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## LEXICAL LENGTH OF ENGLISH DENTISTRY-IMPLANTOLOGY TERMS

*The article focuses on the analysis of a lexical length of English dentistry-implantology terms. Over the past decades, the term as a linguistic phenomenon has been a chief focus of scholars not only in the field of terminology, but also in general linguistics (M. Castellvi; R. Köhler; G. Altman). Despite a considerable number of studies on scientific terminology, certain term systems still remain unresearched, in particular the English terminology of dentistry-implantology. In this context, the study of the structural characteristics of English-language terms in the field of dentistry-implantology is relevant. The goal of the research is to elucidate the structural characteristics of the English terms in the field of dentistry-implantology. The object is the English intra-domain terms of dentistry-implantology. The subject of the study is the lexical length of English terms in the field of dentistry-implantology. Under the term "a lexical length" the number of root morphemes of full-meaning words is meant. In our study, a sample of English language special intra-domain terms in the field of dentistry-implantology was compiled. The English terminology of dentistry-implantology consists of one-component and multi-component terms. One-component terms include one root morpheme of a full-meaning word. One-component terms include 48 intra-domain terms (which makes up 16.7% of the total number of terms, respectively). One-component terms also include abbreviation terms. Multicomponent terms include two or more root morphemes of full-meaning words in their structure. The characteristics of multi-component terms include the part of speech model, which determines the structure of a linguistic unit. There is a correlation between the part of speech model and the term formation type. In our sample, 224 multi-component terms (which have two or more root morphemes) were recorded, which is 78.3%. This percentage characterizes the general tendency of modern terminology, which consists in the use of complex syntactic units. Terms with longer lexical and graphic lengths have greater opportunities for nomination of complex concepts of English dentistry-implantology terminology. That is why, they are predominant. However, these multicomponent terms have a lower absolute frequency according to the law of economy of speech efforts.*

**Key words:** term, English dentistry-implantology terminology, lexical length, one-component term, multicomponent term.

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## ЛЕКСИЧНА ДОВЖИНА АНГЛОМОВНИХ ТЕРМІНІВ ГАЛУЗИ СТОМАТОЛОГІЇ-ІМПЛАНТОЛОГІЇ

*Упродовж останніх десятиріч термін як лінгвістичний феномен привернув увагу вчених не тільки в галузі термінознавства, але й загального мовознавства (M. Castellvi; R. Köhler; G. Altman). З одного боку, це пов'язано*

з розвитком лінгвістичної науки про термін – природним процесом переходу від переважно описових розвідок до теоретичного узагальнення одержаних результатів, дедалі глибшим усвідомленням ролі терміна в науковому дискурсі (Л. Мусик; С. Рибачок; Е. Скороходько; Т. Скопюк та ін.). Незважаючи на значну кількість праць, присвячених науковій термінології, окремі терміносистеми й досі залишаються не дослідженими. До таких належить, зокрема, англomовна термінологія галузі стоматології-імплантології. **Актуальним** у цьому контексті є дослідження структурних характеристик англomовних термінів галузі стоматології-імплантології. **Мета** дослідження – висвітлити структурні характеристики англomовних термінів галузі стоматології-імплантології. **Об'єкт** – англomовні інтрагалузеві терміни галузі стоматології-імплантології. **Предмет** дослідження – лексична довжина англomовних інтрагалузевих термінів галузі стоматології-імплантології. Під лексичною довжиною ми розуміємо кількість кореневих морфем повнозначних слів. Англomовна термінологія стоматології-імплантології складається з однокомпонентних та багатокомпонентних термінів. До однокомпонентних належать терміни, до складу яких входить одна коренева морфема повнозначного слова. Саме кореневу морфему ми приймаємо за мінімальну одиницю лексичної довжини терміна. Відповідно, багатокомпонентні терміни – це терміни, що складаються з двох і більше кореневих морфем. До однокомпонентних термінів належить 48 інтрагалузевих термінів (що становить відповідно 16,7% від загальної кількості термінів). Аналіз нашої вибірки засвідчує малу кількість однокомпонентних спеціальних інтрагалузевих термінів. Коротку лексичну довжину можна пояснити тим, що структурно простіші й коротші терміни є зручними для користування, але можливостей для комбінування п'яти, шести графем чи просто однієї кореневої морфemi замало для номінації великої кількості понять галузі стоматології-імплантології. Структурно короткі терміни не завжди відповідають точності, оскільки практично нереально виразити поняття однією кореневою морфемою. У нашій вибірці зафіксовано 224 багатокомпонентних термінів (які налічують дві і більше кореневі морфemi), що становить 78,3%. Це характеризує загальну тенденцію сучасного термінотворення, яка полягає у використанні складних синтаксичних одиниць. Як було зазначено вище, довші за лексичною та графічною довжинами терміни мають більші можливості для номінації складних понять англійської термінології штучного інтелекту. Проте, ці терміни мають нижчу абсолютну частоту згідно із законом економії мовленнєвих зусиль. Відтак, спостерігаємо незначну кількість чотирьох-, п'яти- термінів у нашій вибірці.

