

UDC 811.111'373.46[615.83+615.851.3]

DOI <https://doi.org/10.32999/ksu2663-2691/2020-83-13>

WAYS OF TERM FORMATION IN THE FIELDS OF PHYSICAL THERAPY AND ERGOTHERAPY

Chumakova Kseniia Oleksandrivna,

Candidate of Philological Sciences,

Assistant Professor at the Department

of Social and Humanitarian Sciences

Khortytsia National Educational and Rehabilitation Academy

ksenchu@gmail.com

orcid.org/0000-0001-5684-4921

The article deals with the methods of term formation in the fields of physical therapy and ergotherapy which are currently gaining popularity in Ukraine. The research covers the structural and semantic features of the mentioned terminological units.

The objective of the research is to study the structural features of these terms in the English language. The mentioned objective, in turn, requires the fulfillment of the following **tasks**:

- to analyze the morphological characteristics which are typical for the researched terminological units;
- to identify the main ways of their formation;
- to identify the structural models used for the formation of the researched multicomponent terms.

The methods applied in this research included both linguistic ones, such as: the continuous sampling method, the method of morphemic analysis and word-building analysis, structural and etymological analysis, and general scientific ones, namely: quantification method, systematization and classification, generalization.

The results of the research are defined as: a) the creation of physio- and ergotherapeutic terms glossary; b) the overview of the term formation methods; c) the identification of the most common patterns used to form multicomponent terminological units in the studied fields.

Conclusions. Over the past decades, terminological units have become the subject of numerous linguistic studies worldwide. Despite the fact that terminological units belong to the lexical system of the language and, therefore, the methods of their formation are the same as those used for common lexemes formation, the ratio of certain nomination processes can differ. The research demonstrated that the ratio of monolexeme terminological units and polylexeme physio- and ergotherapeutic terms is 20% to 75% respectively. The majority of monolexeme terms are formed by means of affixation. The majority of multicomponent terminological units consist of two elements, and the most frequent pattern is N + N. Abbreviated terms (5% of the total number of the researched terminological units) are used parallelly with their full forms.

Key words: lexical system, terminology, structural peculiarities, affixation, abbreviation.

СПОСОБИ ТВОРЕННЯ ТЕРМІНІВ ГАЛУЗЕЙ ФІЗИОТЕРАПІЇ ТА ЕРГОТЕРАПІЇ

Чумакова Ксенія Олександрівна,

кандидат філологічних наук,

старший викладач кафедри

соціально-гуманітарних дисциплін

Хортицької національної

навчально-реабілітаційної академії

ksenchu@gmail.com

https://orcid.org/0000-0001-5684-4921

Статтю присвячено дослідженню способів творення терміноодиниць галузей фізичної терапії та ерготерапії, що наразі набувають популярності в Україні. Дослідження фокусується на структурних і семантичних характеристиках зазначених терміноодиниць.

Метою наукової розвідки є дослідження структурних особливостей зазначених термінів в англійській мові. Для її досягнення у дослідженні необхідно виконати такі **завдання**:

- проаналізувати морфологічні характеристики, які є типовими для досліджуваних терміноодиниць;
- визначити основні способи їх творення;
- визначити структурні моделі, що використовуються для творення мультикомпонентних термінологічних одиниць досліджуваної галузі в англійській мові.

Методи, використані в дослідженні, включали як суто лінгвістичні (наприклад, метод суцільного вибору, метод морфемного та словотворчого аналізу, методи структурно-семантичного й етимологічного аналізу), так і загальнонаукові (наприклад, метод кількісних підрахунків, систематизацію та класифікацію, узагальнення).

Результатами цього дослідження є: а) складання глосарію фізіо- та ерготерапевтичних термінів; б) огляд основних методів їх творення в англійській мові; в) визначення найчастіше використовуваних моделей.

Висновки. Упродовж останніх десятиліть терміносистеми привертають дедалі більшу увагу лінгвістів. Незважаючи на той факт, що терміноодиниці належать до лексичної системи мови (а отже, для них характерні ті ж способи творення, що застосовуються для творення загальноживаних лексем), співвідношення різних процесів номінації може відрізнитися. Серед досліджених термінів галузі фізіотерапії та ерготерапії в англійській мові 20% представлені монолексемними терміноодиницями, тоді як 75% є мультикомпонентними термінами. Більшість термінів-слів утворено за допомогою афіксації. Більшість полілексемних одиниць складається з двох елементів, а найбільш уживаною структурою таких термінів є N + N. Абревіатури (5% загальної кількості досліджених терміноодиниць) вживаються паралельно з повними їхніми формами.

