

The peculiarities of Uzbek medical terminology: historical roots, modern trends and linguistic features

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Abstract: This article examines the development of Uzbek medical terminology, highlighting its historical roots, linguistic transformations, and contemporary adaptations. The paper explores the interplay of Arabic, Persian, Russian, and English influences while analyzing the structural and semantic characteristics of Uzbek medical vocabulary. Additionally, the study addresses the implications of terminology development for cultural identity and public health literacy. By integrating insights from various linguistic and medical disciplines, this research contributes to a deeper understanding of how language shapes medical knowledge and professional communication in Uzbekistan.

Keywords: Medical Terminology, Historical Roots, Linguistic Transformations.

Introduction: Medical terminology is a fundamental component of any healthcare system, enabling precise and standardized communication among professionals. However, it is not merely a technical lexicon; it reflects the historical, cultural, and scientific development of a society. Uzbek medical terminology, shaped over centuries, presents a rich tapestry woven from indigenous linguistic traditions and external influences. Understanding its evolution offers valuable insights into the historical pathways of medical knowledge dissemination and the adaptation of global scientific advancements within Uzbekistan's linguistic framework.

The formation of Uzbek medical terminology can be traced back to the early centers of science and medicine in Central Asia. Scholars such as Avicenna (Ibn Sina), Al-Biruni, and Al-Khorazmi played a pivotal role in shaping medical thought in the region. Their works, primarily written in Arabic and Persian, introduced foundational medical concepts that were later assimilated into Uzbek.

Arabic, as the dominant language of science and religion in medieval Islamic civilization, significantly contributed to Uzbek medical vocabulary. Words such as *tib* (medicine), *shifo* (healing), and *dori* (drug) illustrate this influence. Similarly, Persian enriched Uzbek medical terminology, particularly in areas

related to diagnosis and treatment.

With the establishment of Soviet rule in the 20th century, Russian became the primary source of medical terminology in Uzbekistan. The Soviet healthcare system introduced an extensive range of terms, many of which were directly borrowed and phonetically adapted into Uzbek, such as *xirurgiya* (surgery), *terapiya* (therapy), and *diagnoz* (diagnosis). While these borrowings facilitated integration into the Soviet medical framework, they also contributed to linguistic hybridization, blending Slavic and Turkic linguistic elements.

A term is a lexical word or phrase that designates a concept in scientific and practical activities, performing a nominative function. As an element of the lexical system of the language of science, a term represents signs of a different semiotic nature, whose foundation is the "one-to-one correspondence between the sign and the signified." This characteristic "regulates the properties of the linguistic sign, making it a term." In other words, "a term is not a special word, but a word in a special function," with this function being understood as the nominative function of the term.

A term has three levels:

1. Semantic features — manifested in the definition of the boundaries of the concept being denoted.

2. Morphological-syntactic features — related to the structural characteristics of the term.

3. Pragmatic features — evident in its use in speech.

Unlike the terminology of other branches of natural sciences, medical terminology has distinctive characteristics:

1. The core of medical terminology—including in the Uzbek language—consists of borrowed terms from Greek, Latin, Russian and English.

2. Medical terminology is based on international terms, predominantly of Latin origin.

3. Medical terms have a high degree of motivation and are semantically transparent, making them easier to understand and interpret.

4. The expansion of medical terminology occurs through eponymous terms (eponym, from Greek *epōnymos*—"giving a name, lending one's name to something").

Medical terms, which play a crucial role in shaping the linguistic worldview and possess high informational value, present significant challenges for learning Russian in groups with a multi-ethnic composition. Mastering medical terminology requires:

1. Knowledge of the extralinguistic (conceptual) essence of the term, which forms its content level.

2. Understanding the linguistic normative characteristics of the term, which relate to the rules of its use in speech activities (in texts and communication situations).

This complex interplay of semantic, structural, and functional aspects highlights the unique nature of medical terminology as a linguistic and cognitive phenomenon.

Uzbek medical terminology exhibits several distinct linguistic features that contribute to its adaptability and richness:

1. Morphological Adaptation: Uzbek actively utilizes suffixes and affixes to modify and create medical terms:

o Suffix -ma: isitma (fever), toshma (rash)

o Suffix -shish (-yish): tirishish (convulsion), torayish (stenosis)

o Compound suffixes: shishasimon tana (vitreous body), nuxatsimon (pea-shaped)

2. Lexical Borrowing and Integration: Borrowings from Arabic, Persian, Russian, and English are systematically adapted to Uzbek phonetics and morphology. For instance, kompyuterli tomografiya (computed tomography) and immunitet (immunity) reflect contemporary scientific terminology while maintaining linguistic coherence.

