MEDICAL EPONYMS: LEXICAL-SEMANTIC RELATIONSHIPS AND UNIQUE FEATURES

Nuriddinova Shakhnoza Kakhorovna
BuxDu Researcher
E-mail: nuriddinovashaxnoza777@gmail.com
https://doi.org/10.5281/zenodo.14286723

Abstract: Medical terminology, with its extensive range and complexity, often incorporates eponyms—terms derived from the names of individuals, places, or mythological figures. This study explores the lexical-semantic relationships of medical eponyms, emphasizing their development, linguistic characteristics, cultural significance, and role in global medical terminology. Through an examination of linguistic distinctions and synonymy in medical eponyms, the study highlights the cultural and scientific value of eponyms in promoting cross-cultural understanding and knowledge exchange in healthcare.

Key words: Medical Eponyms,Terminology, Lexical-Semantic Relationships, Synonymy, Homonymy, Polysemy, Linguistic Characteristics, Cross-Cultural Variations, Universal Eponyms, Medical Discourse, Cultural Significance, Historical Figures, Naming Conventions, Standardization, International Medical Terminology, Knowledge Exchange, Cultural Exchange, Scientific Progress, Historical Contributions.

Introduction: The structural nature of medical eponyms influences their integration into medical terminology, textbooks, scientific literature, and clinical practice. Eponyms serve as key elements of medical language, enriching the vocabulary used by healthcare professionals, educators, and researchers.

Discussion and Results: We propose the following classification for medical eponyms:

1. **Simple (single-word) eponyms –** referred to as deonyms;
2. **Affixal eponyms –** eponyms formed with the addition of prefixes or suffixes;
3. **Compound eponyms –** combining multiple words or names;
4. **Abbreviated eponyms –** shortened forms derived from names or terms.

The Deonyms Group (Single-word Eponyms):

This category includes terms derived directly from the inventor's name. In medical terminology, this group often represents units of measurement, such as **Roentgen**, **Weber**, **Volt, Ampere,** or **Gray**. For instance:

"The exposure of mice to total physical doses resulted in structural damage to coronary vessels at 0.2 Gray <...>."

These eponyms serve as concise, universally recognized terms that enhance clarity and precision in medical discourse.

Affixal Eponyms: These eponyms are formed by adding affixes to a base eponym. Common suffixes used in their formation include:

- **"-ia"** (e.g., Crohnia – hypothetical example),
- **"-osis"** (e.g., Hansenosis),
- **"-itis"** (e.g., Wegeneritis),
- **"-ism"** (e.g., Cushingism),
- **"-ella"** (e.g., Salmonella),

- **"-oma"** (e.g., Kaposioma).

Such modifications expand the original eponym into specific medical conditions, diseases, or entities, facilitating their usage in detailed clinical contexts.

This Trend Reflects the Relevance of Latin in Modern Terminology: Affixal eponyms illustrate the ongoing influence of Latin in contemporary medical language. These terms are created by combining personal names with affixes, forming new terminological constructs. Examples include:

- **Theileria** and **Theileriosis** (derived from Sir Arnold Theiler's name),
- **Scopolia** (from Giovanni Scopoli),
- **Babesia** and **Babesiosis** (from Victor Babes),
- **Listeria** and **Listeriosis** (from Joseph Lister),
- **Brucellosis** (from David Bruce),
- **Bartolinitis** (from Kaspar Bartholin the Younger),
- **Parkinsonism** (from James Parkinson),
- **Escherichia** and **Escherichiosis** (from Theodor Escherich),
- **Salmonella** and **Salmonellosis** (from Daniel Elmer Salmon),
- **Pasteurella** (from Louis Pasteur),
- **Schwannoma** (from Theodor Schwann).

Additionally, there are numerous other forms of affixal eponyms created by appending affixes to personal names. These terms enrich medical vocabulary and reflect a systematic approach to honoring contributors to medical science. (Refer to Table 3.2 for a comprehensive list of examples).

