One of Uzbek language researchers Abdullayeva has done some researchs about, monosemy and polysemy coexistance in varying degrees due to a complicated history of borrowing (from Latin/Greek internationalisms, Russian, and Turkic roots) . For the benefit of lexicographers, medical translators, and language instructors, this study provides a targeted, comparative analysis of these phenomena.This article will help to analyse this phenomena and provide meaningful results for both scientists and healthcare professionals.

Literature Review:

In terminology studies, polysemy in specialized domains has received more attention. According to studies, terminological resources frequently fail to adequately represent sense variation and polysemy is inherent to specialized communication[1]. (Alegre & Farrow, 2022; Managing Polysemy project). In order to better capture domain-specific senses, Euralex and recent terminological literature emphasize sense-based approaches rather than lexeme-based entries in terminology databases (Geng, 2024). Common mechanisms that produce polysemy are highlighted by recent empirical work on medical lexis: metonymic shifts (parts-for-whole or process-for-result), grammatical conversion (noun–verb alternations), and metaphorical extension (e.g., "stroke" as an event vs. "stroke" in non-medical senses) (Euralex,

2021).Researchers like Biber et al. (2012) and López-Rodríguez (2016) have shown that when medical terminology enter common conversation, their meaning steadily expands in the English language. For example, once monosemous in the medical register, words like "virus," "trauma," or "depression" now have extra metaphorical or vernacular connotations. This validates the conceptual metaphor hypothesis of Lakoff and Johnson (1980), which describes how medical terminology frequently serves as a source domain for abstract notions (such as "viral trend," "toxic relationship," and "diagnose the problem"). These procedures show how polysemy can occur in domains that strive for semantic accuracy.

On the other hand, Uzbek linguistic literature (Lutfullayeva, 2015; Bozorov, 2019; Rasulov, 2021) highlights the hybrid character of Uzbek medical lexis, which incorporates modern internationalisms, Arabic-Persian elements, ancient Turkic terminology, and Russian-Soviet medical borrowings. Scholars observe that Uzbek medical terminology typically exhibits higher semantic expansion and context-driven polysemy as a result of this multi-layered vocabulary. Numerous Uzbek medical terminology are used interchangeably in both ordinary and professional situations, which makes them more vulnerable to metaphorical and metonymic extension, according to research by Xolmatov (2020) and Mamarasulov (2022). Words like "yurak," "ko'ngil," "qon," and "tomir" are commonly used in metaphorical contexts, exhibiting linguistic polysemy that is not common in official English medical vocabulary.

Semantic variety and morphological productivity are related in another area of research (Jespersen, 1951; Crystal, 2008; Bauer, 2021). English medical language exhibits strong morphological transparency and regulated derivation, supporting monosemy, because of its Greco-Latin composition. On the other hand, because Uzbek is an agglutinative language, it permits productive affixation, which leads to the formation of numerous context-dependent meanings and wider semantic possibilities. The degree of semantic stability in specialized terminology is influenced by typological variations between analytic and agglutinative languages, as confirmed by comparative studies (Karimov, 2018; Eshonqulova, 2020).Furthermore, cross-linguistic studies (Picht & Draskau, 1985; Kageura, 2002) demonstrate how terminological systems change in response to social, scientific, and communicative demands. This is consistent with Uzbek research that highlight how medical language underwent dynamic localization and semantic development in the post-independence era, whereas it was heavily restricted and standardized during the Soviet era. Overall, the studied research shows how historical, morphological, cognitive, and sociolinguistic aspects influence monosemy and polysemy in Uzbek and English medical terminology. Uzbek shows more flexible semantic shifts affected by language typology and general communicative practices, but English retains better semantic accuracy due to worldwide medical standardization.

Research Methodology:

This study applies contrastive descriptive analysis to typical English and Uzbek items, synthesizes recent literature, and examines instances from open-access corpora and scholarly articles on medical terminology. Terminological research, worldwide publications on polysemy management in terminology resources, and regional linguistic periodicals are examples of primary materials. In order to find patterns of monosemy versus polysemy, borrowing effects, and translational problems, a few lexico-semantic mechanisms were

investigated using concordance inspection in accessible online medical corpora and bilingual glossaries. Due to the lack of publicly accessible large-scale Uzbek medical corpora, the method is qualitative-analytic rather than quantitative corpus-driven; however, mentioned research offer empirical support for observed trends (ResearchGate; Euralex proceedings; Uzbek periodicals 2023–2025).Furthermore,contrastive observation method can be applied to this subject.English appears to have a higher degree of conventionalized polysemy because of its wider diachronic stratification of senses and lengthier histories of semantic extension. Uzbek exhibits a hybrid profile: whereas local and Russian-influenced lexis exhibits more polysemy in practice, several internationalisms serve as comparatively monosemous technical labels in formal registers. - Terminography gap: Both languages have terminological resources that do not adequately record sense variation; however, Uzbek has a more severe issue due to the lack of extensive, sense-annotated terminological databases.