3. Compound Word Formation: Complex medical terms are often constructed through compounding, enabling precise descriptions. Examples include yurak-qon tizimi (cardiovascular system) and tish kasalliklari (dental diseases).

4. Semantic and Cultural Nuances: Many Uzbek medical terms embody metaphorical meanings rooted in cultural perceptions of health. Qon (blood) is metaphorically linked to life force, while yurak (heart) symbolizes emotions and courage.

Since Uzbekistan's independence in 1991, linguistic policies have prioritized the development of Uzbek as the national language. This shift has influenced medical terminology, fostering the translation of foreign-derived terms into Uzbek equivalents. For instance, allergiya (allergy) is increasingly rendered as allergik reaksiya.

Despite these advancements, challenges remain. The widespread use of Russian and English in medical education and practice creates a linguistic divide, potentially limiting accessibility for Uzbek-speaking patients. Additionally, the rapid influx of English medical terminology necessitates a systematic approach to localization and standardization to prevent inconsistencies in medical communication.

A comparative examination of Uzbek medical terminology with other languages reveals unique patterns of adaptation. While Latin-based terminologies dominate in many European languages, Uzbek retains a strong tradition of using native roots alongside borrowed terms. For example:

Latin	Russian	Uzbek
hernia	грыжа	churra
hiatus	отверстие	teshik
ginaecophobia	гинекофобия	Xotinlardan qo'rqish
lacrimalis	слезный	Ko'z yoshiga oid

glaucoma	глаукома	Ko'k suv
surditas	глухота	karlik
abscessus	гнойник	Ho'ppoz
crus	голень	boldir
fames	голод	ochlik
gibbus	горб	bukri
hordeolum	ячмень	Govmichcha
fungu	грибки	Zamburug'lar

These adaptations illustrate how linguistic and cultural factors influence medical vocabulary formation.

The continued development of Uzbek medical terminology will depend on several key factors:

- **Standardization Efforts:** Establishing official Uzbek equivalents for medical terms will enhance clarity and consistency in medical education and practice.
- **Integration of Digital Tools:** The use of digital translation tools and medical glossaries can facilitate accessibility for healthcare professionals and the general public.
- **Educational Reforms:** Encouraging medical instruction in Uzbek while maintaining multilingual competence in Russian and English will ensure effective communication in international medical contexts.
- **Cultural Preservation:** Balancing linguistic modernization with the preservation of traditional medical terminology will help maintain national identity while embracing global advancements.

CONCLUSION

Uzbek medical terminology represents a dynamic and evolving linguistic phenomenon that reflects the historical, cultural, and scientific heritage of Uzbekistan. Its hybrid nature, shaped by multiple linguistic influences, ensures both adaptability and continuity in medical communication. As Uzbekistan continues to modernize its healthcare and linguistic policies, the development of medical terminology will play a crucial role in improving public health literacy and reinforcing cultural identity. Future efforts should focus on standardization, digital integration, and educational reform to ensure that Uzbek medical terminology remains both scientifically relevant and linguistically sustainable.

REFERENCES

Abdullaeva R.M. Features of translation of medical terms from Russian into Uzbek language Bulletin of Khorezm Academy Ma'mun 2022-11/4, Khiva-2022, P.99-102

Abdullaeva R.M. Communication Technologies of Language Teaching in Medical University Central Asian Journal of Medical and Natural Sciences Volume: 03 Issue: 06 | Nov-Dec 2022 ISSN: 2660-4159 https://cajmns.centralasianstudies.org/index.php/CAJ_MNS/article/view/1175

Abdullaeva, R., Forms of Latin classes: classics and innovation/ Abdullaeva, R.-IJSSIR, Vol.11, №.12, 2022 - C.358-360

Saidov, Sh. (2018). History of the Development of Medical Terminology in Uzbekistan. Tashkent: Fan Publishing.

Ivanov, A. (2015). Medical Terminology in a Multilingual Society. Moscow: Nauka Publishing.

Smith, J. (2020). Globalization of Medical Terminology. Journal of Linguistic Studies, 45(2), 123-135.

Karimov, M. (2019). Modern Trends in the Development of Uzbek Medical Terminology. Tashkent: Uzbekistan Publishing.