The article raises the issue of structural and semantic features of the term origin in modern English medical discourse. Characteristics of such a plan include a description of the internal form of units of medical terminology, their etymology and morphological structure which are supported by the human cognitive activity in the nominative act. In view of the inner form of the units under analysis, it appears that many names for the medical phenomena were coined on the basis of people’s names or surnames, functional needs, qualitative characteristics, body parts and other features. The most productive ways of term formation in contemporary English are morphological, syntactic and word formation. Considering the etymological roots of the medical terms, units with Latin roots refer to a part of the human body and sometimes to the names of the pathologies. Terms founded on the Greek root signify a pathology or a disease. In English medical terminology there dominate words with Greek word-forming elements, many of them are included in the nomenclature of medical Latin, but they can be traced to the Greek language. Prefixes and suffixes in the morphological pattern of medical terms play an important role in revealing their meaning. The most popular type of word combinations in English terminology is a two-component attributive phrase containing a nuclear element, mostly a noun in the nominative case and an attributive, defining element. On the whole, the meaning of medical terms is determined by the extralinguistic information reflected in the inner form of the lexemes and also by their structural peculiarities such as the origin and the semantic content of the constituent elements such as roots, affixes, words in compound clusters. The semantic method of term formation presupposes the transition of terms from other sciences, borrowing terms from other languages, terminologizing, metaphorical and metonymic transference.

**Keywords:** cognitive semantics, nominative act, medical terms, word origin, eponyms, morphological ways of term formation, syntactic patterns of the terms, compound medical terms, the semantic method of term formation, expansion of the meaning, narrowing of the meaning, metaphorical and metonymic transference.
СТРУКТУРНІ ТА НОМІНАТИВНІ ЧИННИКИ ФОРМУвання ЗНАЧЕННЯ МЕДИЧНИХ ТЕРМИНІВ У СУЧАСНІЙ АНГЛІЙСЬКІЙ МОВІ

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У статті порушено питання структурно-семантичних особливостей та походження термінів сучасного англомовного медичного дискурсу. Характеристики такого плану включають опис внутрішньої форми однінць медичної терміносистеми, її етимології та морфологічної будови як таких, що визначаються когнітивною діяльністю носіїв мови в номінативному акті. Спосою внутрішньої форми аналізованих однінць, низка назв медичних явищ сформована на основі імен чи прізвищ людей, функціональних потреб, якісних характеристик, частин тіла та інших аспектів застосування об'єкта. Найпродуктивнішими способами термінотворення в сучасній англійській мові є морфологічний і синтаксичний. З огляду на етимологічні корені медичних термінів однінці з латинськими коренями позначають частину тіла людини та назви патологій; терміни ж, засновані на грецькому корені, означають патологію або хворобу. В англійській медичній термінології переважають слова з грецькими й латинськими словотворчими елементами. Важливу роль у розкритті їхнього значення відіграють префікси та суфікси в морфологічній структурі медичних термінів. Найпоширенишим типом складених термінів в англійській термінології є двокомпонентна атрибутивна фраза, що містить ядерний елемент, переважно іменник у називному відмінку, та атрибутивний, залежний комонент. Загалом значення медичних термінів визначається екстрапозиційною інформацією, відображеною у внутрішньої формі лексем, а також їхніми структурними особливостями однінць. Семантичний спосіб термінотворення передбачає перехід термінів з інших наук, їх запозичення з інших мов, термінологізацію, метафоричні та метонімічні переосмислення.

Ключові слова: когнітивна семантика, номінативний акт, медичні терміни, походження слів, епоніми, морфологічний спосіб термінотворення, синтаксичні моделі термінів, складені медичні терміни, семантичний спосіб термінотворення, розширення значення, звуження значення, метафоричне та метонімічне переосмислення.

Introduction. Structural and semantic factors to determine the meaning of medical terms in modern English gain a thorough insight from the perspective of the theory of nomination which has close links with the cognitive semantics. The nominative act is viewed as a final stage of mental activity, where establishing names for some result of cognitive processes takes place. The formation of human knowledge about some area of social life is mirrored in the meaning of terms as nominative units. It is determined by mental processes of conceptualization and categorization. Conceptualization lies in comprehending, organizing and structuring data [17: 47], thus resulting in forming a certain category of human experience due to the process categorization [20: 739]. The secondary terminological nomination is influenced by the associative nature of cognition and for the new designation in the nominative act involving units which already exist in the language. This way morphological, syntactic and semantic constructions are rather effective in the terminological system as they reveal the intersection of meaning and form of nominative units.