Table 3.2: Affixal Eponyms Related to Personal Names

№	Suffuxs name	Examples
1	-it	ergusonit, gotit, grenokit, pikeringit, sossurit
2	-n	begonia, claytonia
3	-ize	bovdlerize, galvanize, mesmerize, pasteurize
4	-izm	darvinizm, spunerizm

Several Lexical Units Formed from Compound Terms: Galvanoskop, galvanokustika, galvanopalpatsiya, galvanoterapiya (named after Luigi Galvani); radiography, radiologist, radiology, radioscopy, radiotherapy, radiogram (named after Wilhelm Röntgen), and others. **Compound Eponyms** are terminological units consisting of several words. They are used to denote diseases, phenomena, and processes.

Abbreviated Eponyms are formed by shortening disease names or terms. Examples include:

- **Pap smear** (derived from the abbreviation of Georgios Papanikolaou's name),
- **HeLa** (cell line derived from the cervical cancer cells taken from the patient Henrietta Lacks),
- **BCG** (derived from the abbreviation of Bacillus Calmette-Guérin, named after Albert Calmette and Camille Guérin).

These abbreviated eponyms are widely used in medical terminology for convenience and clarity.

Eponyms are primarily used in medical language, and their importance in medical discourse cannot be denied. When discussing the morphological-structural nature of medical eponyms, several key aspects should be considered.

1**. Formation of Eponyms:** Medical eponyms are typically formed by combining a person's name with a specific medical term. This combination often follows certain morphological rules, such as adding a possessive form to the person's name (e.g., Alzheimer's disease, Parkinson's disease) or combining the name with a medical suffix or prefix to create a compound term (e.g., Broca, Wolff-Parkinson-White syndrome).

2. **Adaptation of Eponyms:** Eponyms may undergo adaptation in their morphological structure to conform to the linguistic rules of the target language or to simplify pronunciation. For example, the original spelling or pronunciation of a person's name may be adjusted to align with the phonological rules of the target language, or it may be modified to facilitate communication among healthcare professionals worldwide.

3. Variability and Irregularity: The morphological-structural nature of medical eponyms can be variable and irregular, leading to inconsistencies in their formation and usage. Eponyms may exhibit different morphological structures, such as compounds, prefixation, addition, or abbreviation, which can make it difficult for learners and practitioners to predict the form of a given eponym.

4. Legacy and Tradition: Medical eponyms often carry historical and cultural significance, reflecting the legacy of prominent figures in the field of medicine. Despite the shift towards anatomical or descriptive terminology, the preservation of eponyms is influenced by traditions, academic conventions, and the recognition of the contributions made by the individuals after whom the terms are named**.**

5. Ambiguity: The use of eponyms in medical terminology can lead to ambiguity, as different names may exist for the same medical person or concept. Such variations in naming conventions can create challenges for standardization and interoperability in healthcare institutions.

6. Criticism and Debate: The reliance on eponyms in medical terminology has faced criticism due to concerns about elitism, Eurocentrism, and the persistence of outdated or inaccurate historical associations. Some scholars advocate for the use of descriptive or generic terms over eponyms to improve clarity and inclusivity in medical communication**.**

6. Global Changes: Eponyms in medicine may differ in their morphological structure across different languages, cultures, and healthcare systems. Translating and adapting eponyms to various linguistic contexts may lead to adjustments in spelling, pronunciation, or form to align with the rules of the target language.

8. Historical Significance: The morphological structure of medical terms reflects the historical context and contributions of the individuals after whom they are named. The inclusion of a person's name in an eponym serves as a tribute to their achievements, discoveries, or significant impact on the field of medical science.

Conclusion: Over time, the structural nature of medical eponyms may undergo modernization or revision to align with contemporary linguistic standards, terminological guidelines, or ethical considerations. The evolving composition of these terms reflects ongoing

efforts to adapt medical language to the changing demands of society and communication practices.

References:

1. Novinskaya, N.V. “Features of Medical Eponyms in Synonymy and Homonymy”.Moscow: Institute of Medical Linguistics, 1985.
2. Abel, E.L. “Research on Medical Terms Derived from Anthroponyms”. Saint Petersburg: Society for Medical Naming, 1978.
3. Churilov, L.P., Ryazantsev, V.D. “Eponymic Dictionaries: Over 650 Medical Terms”. Tashkent: "Science and Technology" Publishing, 2002.