

УКРАЇНСЬКА МЕДИЧНА ТЕРМІНОЛОГІЯ:
СУЧАСНІ ТЕНДЕНЦІЇ РОЗВИТКУ

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MODERN TENDENCIES OF DEVELOPMENT

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Ткач Алла. Українська медична термінологія: сучасні тенденції розвитку. Цель исследования. Анализ проблем функционирования и упорядочение украинских медицинских терминов на современном этапе, выяснения причин и начертание альтернативных путей их решения. **Методы исследования.** Применены сравнительно-исторический, описательный методы, частично использовано классификационный и статистический. **Научная новизна работы.** Осуществлен лингвистический анализ системной организации и создания украинской медицинской терминологии; определена концептуальная структура рассматриваемой терминологической системы и особенности ее репрезентации в украинском литературном языке через лексико-семантическую призму; выяснены тенденции использования определенных способов и средств создания медицинских терминов с учетом терминологической специфики. **Выводы.** Значение научной работы состоит в том, что выявленные особенности соответствующей терминосистемы дополняют знания о лексической природе в целом, а также о термине как единице языкового знака в плане содержания и плане выражения. Комплексная специфика медицинской терминологии определяется структурой и составом лексико-семантических парадигм, наличием явления паронимии, полисемии, абсолютных синонимов и тому подобное. Важной проблемой является неравномерное соотношение международного и национального в процессе создания и функционирования терминов и терминологизованных слов. Выбор соответствия должен определяться основными требованиями к термину (точность, национальная и международная соответственность, мотивированность, системность, лаконичность, звучность). Убеждены, материалы предлагаемого исследования будут способствовать гармонизации процесса кодификации современной украинской медицинской терминологии и на межотраслевом, и на внутриотраслевом уровнях.

Ключевые слова: термин(ы), терминология, украинская медицинская терминология, полисемия (многозначность), паронимы, синонимы, заимствования, интернационализмы.

Introduction. Modern Ukrainian terminology is characterized in one hand, by the tendency to regulation and normalization of all available term systems, and on the other hand, by ambiguity of lingual phenomenon that accompanies this process.

Active, spontaneous, often unmanageable growth of terminology fund leads to its fouling with defective, sometimes unmotivated terms, to inaccuracy and polysemy, increasing phenomena of synonymy in scientific vocabulary. Intensive, not always justified incarnation occurs of foreign language words, etc. That is why it is clear, why researchers desire to avoid such undesirable phenomenon in terminology as polysemy, synonymy, multi-components of term, overloading by eponymous units, unjustified overusing of foreign language vocabulary and other. In particular, domestic linguists note that there are many problems concerning practical incarnation of mentioned requirements (T. Kyiiak, L. Symonenko, N.Lytvynenko, N. Misnyk, A. Diakov, I. Borysiuk, Z. Kudelko, T. Panko, L.Kovalchuk, O. Ponomariv, P. Selihei). The language of medical science is not exception in this aspect.

The aim of investigation. Analysis of problems of functioning arrangement of Ukrainian medical terms at modern stage, clarification of reasons and outlining of alternative ways of their solving.

Material and methods. Comparative-historical and

descriptive methods are applied, classification and statistical methods are partly applied.

The results of investigation and their discussion. Traditional features, which define the nature of any term as lexical unit of special (professional) limited functioning, are: 1) nominating; 2) regularity; 3) availability of definition; 4) tendency to uniqueness within terminology system of certain branch; 5) absence of emotionally expressive coloring; 6) stylistic neutrality. However, these requirements stay more declared than practically realized, rather ideal than implemented within such a complex micro-term-system as medical one. They cannot be completely complied because of the number of ponderable reasons. For example, the problem of polysemy of terms is objective reason of difficulties in realization of terminology requirements.