Analysis of previous research. The development of the discourse paradigm as a reflection of human activity in verbal signs and their meaning is affected by its conceptual apparatus with certain specialized terminology, that presupposes the nomination of objects, situations and processes in a particular area of knowledge and social activity. Theoretical and methodological grounds for investigating structural and semantic factors to determine the meaning of medical terms in contemporary English naturally integrates the achievements obtained by scientists in the field of the theory of nomination [19], terminology [5; 6; 21], semantics [1], cognitive linguistics [11; 12; 14; 15; 17; 20].
Nomination theory explains the use and choice of linguistic means to denote various fragments of the known world and thoughts about it. The subject of its study is the study of the mechanism of nomination, the interaction of thinking, language and the surrounding reality in it, the role of the pragmatic factor in the choice of nominative units, etc. [19: 224]. In vocabulary, a person reproduces the world, in particular, the situation as a fragment of it, which he perceives, evaluates, models.

The aim of the article is to investigate structural and semantic factors to affect the meaning of medical terms in contemporary English.

Results. The main cognitive processes of world interpretation are conceptualization and categorization. Conceptualization is a process of perception, comprehension, construction of the world, which leads to the generalization of ideas about real or imaginary objects and phenomena in the form of mental units. Categorization is the organization of human information about the world by sorting it into categories. Through the mediation of cognitive processes and structures a nominative act is carried out, which is the process of naming fragments of the world by means of language and speech. His research is needed to understand how cognitive models acquire linguistic notation. Cognitive factors accompany the whole process of nominative acts and consist in conceptualization and categorization of the reference situation, in the mediation between the outside world and linguistic notation (language units identify components of the situation through their mental representations), in choosing and removing the necessary denomination from mental structures [7: 15].

The focus of linguistic attention is theoretically and practically significant studies of the motivational aspect of the meaning of language units, terms in particular, in the combination of structural and semantic [4: 52] and cognitively-oriented [8: 104] measurements, which contributes to solving current problems of modern nomination theory. The goal of the semantic-cognitive mechanism of motivation is to distinguish the sign-motivator from mental structures as a set of knowledge about the signified [9: 5]. The analysis of the motivation of nominative units makes it possible to explicate the mental processes that mediate the connection between the linguistic and the conceptual.

The meaning of the terms is determined by the extra lingual data reflected in the inner form of the lexical units and also by their structural peculiarities such as the origin and the semantic content of the components (roots, affixes, words in compound clusters) which constitute the term. Thus, the names of medical instruments can be classified according to various criteria which motivate their meaning, for example:

1. Names of medical instruments that arose on the basis of the names of certain individuals. The group is based
on the names of people, such as doctors, tool manufacturers, engineers or others, who have either developed tools, influenced their development, or participated in their advertising, marketing, for example: ‘Coher circular probe’, Gigli ‘saw’. Eponyms are special lexical units, culturological code, the axiological basis of which is individuality and personified nature, in which certain ethical, social and political values are associated with a particular carrier. Eponyms are used as a basis for the formation of terms, which is determined by the cognitive factor, human mental activity aimed at reflecting environmental objects, the need to name new objects, the understanding of which is due to mental processes of conceptualization and categorization. The noticeable tendency to save language means together with the analytical activity of human thinking is the reason that every language team uses well-known words and established expressions to denote new realities, justifying the active use of eponyms to replenish the lexical structure of language [3; 14].

2. Names of medical instruments based on functional needs, for example: elevator, drill, needleholder.

3. Names of medical instruments based on the required characteristics, for example: sharpness - a hook, clarity - tweezers.


5. Appointment of medical instruments for body parts, for instance: meniscus retractor, the kidney vessel [16]

Word formation, which is usually analyzed on the border of lexicology and grammar, is one of the ways to replenish the lexical and syntactic means of language, ensuring its renewal, enrichment and development. Word formation is interpreted as a process and result of forming new words on the basis of monosyllabic words or phrases with the participation of language-specific formal ways of semantic rethinking and refinement of the original units, one of which is a combination of several bases. The nominative function of word formation is the representation of fragments of the world by means of language - a cognitive property that is actively described by scientists with the emergence of cognitive-discursive paradigm of knowledge in the eighties of the twentieth century and associated with the isolation and objectification of conceptual entities [7: 8]. The word-forming system is an array of vocabulary from which the necessary nominative units can be distinguished, and at the same time a database that equips speakers with schemes of combining knowledge structures with certain word-forming constructions of word-forming modeling [2]. The most productive ways of term formation in contemporary English are morphological and syntactic.