**Ключові слова:** термін, англomовна термінологія стоматології-імплантології, лексична довжина, однокомпонентні, багатокомпонентні терміни.

**The Problem Statement.** The end of the 20th century and the beginning of the 21st century mark a new wave of scientific and technical progress. «Under the conditions of drastic changes in all spheres of a human activity associated with global computerization, the rate of vocabulary enrichment of many languages, in particular English, which is currently experiencing a real «neological boom», has increased significantly. Terminological vocabulary plays a significant role in the vocabulary system of the English language. New concepts in science need new words. This is accompanied by the appearance of new terms» (Skorokhodko, Slipetska, 2006).

Over the past decades, the term as a linguistic phenomenon has been a chief focus of scholars not only in the field of terminology, but also in general linguistics (M. Castellvi; R. Köhler; G. Altman). On the one hand, this interest is connected with the development of linguistic science of the term – a natural process of transition from mainly descriptive researches to a theoretical generalization of the obtained results, an increasingly deeper awareness of the role of the term in scientific discourse (L. Mysyk; S. Rybachok; E. Skorokhodko; T. Skopiuk et al.).

**Review of Recent Researches and Publications.** In domestic and foreign linguistics, terminological studies can be divided into two large groups: researches on general theoretical issues, in which there is considered the term specifics, its properties,

etc. (A. Diakov, T. Kyiak; I. Kvitko; E. Skorokhodko; N. Felber, H. Budin, etc.), and descriptions of the terminologies of individual domains (Yu. Vit; E. Zhernovy; H. Kovalenko; O. Konstantinova; O. Lotka, V. Slipetska, etc.).

Despite a considerable number of studies on scientific terminology, certain term systems still remain unresearched, in particular the English terminology of dentistry-implantology. In this context, the study of the structural characteristics of English-language terms in the field of dentistry-implantology **is relevant**.

**The goal** of the research is to highlight the structural characteristics of the English terms in the field of dentistry-implantology.

**The object** is the English intra-domain terms of dentistry-implantology.

**The subject** of the study is the lexical length of English terms in the field of dentistry-implantology.

Nowadays, scientific research and analysis of terminological vocabulary is based on the identification of terms. Regarding the definition and requirements for the term, there are controversial views and different approaches to term analysis in linguistic studies.

Modern researchers-terminologists formulate a slightly different definition of the term, different from the traditional one. According to E. F. Skorokhodko, T. R. Kyiak, and V. D. Slipetska: under a term they understand a word or word combination, one or more of which have special meanings (Skorokhodko, Sli-

petska, 2006; Dyakov, 2000; Slipetska, 2008). The above mentioned definition of the term is based on polysemy of a word: one meaning functions in the literary language, the other – in one or two terminologies.

According to E. F. Skorokhodko, in the term analysis it is necessary to take into account all its characteristics, and in the term definition – only the qualities of all terms that are not debatable. The scholar emphasizes that the main feature of the term is its special, professional function, the scope of its distribution is narrowed by a specific field of knowledge (Skorokhodko, Slipetska, 2006).

In the research by V. D. Slipetska, we find the following definition of the term: it is «a linguistic sign that nominates a scientific concept of a special field of knowledge» (Slipetska, 2008).

E. F. Skorokhodko understands the term «as a word or word combination that is a member of such a lexical-semantic system that represents a certain professional (specialized) system of concepts» (Skorokhodko, Slipetska, 2006: 10–11). A well-known Ukrainian scholar-terminologist suggested studying the structural characteristics of terms by determining their graphic and lexical length. Under the term «a graphic length», the number of graphemes (letters) of a word is meant. Under the term “a lexical length” the number of root morphemes of full-meaning words is meant (Skorokhodko, Slipetska, 2006). The analysis of the lexical and graphic length of terms of artificial intelligence was carried out in the dissertation study by V. D. Slipetska (Slipetska, 2008). In our study, a sample of English language special intra-domain terms in the field of dentistry-implantology was compiled. The total number of terms is 286. We classified the terms according to their graphic and lexical lengths. The results of the analysis of our sample testify to the dominance of intra-domain terms with a graphic length of 9 to 15 graphemes. The number of terms with a graphic length of 6–8 graphemes does not exceed thirty units.

The English terminology of dentistry-implantology consists of one-component and multi-component terms. One-component terms include one root morpheme of a full-meaning word. We consider the root morpheme as the minimum unit of the lexical length of the term. Accordingly, multi-component terms are terms consisting of two or more root morphemes (Skorokhodko, Slipetska, 2006).

One-component terms include 48 intra-domain terms (which makes up 16.7% of the total number of terms, respectively), for example: *aligners, dehiscense, incisor, gingival, nonextraction, occlusion, periosteum, pretreatment, posttreatment, pin, premo-*

*lar, resorption, screw, etc.* One-component terms also include abbreviation terms, for example: *CAT (clear aligner therapy)*. Although they make up a small percentage of the researched material (1.7%, corresponding to 5 terms), the analysis of the word-formation type shows that shortenings are an independent linguistic sign, and moreover, like a word, can be part of word combinations (Skorokhodko, Slipetska, 2006; Skorokhodko, 2002) (See: Table 1).