So, „the state when one separate concept responds one term is ideal for any term system, because such clear, regulated correlation of the name and reality gives possibility to avoid probable discrepancies and sometimes confusion in the domain of terms¹. Despite it, it is not possible to save mono-semimity in medical terminology as well as in literary language, as human knowledge always updates and new concepts occur on the process of cognition, which require verbal expression. Newly established concepts are reflected in language, in particular, in polysemy of word, which is a form of economy of lingual means. Polysemy is avoided due

¹ Borysiuk I. “Yavyshche synonymii v terminolohii” [The phenomenon of synonymy in terminology], *Dyvoslovo [Divoslove]*, 2000, № 4, P. 27–28 [In Ukrainian].

to appealing to wide context. Its displays in terminology, which are suppressed by clear logically semantic boarders, are significantly narrower than in commonly used language. The type of polysemy that characterizes medical terms is connected with terminology of generally national tokens and their entering in appropriate expressions (composites) concretizes the content of scientific concepts marked by them: *ear drum, upper lip bristle, respiratory tract, bloodstream, field of view, cardio-vascular system*. So, availability of different micro-terms-systems conditions using of equal sound complexes for expression of different concepts (for example: *anastomosis* – in anatomy, biology, surgery; *anesthesia* – in neurology, surgery, dentistry; *induction* – in logic, physics, technique, physiology; surgery – in medicine, military affair, industrial process, financial-trading branch). Such models experienced semantic evolution, namely they occurred through the process of determinologization. For example, such model as *aspirator* occurred in the process of determinologization, that is used with semantics „device for gases, air and other absorption, with the aim of definition of their chemical content, content of humidity and other.“ Such lingual sign expands its semantic structure later through its application in two other terminologies – in branch of medicine and technique – accordingly to meanings „device for conduction of aspiration“ (med.), where *aspiration* is „absorption of different liquids (pus, sputum, saliva), small cloves of something or air from cavities, respiratory tracts, and other with the help of special devise“ and „device for extraction of dust from air in industrial buildings“ (techn.). As we can see, sema „device“ is common for both terminology concepts and differential semes are distinctive which point on the sphere of purpose of devices: „respiratory tracts“ (med.) and „dust“, „industrial building“ (techn.).

Changes considered above in scientific language arise as the result of action of external factors – development of civilization in all its displays that is the result of formation of semantic neologisms.

Another reason of polysemy consists in „retardation“ of the term from evolution of content of a concept, that is expressed by it. One or another concept is divided into two or more separate meaning under conditions of scientifically-technical progress, and one sound complex continues to be used for their expression within one microsystem or closely-related ones. Intra-objective polysemy always causes difficulties in medical terms using, it must be liquidated by introduction of new terms at simultaneous restriction of the meaning of created term (*hypertension* and *hypertonia, microcephaly* and *microcephalia*).

So-called categorical polysemy is also possible, that arises with the condition when one sound complex expresses categorically different meanings due to its word-building structure (subject and process, phenomenon and feature, state and action, action and its result, etc.). For example: *pathology* – science and deviation from norm; *sterilizer* – apparatus for sterilization and performer (specialist in sterilization).

We are going to notice, that medical terms which contain any polysemic term element in its content are not necessarily polysemic, however, such sound arrangement of a term allows to clearly orient in its semantics, comparing: *autolysis, hemolysis and analysis, dialysis; logic, logopedist and physiologist, ophthalmologist*.

Functioning of the phenomenon of paronymy is firstly marked by the impact of international formats in Ukrainian

medical terminology. Partial similarity of some medical term tokens is conditioned by the similarity of those word-building elements, which enter their composition. Semantical dependence is among main factors, which define peculiarities of paronyms. Each paronymatic couple (range) has its own specificity, that is why is it possible to reveal ability of each of them to connect with other words during comparison of paronyms. For example, the term of foreign language origin *defective* (Lat.) – those who have defect, blemish, violation; *defective*, spoiled – realizes its meanings in phrases *defective choice, defective porcelain*, and the term *defective* (who has psychological physical disorders; abnormal) – in phrases *defective psychology, defective pronunciation*, etc.