The common way of morphological term building is suffixation. Productive models in modern medical terminology are models with the suffixes -ing, -tion (-sion), -er (-or), -ist, -ic. The suffixes -ing and -tion (-sion) can be used to form the names of processes, actions: aging, feeding, healing, teething, mapping, sweating. The suffixes -ist, -er (-or) tend to express the meaning of a doer of the action: alienist, anatomist, bacteriologist, oculist, neurologist, oncologist, urologist, trichologist. The suffixes -er, -or can be used to denote equipment names: activator, adapter, needleholder, suppressor, stretcher, sterilizer, scarificator, oxygenator, neurotransmitter [13]. The suffix -ic often denotes belonging to a particular subject area: galactogenic, icteric, immunogenic, lipotropic, cholecystic, dactylic [16].

With the help of prefixation a much smaller number of terms is formed, and there is a significant tendency to use borrowed prefixes (re-, de-, poly-, sub-, neo, etc.), most of which are taken from Latin: reinfection, regression, replanting, derangement, desiccation, desorption,
polyclinic, polyclaryocyte, polyeuritis, sublingual, subliminal, subscription [16].

A great number of affixes are etymologically marked adding extra meaning to the units. Regarding the origin of modern medical terminology is the result of centuries of development of world treatment and medical science. Regardless of the national language in which medical terminology is presented, it includes a significant proportion of common lexical and word-forming units and general structural models. This is due to the influence that has had on medical terminology for centuries and is still exerted by the two classical languages of the ancient world, ancient Greek and Latin.

According to some estimates, in English most terms are based on Latin and Greek. Anatomical and histological nomenclatures, which are part of medical terminology, are compiled entirely in Latin. These nomenclatures are based on the alphabet, phonetics and grammar of the Latin language [13].

The word-forming possibilities of the Greek language significantly prevailed over the potential of the Latin language, as they were characterized by the ability to place in any language forms first recognized and depicted phenomena, facts, concepts and ideas of biological and medical aspects by means of various ways of word formation, in particular by suffixation and base formation.

Diseases, pathologies, symptoms, vectors, medical devices get their names from the fund of Greco-Latin vocabulary.

With some exceptions, terms with Latin roots refer to a part of the human body and sometimes to the names of the pathologies (fever, stress), and terms based on the Greek root indicate that this part is currently being examined or that there is some pathology in it (allergy, atherosclerosis, athrophy, dystrophia, hypoxia, thrombosis etc.) or diseases (anemia, diabetes, dysentery, gonorrhea, leukemia, leprosy, migraine) [16].

Prefixes and affixes that constitute the word-building pattern of the medical terms play a crucial role in understanding their meaning. Thus, prefixes can indicate the location of the object, for example: Greek prefix ‘peri-’ means ‘around, about, beyond’ referring to anatomical formations and pathological processes located in close proximity to the object of basic anatomical significance: periosteam, peripapillary, perisalpingitis, periuongul – periungual, perivesical [16].

Latin prefix ‘supra-‘ means ‘above, over, beyond, on the upper side’: supraauricular, supraduction, suprarenal, supravalvular [16].

Latin prefixes with the opposite meaning ‘pre-‘ meaning ‘before, to’ and ‘post-‘ meaning ‘after’ in predoctoral, preeruptive, preexcitation, premature preplanning, prepossession; postabortal, postsurgery, posthemorrhage, postmyocardial [16].

To denote redundancy or insufficiency in English medical terminology, the Greek prefix ‘hyper-‘ is used to mean ‘over, above, beyond’, and ‘hypo-‘ to signify ‘under, beneath; less, less than’ for example: hyperemia, hyperemotivity, hypergonadism, hyperhidrosis; hypersomnia, hypocrinism, hypomelanosis [16].

The syntactic method of term formation is the most productive means of replenishing terminology. This method involves converting ordinary free phrases into complex “word equivalents”.

The simplest and at the same time the most common type of word combinations in English terminology is a two-component attributive phrase consisting of a nuclear element, namely a noun in the nominative case and an attributive, defining element. Common types of two-component terms in English medical vocabulary [16] are as follows:

1. Attributive phrases with an adjective in the function of the prepositional definition: metabolic rate, infrared rays, ultimate recovery, multiple sclerosis, gastric secretion, supraventricular tachycardia, soft abdomen, cold abscess, salicylic acid, aural calculus, occult cancer.
2. Attributive phrases with a noun in the function of the prepositional definition: water pox, microbiology laboratory, elbow joint, blood serum, infection rate, head physician hepatitis virus, leg ulcer, motor nerve, skin rash, lupus nephritis, scrub nurse, duct orifice, finger plethysmography, drug.

3. A significant number of medical terms (mainly the names of diseases) are formed according to the noun-and-noun model, the first component of which denotes the proper name, the bearer of which is usually the creator of this term: Robson’s point, Alanson’s amputation, Alzheimer’s disease, Sutter’s blood, Kocher’s forceps, Sutter’s blood, Bell’s mania, Trendelenburg’s position, Friedman’s reaction.

