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ПОРІВНЯЛЬНИЙ АСПЕКТ У ФОРМУВАННІ ЛЕКСИКИ ТЕРМІНОЛОГІЇ СУБМОВИ ПЕДІАТРІЇ Богдана КАЧАН, Наталія ЧАЙКОВСЬКА, Любов СТЕГНІЦЬКА, Оксана ОСТАПЧУК

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COMPARATIVE ASPECT OF LEXICON FORMATION IN PEDIATRIC TERMINOLOGY Bogdana KACHAN, Natalia CHAIKOVSKA, Liubov STEHNITSKA, Oksana OSTAPCHUK

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Богдана Качан, Наталія Чайковська, Любов Стегніцька, Оксана Остапчук. Порівняльний аспект у формуванні лексики термінології субмови педіатрії. В останні десятиліття вивчення процесів термінотворення набуває все більшої актуальності як в українському, так і в зарубіжному мовознавстві. Вивчення лексикосемантичних та структурно-морфологічних особливостей термінів дає змогу оцінити рівень розвитку відповідної терміносистеми та визначити пріоритетні напрями її унормування. Поповнення термінології фахових мов відбувається на основі загальних принципів словотвору, характерних для мови в цілому. Метою статті є виявлення тенденцій інтернаціоналізації та автохтонності у процесі найменування хвороб у сучасній терміносистемі педіатрії. Розуміння основних моделей термінотворення дає можливість оволодіти професійною мовою при обміні та інтеграції даних, що сприятиме своєчасному вирішенню нагальних питань медицини. Об'єктом дослідження є терміни на позначення дитячих хвороб. Методи дослідження. Проведено етимологічний та порівняльний аналіз латинських, німецьких та англійських термінів з метою встановлення способів трансформації назв дитячих хвороб.

Наукова новизна. Німецька та англійська медична термінологія формувалася протягом століть під впливом різних чинників, які зумовили її неоднорідність. Щодо внутрішніх чинників, то на межі століть спостерігається динамічний розвиток мов, що призводить до збільшення кількості запозичень та відновлення і вдосконалення їх національних мовних ресурсів. На особливу увагу заслуговують терміни давньогрецького та латинського походження. Упродовж століть класичні мови античності відігравали унікальну роль у формуванні медичної термінології, до якої належить і номенклатура педіатрії, де греко-латинські морфеми сьогодні посідають провідні позиції з точки зору термінотворення на позначення її номінативних класів. У нашому дослідженні вони функціонують як греко-латинські терміни, що адаптувалися до фонетичних і морфологічних особливостей мовиреципієнта, наприклад, лат. hepatitis > нім. die Hepatitis > англ. hepatitis або лат. cherubismus > нім. der Cherubismus > англ. cherubism. 3 розвитком національної термінології з'являються терміни автохтонного походження, як-от: лат. tussis convulsia > нім. der Keuchhusten > англ. whooping cough або лат. metatarsus varus > нім. der Klumpfuß > англ. clubfoot. В епоху глобалізації суспільства англійська мова поступово стала мовою міжнародного спілкування, в результаті чого в німецькій мові ми маємо такі теміни, як der Flap-Op (розщеплення піднебіння у дітей, що піддаються хірургічному втручанню) чи die Check-up-Untersuchung (скринінгове обстеження). Висновки. Порівняльний лексико-етимологічний аналіз термінів фахової мови педіатрії дозволив встановити певну специфіку походження термінів, де етимологічну основу термінології складають інтернаціональні та автохтонні елементи, які є повністю або частково запозиченими і мають національні відповідники у фаховій мові.

Ключові слова: термінологія, педіатрія, етимологія, автохтонність, запозичення.

**Introduction.** Terminological vocabulary, as an integral part of the vocabulary of any language, is the result of a complex historical process determined by the laws of the development of language and technology, the scientific theory, and the culture of each country.

In recent decades, the study of term formation processes has become increasingly relevant both in Ukrainian and foreign linguistics. The scientific and technological progress with its discoveries and inventions determines the need to create nominative units to indicate new processes and phenomena in various fields. The study of lexical-semantic and structural-morphological peculiarities of terms makes it possible to estimate the level of development of the corresponding terminology system

and determine its standardization's priority directions. The complement of the terminology of professional languages is based on the general principles of word formation, which are characteristic of one national language. A productive way of creating lexical innovations in many Indo-European languages is stem and word formation since compact compound words can call different phenomena simultaneously.