Paronymy provides partial coincidence, similarity of structure and words pronunciation which are different by meaning, comparing: *appendix – appendicitis, psychiatric – psychic – psychological, heart – miserable – cardiac, stain – stamp*.

Minimal and maximum paronyms are distinguished by the degree of approximation (similarity) of sound arrangement of morphemic composition. Minimal ones differ by no more than one sound unit, for example: *viazny – miazny [elms – muscles], stres – strus [stress – shake], hamuvaty – tamuvaty [gamble – suppress]*; maximum ones differ by more than one sound, for example: *scalpel – skarpel [scalpel – boaster], hronicalnyi – hronichnyi [chronical – chronic]*, etc.

As medical terminology is integral component of generally used vocabulary of Ukrainian literary language, then the phenomenon of paronymy is characterized by similar principled features. Specificity of medical paronymy is conditioned by the nature of a term as special type of lingual sign and specificity of objective branch.

Basic principles of occurrence of paronymy among medical terms and terminology words are: 1) accidental coincidence in sounding: *karbon – karben [carbon – karben], renaturatsiya – denaturatsiya [renaturation – denaturation]*; 2) need of differentiation of terms of different groups (categories): *nervuvaty – nervuvatysia [jitter – be nervous], roztyah – roztyahnennia [roztiahuvannia] [tensile – strain (stretching)]; tsykl – tsykluvannia [tsykliuvannia] [cycle – cycling (sanding)]*; 3) peculiarities of the way of nomination of substances: *metyl – metylen [methyl – methylene], etyl – etylen [ethyl – ethylene], tetryl – tetryt [tetryl – tetryd]*; 4) formation of derivatives from different terms with common roots, but different affixes: *likarniany – likarskyi (likar) – likarskyi (liky) – likuvalnyi [hospital – medicinal (doctor) – medicament (drugs) – therapeutic]; potentsiynyi – potentsialnyi [potential – potential]*, etc.

So, paronymy stays on periphery of medical terms system as type of lexical relations, and it is a possible reason of violation of norms of word usage.

The problem of synonyms is a problem of arrangement of medical terminology. Terminology cannot be separated from laws and processes of their development and functioning as a part of generally-literature vocabulary. According to L. Kovalchuk, a term cannot be exact and at the same time short, not causing associations and having transparent internal form that is oriented into the content of a concept, in addition to be productive in word building relation². Different names for marking identical concepts actively form and function in parallel in scientific language, which have different value can be inter-complemented by each other. It concerns the language of medical science, as well. Terms-synonyms are used in almost

² Kovalchuk L. Yu. Synonimiia terminiv u rosiiskomu usnomu naukovomu movlenni [Synonymy of terms in Russian oral speech]: Extended abstract of candidate's thesis, Odesa, Odeskyi derzhavnyi universytet, 1993, 16 p. [In Ukrainian].

all branches of clinical medicine, especially for marking names of illnesses, their symptoms and (partly) in pharmaceutical sphere.

Synonymous terms are divided into equivalent and interpretive depending on identity or diversity of features in motivation at lexical-semantic level. The first type includes synonyms with sound complex of which one motivational feature is reproduced, fixed by different root or word building elements with similar or close meanings. Synonyms of the second type represent different features of motivation in sound arrangement.