Ключові слова: лексична система, термінологія, структурні особливості, афіксація, абревіація.

1. Introduction

The growing demand for well-qualified health specialists worldwide increases the importance for physiotherapists and ergotherapists to integrate into the international professional community for knowledge exchange and research. The active processes of term formation taking place in the researched terminological sphere are accompanied by a significant variability of denominations and necessitate the unification of the mentioned terminological system. The relevance of the chosen research topic is determined by the fact that structural and semantic features of the physio- and ergotherapeutic terminology have not been sufficiently covered by researchers yet.

Physio- and ergotherapeutic terminological units are *the object* of the research while the ways of their formation are its *subject*.

The *material* for the study (1 800 units) was selected using the continuous sampling method from printed and electronic defining, ideographic, thesaurus and etymological dictionaries as well as printed and on-line journals, encyclopaedias and reference books on physiotherapy and occupational therapy.

Such scholars as I. Arnold (Арнольд, 1998), S. Grinev-Grinevich (Гринев-Гриневич, 2008), Т. Куяк (Кияк, 2007), Т. Kandelaki (Канделаки, 1977), G. Litvinenko (Литвиненко, 2007), D. Lotte (Lotte, 1961), A. Reformatskyi (Реформатский, 1986) researched terminological systems of different fields. Subject field terminology in different languages was studied in the works of K. Jacobs (Jacobs, 2015), R. Koval (Коваль, 2017), S. Porter (Porter, 2005), J. Rice (Rice, 2016).

The majority of the scientists mentioned above argue that the term has peculiar features distinguishing it from commonly-used lexical units; however, it is emphasized that terminological systems belong to the lexical system of a certain language. Therefore, the former are governed by the rules which are the same as those used for the commonly-used lexical units (Лейчик, 2006). Nevertheless, the ratio of certain nomination processes can differ (Алексеева, 2002: 56). Taking into account the belonging of terminology to the lexical system of the language, it is possible to conclude that the same ways of units formation, their structural types and semantic processes should be characteristic for it.

As any other sphere of human activity, physiotherapy and occupational therapy are not isolated, so a significant number of terms used by therapists have been borrowed from medicine (*arteriosclerosis, glomerulus, myoclonus*), psychology and psychotherapy (*agoraphobia, instinctual drives, insight*), social work (*caregiver, institutionalization, allowance*), physics (*friction, tension, motion*), mathematics (*angle, horizontal plane, vertical plane*) and so on.

Having performed the analysis of physio- and ergotherapeutic terminological units, we have identified monolexemes, formed morphologically or by means of semantic derivation, and polylexeme terms formed syntactically.

2. Monolexeme term formation

Interestingly, the proportion of basic monolexeme terms identified during our research is rather low (approximately one fifth of the total number of analyzed units). Among the monolexeme terms, there are: a) 19% of underived or root words, for instance, *creep* (a measure of the deformation in a material as a result of a constant load applied over a specific time interval), *cue* (subjective and objective data), *flow* (a state of consciousness when people are so involved in an activity that nothing else seems to matter); b) 60% of units formed by affixation, for example, *flexion* (the act of bending a body part), *signage* (displayed verbal, symbolic, tactile, or pictorial information), *pronation* (rotation of the forearm so the palm is facing down toward the floor); c) 21% of compounds, that is terminological units which consist of several root words or stems combined together, such as: *caregiver* (the one who provides care and support to another person), *clubfoot* (birth defect in which the soles of the feet face medially and the toes point inferiorly), *tensiometer* (the device used to measure force produced from an isometric contraction).

Having performed the etymological analysis of the underived root-word terms from the studied field, we can conclude that the percentage of identified terms formed using semantic derivation was not significant, for example: *aura* (subjective sensation preceding a paroxysmal attack) or *raw* (unadjusted).

The prevalence of affixation as the way of forming monolexeme terms correlates with the opinion of L. Chernyshova who argues that such construction of the derivative reflects notion development caused by the development of the scientific thought (Чернышова, 2010: 141). About 18% of the monolexeme terms were formed using prefixes, with *pre-*, *anti-*, *hyper-*, *hypo-* and *poly-* being the most productive, for example, *prejudice, preload, antigen, antibody, hypertension, hyperventilation, hypoxia, hypotonicity, polydrug*. Almost the same proportion of terminological units were formed using suffixes, the most widely-used of which were *-tion* and *-ment*, for instance, *adaptation, adduction, adjustment, ailment*. The vast majority of terms were formed using both prefixes and suffixes, such as: *presbycusis, akinesia, presbyopia, micrographia*.