Analysis of the recent research and publications. The interest in the texts of sublanguage Pediatrics is growing with the rapid development of medicine. Many Ukrainian and foreign Germanists have studied the questions of creating compound nominations. Among the research devoted to medical terminology issues, a

significant place is allocated to the works that highlight the etymology problems, namely A. Botsman<sup>1</sup>, O. Petrova<sup>2</sup>, who consider the definition of ways of its creation, and V. Labov<sup>3</sup>, who analyzed the specifics of the functioning of the foreign language medical terms, respectively. In particular, the work of many scientists, such as K. Galinski<sup>4</sup>, T. Kyiak<sup>5</sup>, D. Samoilova<sup>6</sup>, L. Zubova<sup>7</sup>, is focused on the study of various aspects of the term formation of individual terminology systems.

Medical professional language is an extensive system of the use of vocabulary in each branch of medicine, which is constantly enriched with new terms. "The terminologization of new concepts in science cannot be chaotic since there is a need for clear and unambiguous communication between representatives of a specific field of knowledge and interlanguage communication".

The aim of this article is to identify the tendencies of internationalization and autochthony in the process of naming diseases in the modern terminology system of pediatrics as the leading branch of medicine. Both specific and universal features and characteristics are traced in the terminology of childhood diseases; this also applies to the pathological anatomy and physiology of the child, diseases of the cardiovascular system, and general medical vocabulary, which functions in the above-mentioned texts.

The object of the research is the terms that nominate children's illnesses and are documented in medical explanatory dictionaries, reference books, and manuals. The names of diseases in the pediatric professional language have been studied, and a comparative analysis of Latin, German and English terms has been carried out to establish how to transform the names of childhood diseases.

Presentation of the primary material. The system of terms is a signed model of a particular field of knowledge that explains the notions through names, called "terms" in terminology. The term is considered a word or a fixed phrase, which expresses the concept of science, technology, or another field of human activity, and has a definition that reveals those signs of the concept relevant to this area"9. Following the generally accepted definition, a term is a sign of the particular semiotic system that performs the function of definition to express a concept. It is a complex dialectical phenomenon that combines inherently coexisting language substrate and logical superstrate of a term and its nature (scientific, terminological scientific-technical)

meaning<sup>10</sup>. The terminology science has acknowledged that a term is intended to express the scientific concept and to be a unique instrument of cognition and knowledge<sup>11</sup>.

A set of terms correlated with a particular area of human activity forms a terminology or terminology system, which serves as a kind of linguistic model of a system of professional concepts, a concentrated expression of achievement in a particular area of knowledge<sup>12</sup>.

Terminological vocabulary is created to ensure optimal mutual understanding between the specialists of a particular area, which has an inherent, standardized thesaurus and typical grammatical and syntactic constructions in the standard texts for this discourse. Therefore, terminology is generally regarded as a "closed vocabulary context whose boundaries are predetermined by a particular social organization of activity." Thus, the terms represent the artificial names created and not the data in the language and may be replaced by other terms. Term formation is conducted using the methods of word formation, which are characteristic of the common national language, productive models of term formation of the "popular" donor language, or borrowing the names for the denotations and concepts of the subject field, which are lacunary in the recipient language.

Different methods and models of term formation are distinguished in the professional literature, the variation of which depends on the concept of the author. Thus, O. Reformatskyi specified the following methods of term formation: 1) borrowing; 2) translation of the fixed term; 3) terminological specification of the commonly used word; 4) derivation according to H. Fluk, a) specific use of commonly used words (metaphor, metonymy, specification, definition); b) the use of the elements of the foreign words (borrowing, loan-translation); c) derivation; creation of the complex nouns (word-formation and word-combination); d) abbreviation are included to the productive methods of term formation

German and English medical terminology has been formed for centuries under various factors that determined its heterogeneity. Regarding the internal factors, dynamic language development can be observed on the verge of centuries, leading to an increase in the number of borrowings and the restoration and improvement of their national linguistic resources. Using autochthonous and foreign-language terms led to such lexical-semantic

<sup>&</sup>lt;sup>1</sup> Botsman A.V. Strukturno-semantychni ta prahmatychni osoblyvosti farmatsevtychnykh tekstiv (na materiali anhlomovnykh instruktsiy do vzhvzhyvannya likars'kykh preparativ) [Structural-semantic and pragmatic features of the pharmaceutical texts (based on the English instructions for use of drugs)]: avtoref. dys. kand. filol. nauk: spets. 10.02.04. K., 2006, 20 p. [in Ukrainian].