Table 1

**Lexical Length of English Intra-Domain One-Component Terms of Dentistry-Implantology**

Term	Lexical Length	Part of Speech Model	Term-Formation Type
aligners	1	N	Affixal Derivative
dehiscense	1	N	Affixal Derivative
nonextraction	1	N	Affixal Derivative
pin	1	N	Semantic Derivative
screw	1	N	Semantic Derivative
resorption	1	N	Affixal Derivative
pretreatment	1	N	Affixal Derivative

The analysis of our sample shows a small number of one-component special intra-domain terms. The short lexical length can be explained by the fact that structurally simpler and shorter terms are convenient to use, but the possibilities for combining five, six graphemes or just one root morpheme are not enough to nominate a large number of concepts in the field of dentistry-implantology. Structurally short terms do not always correspond to accuracy, since it is practically impossible to express the meaning of a concept using one root morpheme.

The impossibility of conveying all the concepts of the field of dentistry-implantology by one-component terms, i.e. terms with one root morpheme, causes the creation of terms-compound words and word combinations. Multicomponent terms include two or more root morphemes of full-meaning words in their structure. The characteristics of multi-component terms include the part of speech model, which determines the structure of a linguistic unit. There is a correlation between the part of speech model and the term formation type (Skorokhodko, Slipetska, 2006). This correlation characterizes the general tendency of modern term-formation, which consists in the use of complex

syntactic units: 60–95% of terms in modern European languages are multi-component units (Skorokhodko, Slipetska, 2006).

In our sample, 224 multi-component terms (which have two or more root morphemes) were recorded, which is 78.3%. This percentage characterizes the general tendency of modern terminology, which consists in the use of complex syntactic units.

In our sample there are multi-component terms, each model with a larger number of morphemes is built from the previous one (with a smaller number of morphemes) by increasing the length (Skorokhodko, Slipetska, 2006), for example: *guided bone – guided bone regeneration, fibrous tissues – fibrous connective tissues, etc.*

Among multi-component terms, 174 terms (60.5%) belong to two-component terms, for example: *alveolar ridge, buccal side, extracellular membrane, bacterial cellulose, elongation percentage, autogenous bone, primary closure, titanium mesh, space maintenance, resorbable membranes, bone defects, post-operative healing, bone augmentation, mucosal healing, cortical plate, etc.* Two-component terms, which are the most numerous in our sample, belong mainly to such part of speech model *Adjective + Noun (Adj+N)* and *Noun + Noun (N+N)*, for example: *resorbable membranes, tensile strength, initial stability, mucosal healing (Adj+N); space maintenance, piezosurgery (N+N), etc.* Our sample attests to 132 (46.1%) terminological units belonging to the *(Adj+N)*. The second most numerous is the part of speech model as *Noun + Noun (N+N)* among two-component terms, for example: *Camper's line, reference plane, facebow, bite fork, refinement phase, etc.*

In our sample, 45 three-component terms (15.7%) were recorded, for example: *guided bone regeneration, fibrous connective tissues, bone grafting material, microbial fermentation metabolites, etc.* Among three-component terms, we observe the dominance of the part of speech model *Adjective + Noun + Noun (Adj+N+N)*. we observe the dominance of this part of speech model *Adjective + Noun + Noun (Adj+N+N)*.

Our sample testifies that Noun models dominate in terms of belonging to part of speech models, which is fully consistent with the widespread view of the nominative nature of scientific terminology (Sko-

rokhodko, Slipetska, 2006). In our sample, among the three-component terms, there are models of the type *Adjective + Noun + Noun (Adj+N+N)*:

Table 2  
**Lexical Length of Special Intra-Domain Multicomponent Terms of Dentistry-Implantology**

Term	Lexical Length	Part of Speech Model	Term-Formation Type
alveolar ridge	2	Adj+N	SE
buccal side	2	Adj+N	SE
extracellular membrane	2	Adj+N+	SE
fibrous connective tissues	3	Adj+ Adj+ N	SE
guided bone regeneration	3	Adj+N+N	SE
bacterial cellulose	2	Adj+N	SE
microbial fermentation metabolites	3	Adj+N+N	SE
autogenous bone	2	Adj+N	Adj+N

**Conclusions.** Thus, terms with longer lexical and graphic lengths have greater opportunities for nomination of complex concepts of English dentistry-implantology terminology. That is why, they are predominant. However, these multicomponent terms have a lower absolute frequency according to the law of economy of speech efforts. Therefore, we observe a small number of four- and five-terms in our sample. The process of formation of multi-component terms is a natural phenomenon in the term system of any language. However, in any language, the law of economy of speech efforts is observed. Therefore, in the process of forming any terminology, terms with a graphic length of 9–14 graphemes and terms with a lexical length of two or three root morphemes of full-meaning words dominate. Terms shorter in graphic and lexical lengths are used to nominate the most important concepts. Shorter terms meet the requirement for terms – shortness and meet the requirements concerning economy of speech efforts.

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