Inter-lingual terms-doublets prevail among medical terms-synonyms of equivalent type, which are words (phrases) of multilingual character, root or word building elements which possess identical meaning. Such doublet pairs are mainly represented by words of Greek-Latin origin and Ukrainian equivalents. Properly Ukrainian (specific) equivalent is word building calque, comparing: *anemia* – *nedokrivnia* [*anemia* – *anemia*], *hennhrena* – *zmertvinnia* [*gangrene* – *nekrosis*], *hiperemiia* – *pochervoninnia* [*hyperemia* – *redness*], *pedykulioz* – *voshyvist* [*pediculosis* – *lice*], *rynit* – *nezhyt* [*rhinitis* – *cold*], *toksychnyi* – *otruynyi* [*toxic* – *poisonous*], *photophobia* – *svitloboiazn* [*photophobia* – *photophobia*]. Ukrainian equivalent is often represented by not a word, but phrase in the series of doublets, comparing: *astysyt* – *chervona vodianka* [*ascites* – *red edema*], *atheroma* – *kista salnoyi zalozy shkiry* [*atheroma* – *cyst of oil gland of skin*], *hematosele* – *kroviani nabriak* [*hematocell* – *blood swelling*], *irynt* – *zapalennia raiduzhnoyi obolonky oka* [*iritis* – *inflammation of iridescent membrane of eye*], *limphadenit* – *zapalennia limphatychnyh vuzliv* [*lymphadenitis* – *inflammation of lymph nodes*], etc. Ukrainian monolingual names occur among equivalent synonyms. Common motivational feature is represented in their sound complexes by multi-roots words or different word building formats with identical or very close meaning in generally used vocabulary (*vodolikosumish* – *likosumish* – *likarska sumish* – *likarskyi rozchyn* [*medical mixture*], *ziv matky* – *otvir matry* [*uterus hole*], *cherevna porozhnyina* – *porozhnyina zhyvota* [*abdominal cavity*]).

Complete and short variants of single sound complex with identical meaning form special variety of synonymy of equivalent type. Short variants of term are created by different ways, in particular: 1) by transition of composite term (term-composite) into difficulty reduced name, for example: *sharp atrophic spiral infant paralysis* – *inflammation of gray substance of spinal cord of children* – *poliomyelitis*; *multiple inflammation of nerves* – *multifold neuritis* – *polyneuritis*; 2) by abbreviation – from initial letters of words, for example: *acute respiratory diseases* – *ARD*; *acquired immune deficiency syndrome* – *AIDS*; 3) by omission one component of complex term, for example: *iontophoresis* – *iontophoresis, leukocytosis* – *leukemia* and others.

Synonyms of equivalent type don't cause special difficulties concerning arrangement of medical terminology, as they don't have such semantic differences which would give

backgrounds to doubt in identity of a concept expressed by them. However, their restriction in using, in particular attempts to avoid unjustified doublets stays the problem of terminologists and authors of various dictionaries, handbooks, manuals, other scientific and education-methodological literature.

Significant amount of synonyms of interpretive type is mainly conditioned by extra linguistic factors in medical terminology – by peculiarities of development of medical science and practice. Firstly, there is principled criterion of emphasis of several distinctive features in one object which are showed up by different motivation features in words terminology. So, obsolete and modern names can be used for marking a certain illness, for example: *mumps* – *epidemic parotitis*; *zolutuha* – *skrofulioz* [*scrofula* – *scrofula*]; *phthisis* (*black illness*) – *tuberculosis*. Secondly, interpretive terms-synonyms can occur in the result of appearance of new classification group of concepts, for example: *diffuse toxic goiter* – *thyrotoxicosis* – *Basedow disease* – *thyroid hypertrophy*; *Pehkrantz-Babinskyi-Frel'ih syndrome* – *neuro-endocrine syndrome* – *adiposogenital dystrophy* – *adiposity*.

So, there is the problem of distinction of synonymy and homonymy and polysemy concerning arrangement of medical terms of interpretive type. Scientific definition and description-explanation are single reasons for identification, absence of which doesn't allow to establish whether medical term expresses the concept in general or only its separate features. It is necessary to name the most adequate for concept in synonymic nest, for example: *hereditary endocrine disease* – *Leschke syndrome* – *dystrophy*; *histamine headache* – *Horton syndrome*, *heliconia* – *migraine*.