Compounding is a combination in one word of two or more root morphemes: frostbite, gastroduodenoscopy, gastrointestinal, macroglobulinemia, heatstroke, high-toxic, juxta-articular, kidney hypochondrodystrophy, framework, monoaminoxydase, morphogenesis, juxta-articular, microspherocytosis.

English medical terminology, like any other terminological system, is supplemented in various ways, one of which is the semantic method of term formation. It includes the transition of terms from other sciences, borrowing terms from other languages, terminologizing the common meaning of the word, metaphorical and metonymic transfers. Semantic changes can occur due to linguistic, historical and social reasons and can be caused by the influence of other languages and dialects.

One of the types of semantic changes is the generalization or expansion of the meaning of the word, which means increasing the semantic volume of the word in the process of historical development. Most often, the expansion of the meaning is carried out as a result of the transfer of the name to the function performed by two objects. For example, the word doctor meant ‘religious teacher, adviser, scholar’ from Latin [18]. The current use of this word in the medical sense is the norm, but in this meaning it gradually came into use due to the fact that people associated a doctor with an educated person.

The essentially opposite process is the narrowing or concretization of the meaning which means a reduction in the semantic scope of the concept in the process of its historical development or in the context of language use. The concretization of the meaning can occur due to the quality clarification. For example, the semantic content of ‘pemphigus’ was narrowed to ‘pemphigus vulgaris’ that is a severe skin disease associated with the formation of blisters on the skin and mucous membranes, which open with the formation of painful erosions.

A rather productive semantic method that serves to form terms in the system of medical terminology is metaphorical transfer of meaning. Metaphor denotes the transfer of meaning by the similarity of external or internal features, as well as functions [10: 307]. The main function of the terms formed by metaphorical transfer is the function of naming new objects, processes, phenomena: tail of the pancreas, strawberry tongue, butterfly vertebra. Metaphorization in English terminology is a verbalization of figuratively meaningful specific scientific knowledge that mirrors the mentality, social mental activity, professional experience, linguistic and cultural competence of specialists [22: 114].

If metaphorization is based on the comparison or analogy of any objects, phenomena, properties, unrelated and independent of each other, then metonymy is based on the transfer of adjacency. The focus is on the parts of something that can signify or replace something on the whole. In metonymy, terms are created as a result of a shift in meaning based on spatial, temporal or causal contiguity of concepts. It is believed that metaphorization is more
productive in the field of specific vocabulary, and metonymic transference associated with the narrowing of meaning is more common in abstract vocabulary [22: 113]. Metonymization in English medical terminology (hay fever, hospital fever, swamp itch) is less productive than metaphorization.

**Conclusions.** The application of the cognitive aspect of the study of nominative processes made it possible to clarify the role of cognitive capabilities of consciousness in the creation of nominative units, taking into account motivational relationships. The study of motivational mechanisms is based on the analysis of structural and semantic connections between derived and created units of language, which at the cognitive level is a way of linguistic representation of the conceptual components of the system of ethnic consciousness. Nomination theory contributes to figuring out the factors of using and selecting language means to denote a variety of fragments of the real or virtual world and conclusions about it. The techniques of nomination reveal the interaction of thinking, language and the outer reality in it. In vocabulary, terms including, a person judges about the world and its fragments. The semantic-cognitive feature, which motivates the meaning of the terms, reflects in the meaning the peculiarities of the culturally marked comprehension by the bearers of the English language of the fragments of the surrounding reality, medical area in particular. The structural and semantic features of medical terms in modern English are reflected in the internal form of units, their etymology and morphological structure. As for the inner form of the lexemes under analysis, a lot of names for the medical issues were created on the basis of eponyms, functions, certain characteristics, body parts and other features. The productive ways of term formation in modern English are morphological, syntactic and forming compounds. Regarding the etymological roots of the medical terms, words with Latin roots refer to a part of the human body and to the names of the pathologies. Terms based on the Greek root contribute to names of a pathology or a disease. Affixation play an important role in word formation in medical terminological system. An overview of the types of English two-component terminological phrases allows us to conclude that the most typical are phrases formed by defining the original term, in which the role of the attributive unit are adjectives and nouns eponyms in particular. The role of metaphorization as one of the most effective sources to develop professional vocabulary with new units is quite vivid. Metaphor is viewed as a cognitive mechanism to produce the meaning of abstract notions by means of specific objects. The semantic method of term formation presupposes borrowing terms from other languages, terminologizing, metaphorical and metonymic transfers which, along with their structural peculiarities, predetermine the semantic content of medical terms in contemporary English.

**СПИСОК ВИКОРИСТАНЬОХ ДЖЕРЕЛ ТА ЛІТЕРАТУРИ**


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