Analysis and Results:

Medical terms in English Both polysemous items that retain or acquire additional senses (e.g. "operation"—surgical procedure vs. general activity; "lesion" used in clinical descriptions and in radiology reports with slightly distinct sub-senses) and monosemous technical terms (often derived from classical roots with restricted technical meaning, such as "appendectomy") can be found in English medical lexis. In medical terminology, polysemy results from multiple mechanisms: The Extension in metaphor: While terms like "stroke" and "shock" are used metaphorically in many situations, they acquire specific meanings in the medical field. Research demonstrates that in specialized lexis, metaphor and metonymy continue to be key factors in sense extension. Polysemy across disciplines: Terms in subdisciplines take on domain-specific meanings as biomedical research becomes more interdisciplinary (e.g., "index" in epidemiology vs. "index" in clinical scoring). Recent research supporting sense-based terminology has documented this. Lexicalization and historical layering: Long-term use in English has led to conventionalized polysemy for some items where historical general senses coexist with narrow clinical senses.

The three main sources of Uzbek medical vocabulary are international (Greek/Latin) internationalisms, Russian borrowings, and Turkic-native formations. Internationalisms tend to be more monosemous when used as technical labels (e.g., "analiz"- analysis/tests,"'diagnostika"-diagnostics), especially in formal registers and texts. However, polysemy appears in borrowed Russian or Uzbek-native terms that serve both everyday and clinical functions; for instance, a mismatch between prescriptive dictionaries and actual usage. We can see morphological productivity in Uzbek. Uzbek's agglutinative morphology allows derivation and compounding can produce distinctions, but sometimes overlapping senses at the word.Translational ambiguity occurs as well. Because a single English term may have several Uzbek interpretations, while the same Uzbek term may have multiple English meanings due to translators' inconsistent usage of internationalisms or retention of Russian calques. Corpus-based standardization is recommended in recent regional studies.

Discussion:

The practical ramifications of monosemy versus polysemy in medical language include the possibility of misunderstandings in clinical settings, difficulty with patient information translation and localization, and comprehension issues for non-specialists. Given that

polysemy is common in specialized lexis, translators and lexicographers should incorporate sense-based entries, use examples, and corpus evidence into terminological resources (Euralex 2020; Managing Polysemy research). Targeted corpus development, internationalism harmonization, and training resources for medical professionals and interpreters would improve patient safety in Uzbekistan.Lastly, there are several practical consequences for the findings. The information highlights the necessity for lexicographers and terminographers to distinguish meanings in dictionaries more clearly, particularly for Uzbek polysemous items. In order to prevent misunderstandings when switching between monosemous and polysemous systems, translators must be aware of semantic subtleties. The increasing use of polysemous English terminology in Uzbek contexts emphasizes the value of teaching methods that support conceptual clarity and context-based interpretation for medical educators and professionals.

Conclusion

This contrastive study confirms that both monosemy and polysemy coexist in medical terminology, with English exhibiting more entrenched polysemy and Uzbek showing a mixed pattern driven by borrowing and morphological processes. Being aware of these phenomena is important in communication among not only professionals ,but also people in general.

Overall, the conversation demonstrates that monosemy and polysemy in medical terminology are dynamic processes impacted by historical, cognitive, and sociolinguistic factors rather than static characteristics. It is essential to comprehend these processes in order to advance terminological standardization in both Uzbek and English, improve communication, and increase translation accuracy.

REFERENCES:

1. Alegre & Farrow, 2022; Managing Polysemy project

2. Abdullaeva R. M. (2025). "The peculiarities of Uzbek medical terminology: Historical and structural aspects". InLibrary.

3. Euralex (2021). "Revisiting polysemy in terminology". Proceedings of the Euralex International Congress.

4. Gena W. (2024). From words to senses: Interdisciplinary polysemy. "ScienceDirect". https://www.sciencedirect.com

5. Lexical description of some medical terms. (2024). "Uniwork BuxDU Repository".

6. Managing polysemy in terminological resources. (2023–2024). "ResearchGate". https://www.researchgate.net

7. Polysemy of medical terminology. (2024). "NewJournal".

8. Turakulova, O. N. (2020). "Features of medical terminologies in Tajik, Uzbek and English". "CyberLeninka". https://cyberleninka.ru