Despite the fact, that selection of the most successful term is competence of scientists (medic, philologists, terminologists), lack of coordination in using of terms-variants can be considered in science, as well as passivity of restriction of unsuccessful synonyms. It conditions ambiguity of their interpretation and it is serious obstacle in exchange of scientific information, also it creates outstanding difficulties in accurate scientific translation of medical literature, etc.

Another „lingual disease“ of medical terminology is unjustified involvement of terminological units and term elements from other languages, super saturation of scientific texts of abstruse and excessive medical terms. Although borrowing is a way of enrichment of lexical composition of national language, that connects it with international standards, with different cultures and so on, however, scientists not always follow balance in coexistence of „foreign“ and „own“, international and national, optimal proportion of these two components³. Concerning Ukrainian medical terminology, it means that terms and borrowing from West European languages or formed from Greek-Latin elements should have been built on equal principles and they must be formed on the background of specific (Slavic) word building means. Neglecting of one or another component can affect setting up of scientific terminology, violate its organic, slow down development of medical science in Ukraine. „Calquing of foreign words as means of

³ Kyiak T. R. „Prahmatychni aspekty standartyzatsii ukrainskoi terminolohii“ [Pragmatic aspects of standardization of Ukrainian terminology], *Movoznavstvo* [linguistics], 1993, №1, P. 35–38 [In Ukrainian]; Ponomariv O. „Movnostylistychni porady: lekhyka inshomovnoho pokhodzhennia“ [Speech-language tips: vocabulary of foreign-language origin], *Urok ukrainskoi* [Ukrainian lesson], 2001, №11–12, P. 25–27 [In Ukrainian]; Selihei P. O. „Suchasne terminotvorennia: symptomy ta syndromy“ [Modern terminology: symptoms and syndromes], *Movoznavstvo* [linguistics], 2007, № 3, P. 48–61 [In Ukrainian]; Selihei P. O. „Shcho nam robyty iz zapozychenniamy?“ [What do we do with borrowing?], *Ukrainska mova* [Ukrainian language], 2007, №3, P. 3–16 [In Ukrainian]; Tkach A. V. Prynysyp orhanizatsii ukrainskoi medychnoi terminolohii na lekhyko-semantychnomu rivni [Principles of organization of Ukrainian medical terminology at the lexico-semantic level]: Proceedings of the 86rd the final conference of scientists of Bukovina State Medical University „Aktualni pytannia klin. ta eksperym. med.“, Chernivtsi, BDMU, 2005, P. 208–214 [In Ukrainian]; Tkach A. V., Shynkaruk V. D. Slovoivirna identychnist ukrainskoi terminolohii [The Slavic Identity of Ukrainian Terminology], Chernivtsi: Chernivetskyi nats. un-t, 2010, 200 p. [In Ukrainian].

nomination is appropriate then, – O. Ponomariv is convinced, – when a certain concept doesn't have name in native language⁴. However, modern scientific works are often overweighed with terminology borrowings and their researchers-terminologists often presume foreign language words (terms) because of insufficient knowledge of lexical wealth of their language. Internationalisms prevail in medical dictionaries, and sometimes even displace national component, stagger the norm and strengthen terminological lack of coordination.

Disclaimer from specific resources is often explained by the fact, that Slavic root causes odd associations by its transparent origin (internal form semantic motivation) during terms creation. We are convinced that such warnings are mostly baseless, as Ukrainian words are automatically perceived in their second – terminological meaning in scientific context (*dno* [bottom], *rakovyna* [sink], *rechovyna* [substance], *rydyna* [liquid], *tilo* [body]). Clearly expressed inner form of word not only do not prevent functioning and development of such meaning, but it is able to better convey the essence of marked concept, facilitates perception of professional language.