<sup>&</sup>lt;sup>2</sup> Petrova O.B. Strukturno-semantychna kharakterystyka medychnoyi terminolohiyi ta narodnykh naymenuvan' khvorob v ukrayins'kiy movi [Structural-semantic characteristics of medical terminology and national titles diseases in Ukrainian]: avtoref. dys. kand. filol. nauk , Harkiv, 1994, 24 p. [in Ukrainian].

<sup>&</sup>lt;sup>3</sup> Labov W. Sociolinguistic Patterns, Philadelphia: Univ. of Pennsylvania Press, 1972, 344 p. [in English].

<sup>&</sup>lt;sup>4</sup> Galinski C. Terminology and specialized communication. The international conference on "Professional Communications and knowledge Transfer" (Vienna, 24–26 August 1998), Vienna, 1998, Vol. 1., P. 117–131 [in English].

<sup>&</sup>lt;sup>5</sup>Kyiak T. R. Lynhvystycheskye aspekty termynovedenyya [Linguistic aspects of terminology studies], K.: UMK VO, 1989, 174 p. [in Russian].

<sup>&</sup>lt;sup>6</sup>Samoylov D. V. O perevode medytsynskoho teksta [About translation of medical text], Yzdat. dom "Praktyka", 2006, 148 p. [in Russian].

<sup>&</sup>lt;sup>7</sup> Zubova L. Yu. "K voprosu ob osobennostyakh y trudnostyakh perevoda anhlyyskykh medytsynskykh sokrashchenyy" [To a question about the features of the first difficulties of translation of English medical abbreviations], *Vestnyk VHU, Seriya "Lynhvystyka i mezhkul'turnaya kom-kommunykatsyya"*, 2005, 96 p. [in Russian].

<sup>&</sup>lt;sup>8</sup> Kosenko A.V. "Osnovni kharakterystyky anglijskoji međuchnoji terminologiji" [Basic characteristics of the English medical terminology], *Nau-kovyj visnuk humanitarnogo universytetu, Ser.: Filologija*, 2015, N 18, Vol. 2, P. 68–70 [in Ukrainian].

<sup>&</sup>lt;sup>9</sup> Mishchenko A.L. *Linhvistyka fakhovykh mov ta suchasna model' naukovo-tekhnichnoho perekladu* [Linguistics of specialized languages and the modern model of scientific and technical translation], Vinnytsia: New book", 2013, 448 p.

<sup>&</sup>lt;sup>10</sup> Leichyk V. M. Termynovedenye (predmet, metodu, struktura), Lybrokom, 2009, 256 p. [in Ukrainian].

<sup>&</sup>lt;sup>11</sup>Kuptsova T. A. "Structural peculiarities of railway term formation in the English language", *Naukovi zapysky Natsionalnoho universytetu Ostrozka akademiia": seriia "Filolophiia"*, 2020, Vup. 9 (77), P. 43–46 [in English].

<sup>&</sup>lt;sup>12</sup>Tomilenko L. M. Terminolohichna leksyka v suchasnii tlumachnii leksykohrafii ukrainskoi literaturnoi movy [Terminological lexicon in modern interpretative lexicography of Ukrainian literary language], Ivano-Frankivsk: Foliant, 2015, P. 20 [in Ukrainian].

phenomena in medical terminology as polysemy, antonymy, homonymy, and synonymy. Most certainly, this does not contribute to the accuracy of the term, although N. Misnyk states that these lexical-semantic processes do not violate the values of semantic certainty of terms<sup>13</sup>.

Most researchers (O. Stishov, H. Onufrienko, etc.) consider the lexical borrowing process as progressive since there is a replenishment and modification of the medical terminology. However, the disadvantages of this method are known to lead to the denationalization of the terminology system and the substitution of national terms. In particular, it is a rejection of national terms, which is often explained by the fact that they, with their internal form, and semantic motivation, cause unnecessary associations. The etymological analysis of terms of childhood diseases has been conducted, and the specific vocabulary has been established to be combined with borrowed words. Particular attention should be paid to the terms of ancient Greek and Latin origin. For centuries, the classical languages of antiquity have played a unique role in the formation of medical terminology, which includes the nomenclature of pediatrics, where Greek-Latin morphemes today occupy leading positions in terms of termination to denote its nominative classes. In our study, they function as Greek-Latin terms, which adapted to the phonetic and morphological features of the recipient language, for instance:

Lat. hepatitis > Germ. die Hepatitis > Eng. hepatitis;

Lat. parotitis > Germ. dee Parotitis > Eng. parotitis;

Lat. autismus > Germ. der Autismus > Eng. autism;

Lat. *cherubismus* > Germ. *der Cherubismus* > Eng. *cherubism*;

Lat. pediculosis > Germ. die Pedikulose > Eng. pediculosis;

Lat. scoliosis > Germ. die Skoliose > Eng. scoliosis;

Lat. scarlatina > Germ. der Scharlach > Eng. scarlet fever;

Lat. enuresis nocturna > Germ. die Nachtenurese > Eng. nocturnal enuresis.