3. Polylexeme term formation

Researched polylexeme terms differ depending on the number of elements constituting them and the grammar pattern. They can be subdivided into those consisting of two elements (*intention tremor* – a rhythmical, oscillatory movement initiated with an arm or hand.), three elements (*pulmonary postural drainage* – placing the body in a position that uses gravity to drain fluid from the lungs), multicomponent ones (*Quick Neurology Screening Test* – an informal screening for children 5 to 18 years that tests gross motor, praxis, fine motor, visual motor integration, visual perception, tactile, and vestibular functioning) and phrasal ones, which contain prepositions or conjunctions (*rating of perceived exertion* – psychophysical scale for subjective rating of exertion during work).

Research results suggest that approximately 75% of physio- and ergotherapeutic terms are represented by polylexeme units. This goes in accordance with the commonly held opinion that syntactic formation is the prevailing method of forming terms, and from 60% to 90% of terms in the majority of European languages and polylexemes, (Дрезен, 1934) which can be explained by the fact that such structure enables a higher level of meaning specialization (Гореликова, 2002: 133). The majority of polylexeme terms in the researched field consist of two elements; the most productive models are *N + N* (*toilet hygiene, role dysfunction, respite care*) and *Adj. + N* (*arterial embolism, developmental disability, truncal ataxia*).

Among the three-component terminological units, the prevailing models are $N + N + N$ and $Adj. + N + N$ (40% of the total number of 3-component terms each), for instance, *patient's needs assessment*, *pain intensity measurement*, *Minimum Data Set*, *dissociative identity disorder*, *arteriovenous oxygen difference*. One more productive pattern used to form three-component terminological units in the researched field is $N + V-ed + N$, in which two first elements are written with a hyphen and function as an attribute to the first element, for example, *patient-related consultation*, *patient-oriented approach*, *norm-referenced test*, *animal-assisted therapy*. Interestingly, the opposition in three component terms is demonstrated with hyphens and slashes, for example, *nature/nurture controversy*, *person-environment fit*, *appearance-reality distinction*, *right-left discrimination*. In addition, this group contains eponyms, mainly denominating disorders or health problems, agreements or norms and methods of treatment, such as: *Wernicke-Korsakoff syndrome*, *Welsh-Clark Act*. Four- and five-component terms have also been identified in the course of our analysis, but their total proportion constitutes only 10% from the total number, for example, *American Occupational Therapy Association*, *attention deficit hyperactivity disorder*, *Baltimore Therapeutic Equipment work simulator*.

Among the polylexeme terms of the phrasal type, one element of which is a preposition or a conjunction, the majority are formed using *and*, *of* and *with*, for example, *basic activities of daily living*, *Bayley Scales of Infant Development*, *Individuals with Disabilities Education Act*, *safety and emergency maintenance*, *Safety and Functional ADL Evaluation*. Thus, it can be concluded that the frequency of using the mentioned models witnesses about the attempt to structure and systemize the terminological units, which, in turn, helps to nominate the complex notions of the branch.

According to our findings, almost 5% of the researched terms total number are abbreviations, which is, a good example of the language means economy law put forward by of A. Martinet and the opinion of I. Baudouin de Courtenay who argues that in any language there is striving for efforts economy (Бодуэн де Куртенэ, 1963: 224). The majority of identified abbreviations are acronyms, for example, *ADLs* (*activities of daily living*), *UR* (*utilization review*), *VRS* (*verbal rating scale*), *RTS* (*rehabilitation technology supplier*), *RMA* (*Refugee Medical Assistance*), *PEVST* (*Post-Employment Vocational Skills Training*). Notably, the full forms and their shortened versions function as synonyms. There are also abbreviations where one element is shortened, while the other one is not, such as: *eHealth* (*a broad term encompassing health-related information and educational resources*), *mHealth* (*delivery of health-related information and services using mobile communication technology*). Except acronyms, we have identified other common shortenings, such as: *Ant.* (*anterior*), *Dep.* (*dependent*), *Ex.* (*example*), *EX* (*exercise*) and others.

4. Conclusions

Summarizing the above-mentioned, it can be concluded that a big proportion of terms came to the spheres of physiotherapy and occupational therapy from medicine, psychology and psychotherapy, social work, physics and mathematics. The proportion of monolexeme and polylexeme physio- and ergotherapeutic terms is 20% та 75% respectively. The predominant majority of monolexeme terminological units are formed by means of affixation and the most frequent pattern of polylexeme terms is $N + N$. 5% of terms are abbreviations.

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Стаття надійшла до редакції 01.07.2020
The article was received 1 July 2020