There are known attempts to distinguish scientific lexicology from colloquial one; they were made (and continue to be made) with the help of Briticism, Ancient Greek, Latin borrowings, etc. Such excessive borrowings fundamentally change composition and national admissibility of our vocabulary. Besides, frequently used terms-borrowings with incomprehensible inner form sometimes are redefined accordingly to sound or imaginative associations with words of native language, uniting in sounding, causing difficulties in distinction of meanings in medical professional language. It is phenomenon of paronymy where „alien“ tokens play considerable role, for example: *kseroz* and *kseroks* [xerosis and Xerox], *retseptornyi* – *retsepturnyi* [receptor – prescription], *hronikalnyi* and *hronichnyi* [chronical and chronic] and other. Mentioned lingual problems are „vivid proof of how unnatural is when terminology develops only due to borrowings, and how is important that specific lexicology takes proper place there“. We have tautologies in the result, dependence from foreign language, inability to think independently, lack of creative intellect, destruction of originality of Ukrainian language.

The amount of terms must be as many as it is necessarily for science, they must be introduced when their appearance is prepared by previous development of science, checked by experience, „when fallibility or incompleteness of hitherto notions were indulged to prove or available term leads to misunderstandings and confusions“.

Conclusion. Considered problematic aspects prevent to implement main purpose in creation and functioning of Ukrainian medical terms, that is arrange scientific knowledge, transfer scientific truths in the most accurate clear way, facilitate communication between specialists and with average people.

Prospects of further investigations. Materials and results of our work is background for further development for solving the problems of arrangement of modern Ukrainian medical terminology as well as profound studying of appropri-

ate scientific lexicology by students at practical lessons at higher school.

Ткач Алла. Українська медична термінологія: сучасні тенденції розвитку. Мета дослідження. Аналіз проблем функціонування й упорядкування українських медичних термінів на сучасному етапі, з'ясування причин та накреслення альтернативних шляхів їх вирішення. **Методи дослідження.** Застосовано порівняльно-історичний, описовий методи, частково використано класифікаційний і статистичний методи. **Наукова новизна роботи.** Здійснено лінгвістичний аналіз системної організації і творення української медичної термінології; визначено концептуальну структуру аналізованої термінологічної системи та особливості її репрезентації в українській літературній мові через лексико-семантичну призму; з'ясовано тенденції використання певних способів і засобів творення медичних термінів з урахуванням термінологічної специфіки. **Висновки.** Значення наукової праці полягає у тому, що виявлені особливості відповідної терміносистеми доповнюють знання про лексичну природу в цілому, а також про термін як тип мовного знака у плані змісту і плані вираження. Комплексна специфіка медичної термінології визначається структурою і складом лексико-семантичних парадигм, наявністю явища паронімії, полісемії, абсолютних синонімів тощо. Важливою проблемою є нерівномірне співвідношення інтернаціонального й національного у процесі творення та функціонування термінів і термінологізованих слів. Вибір відповідника повинен визначитися основними вимогами до терміна (точність, національна і міжнародна відповідність, мотивованість, системність, лаконічність, милозвучність). Переконані, матеріали пропонованого дослідження сприятимуть гармонізації процесу кодифікації сучасної української медичної термінології і на міжгалузевому, і на внутрішньогалузевому рівнях.

Ключові слова: термін(и), термінологія, українська медична термінологія, полісемія (багатозначність), пароніми, синоніми, запозичення, інтернаціоналізми.

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⁴ Ponomariv O. „Movnostylistychni porady: leksyka inshomovnoho pokhodzhennia“ [Speech-language tips: vocabulary of foreign-language origin], *Urok ukrainskoi [Ukrainian lesson]*, 2001, №11-12, P. 25–27. [In Ukrainian].

⁵ Selihei P. O. „Shcho nam robyty iz zapozychenniamy?“ [What do we do with borrowing?], *Ukrainska mova [Ukrainian language]*, 2007, №3, P. 3–16. [In Ukrainian].

⁶ Ibidem, P. 3–16

⁷ Selihei P. O. „Suchasne terminotvorennia: symptomy ta syndromy“ [Modern terminology: symptoms and syndromes], *Movoznavstvo [linguistics]*, 2007, № 3, P. 48–61. [In Ukrainian].