With the development of the national terminology, there are terms of autochthonous origin, which do not have the same features in the professional language of medicine as in Latin but are derived from words of national origin by word formation as in the following examples:

Lat. tussis convulsia > Germ. der Keuchhusten > Eng. whooping cough;

Lat. labium leporinum > Germ. die Lippen-Kiefer-Gaumenspalte > Eng. cleft lip;

Lat.  $metatarsus\ varus > Germ.\ der\ Klumpfu\beta > Eng.\ clubfoot.$ 

In addition, some children's diseases can be named using both native and borrowed terms, such as:

Lat. tetanus > Germ. der Tetanus / der Wundstarrkrampf > Eng. tetanus / lockjaw;

Lat. strabismus > Germ. das Strabismus / der Schielsehen > Eng. strabismus / crossed eyes;

Lat. varicella > Germ. die Windpocken / die Varizella > Eng. varicella / chickenpox.

In the era of globalization of society, the English language has gradually become the language of international communication, as a result of which we have the following words in German:

der Flap-Op (clef palate in children treated with surgery);

die Check-Up-Dossier (record of the preventive examination);

die Check-up-Untersuchung (screening examination); das GI-Check (examination of the gastrointestinal fact).

In pediatric terminology, some terms are symbols. The essence of the scientific concept is not revealed in its linguistic form, so background knowledge is necessary to interpret such terms. In English, there are so-called "Numbered diseases," considered neutral terms in pediatrics. Pediatricians offered six common diseases that cause rashes to facilitate their work in 1905. They identified them in numbers 1 – rubeola, 2 – scarlet fever, 3 – rubella, 4 - Filatov-Dukes disease, 5 - erythema infectiosum, and 6 roseola, respectively. In particular, erythema infectiosum is often referred to as the fifth disease since it is difficult to pronounce it in Latin several times. Despite the apparent advantages (shorthand and numbers, which are easy to remember), the use of such names by non-professional physicians can lead to inevitable blunders, such as the thought that it is Dr. Fifth who described or discovered the disease. In addition, there are doubts about whether the fourth disease (Dukes' disease) exists as a nosological unit. By 1930 this disease was recognized, but since the 1960s, it has not been mentioned in textbooks. A group of authors who conducted an additional study on Dukes' disease concluded that this disease did not exist at all<sup>14</sup>. The matches have not been found in German, which seeks accuracy.

Also, neutral terms include eponyms. i.e., terms that were named after the author who described the disease, its manifestations, or developed a technique for its treatment:

Lat. *Ewing sarcoma* > Germ. *das Ewing-Sarkom* > Eng. *Ewing sarcoma* (named after James R. Ewing, American pathologist);

Lat. Lesch-Nychan syndromum > Germ. das Lesch-Nychan-Symdrom > Eng. Lesch-Nychan syndrome (named after Michael Lesch, American physician, and William Nyhan, American pediatrician).

The given examples demonstrate that the process of naming diseases in the professional vocabulary of Pediatrics has international (because they are of Greek-Latin origin) and autochthonous characteristics, i.e., terms that are understandable only for native speakers or people who master this language.

Conclusions and perspectives of further research. A comparative lexical-etymological analysis of terms in the professional language of pediatrics has made it possible to establish a particular specificity of the origin of terms, where the etymological basis of terminology consists of international and autochthonic elements that are fully or partially borrowed and have national matches in the professional language. We have concluded that German, English, and pediatric Latin terminology is an open terminology system, constantly supplemented by new concepts and terms requiring a specific name for their designation. The study of terminology and the correct use of medical terms in a foreign language of the professional area is one of the factors in successful professional

<sup>14</sup> Morens D M, Katz A R. "The "fourth disease" of childhood: reevaluation of a nonexistent disease", *Am J Epidemiol*, 1991, Sep 15; 134 (6): 628–40 [in English].

<sup>&</sup>lt;sup>13</sup> Misnyk N.V. Formuvannia ukrainskoi medychnoii klinichnoii terminologiii [Forming of Ukrainian clinical terminology], Avtoreferat dissertacii, Kyiev, 2002, 20 p. [in Ukrainian].

communication. We see further prospects for research in considering the peculiarities of the transformations of the names of childhood diseases in the professional language of pediatrics in the format of translation studies.

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