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Practical And Theoretical Features Of Teaching The Linguistic And Exctralinguistic Factor Of Pharmaceutical Terminology

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ABSTRACT

In the article, it is studied that as a result of the socio-economic progress in Uzbekistan great attention is being paid to medicine and pharmacy, differentiation, innovation (updating) in the field of medicine is an important factor in the development of the lexical layer of the language. It is studied how the current of neologisms are actively used in the lexicon of such updates, and their practical application.

Keywords: teaching, method, linguistic, extra linguistic, term formation, pharmaceutical, teaching, neologism, phraseologism, lexical-semantic, functional, structural.

INTRODUCTION

In world linguistics, a number of studies are being conducted to determine the terminological system of different languages, especially the linguistic and extralinguistic factors affecting the development of pharmaceutical terms, isomorphic and allomorphic features of the terminology of the languages being compared. In this sense, the process of regulating pharmaceutical terms is to determine the functional-semantic, structural and derivational models of the terms, to find their optimal alternatives in translation, to improve their lexicographic explanations, to arrange synonymy, ambiguity and acquired neologisms in the field terminology from a lexicographic point of view, as well as unification and standardization proposals, development also determines the need to compile multilingual printed and electronic translation dictionaries.

The main findings and results

In recent years, the development of pharmaceutical services in our country, which can meet the requirements of the times, increases the need for training of specialists who have perfect command of foreign languages. Studying the lexical-semantic, functional-semantic and lexicographical aspects of terms related to the field of pharmaceuticals on the basis of principles such as regulation and standardization in the section of different systematic languages is becoming relevant.

The level of study of the problem. Foreign linguists have conducted research on pharmaceutical terminology in theoretical and practical directions, and so far no special research on pharmaceutical terminology has been conducted in Uzbek linguistics. Only I.A. Kasimov, H.Kh. Kholmatov "Dictionary of Russian-Uzbek-Latin pharmaceutical terms", L.Kh. Bazarova, F.U. Magzumova, N.S. Suyundikov and F.H. In works such as Kalonova's "Latin-Russian-Uzbek pharmaceutical dictionary", practicing experts paid attention to the lexicographical aspects of the terminology of the pharmaceutical field and created small trilingual translation dictionaries, which means that the field terminology remains an unexplored direction of Uzbek terminology.

A number of issues of pharmaceutical terminology in different languages have been studied to some extent by English and other foreign linguists. In particular, lexical-semantic features of pharmaceutical terms E.A. Korzhavykh, G.P. Burova and O.B. Burdina was reflected in his scientific work, while V.I. Gataulina studied English terminology diachronically, L.N. Utkina paid attention to the functional aspects of linguistic terms in the process of language learning.

In Uzbek linguistics, the choice of terms in the field of pharmaceuticals and their use in their place are relevant and related to human health, but not enough attention has been paid to this issue. Historical formation and linguistic features of the terms used in pharmacy and medicine have not been researched. The lexical-semantic, historical-etymological, functional-semantic, comparative-statistical issues of pharmaceutical terminology have not been studied.

Terminology is a set of words and phrases used in linguistics to express special concepts and names related to a specific field of science. Terminology is an independent sector of any national language and is closely related to professional activity.

The role and importance of the Latin language in the study of pharmaceutical terms was analyzed. A term is a word that is unconditionally (compulsorily) related (comparable) to a certain unit in the system of specific

logical concepts. In our opinion, the term, according to its linguistic nature, is an integral part of the vocabulary system of the literary language, and differs from other categories of words by its clear, concise expression of scientific, technical or other professional concepts and its wealth of information.

According to the linguistic approach, the term is interpreted as an object with a single meaning, characterized by systematicity and expressed in a scientific definition. The term is not influenced by context. It is methodologically neutral and is mainly used in a functional environment, that is, in texts and documents used by specialists and researchers in various fields of knowledge.

Since the scientific terminology was formed on the basis of the Latin language, it is considered to have an international character, that is, it is sufficiently recognized and understood by the people of science all over the world. It should be clear to everyone that frequently repeated lexical units, a lexical layer consisting mainly of socio-political orientation, meet in different contexts, for example: shprishch, dose, extract, tincture, assistant, student, forum, scholarship, laboratory assistant, etc.

Terminology in the field of pharmacy (which began to develop systematically and purposefully at the beginning of the 19th century) is of particular interest to researchers due to linguistic and extralinguistic factors. Pharmaceutics itself refers to modern methods of pharmaceutical drug and drug development and new, technological development stages related to their use.

The functional-semantic features of abbreviations in pharmaceutical terminology and their rendering in translation were analyzed, it was proved that the classification of pharmaceutical field terms according to the methods of term formation is based on the following basic rules: 1) according to the spheres of social activity of science or society; 2) small systems (small subjects) within the big system (big science); 3) according to the concepts expressed by the terms; 4) according to term structure; 5) according to the methods of forming the term; 6) according to the original national terms (terms created on the basis of internal capabilities of the Uzbek, English or Russian languages); 7) borrowed terms: a) from the Latin language; b) from the Greek language; c) from English and other modern Romano-Germanic languages; g) from the Russian language or through the Russian language; d) from the Arabic language; e) according to borrowed terms from the Persian language; 8) classified according to hybrid terms (terms in the mother tongue, made by adding the root or base of the acquired terms, etc.).

In learning pharmaceutical terms, their structural-semantic features were studied, the features of the terms learned in pharmacy, the translation features of pharmaceutical terms (acronyms and abbreviations), their presentation in dictionaries and scientific articles, and their relationship with the terminology of other fields were analyzed.

In English and Russian, more and more productive methods of forming terms related to the field of pharmaceuticals are assimilation, calking and morphological methods, and the main source of terms acquisition is the Greek-Latin language. Much of the pharmaceutical terminology in English is derived from Greek or Latin: linimentum (lat.) – liniment (eng.) – линимент (rus.) – линимент (uzb.), aërosolum (lat.) – aerozole (eng.) – аэрозоль (pyc.) – аэрозоль (pyc.) – аэрозоль (uzb.), emulsum (lat.) – emulsion (eng.) – эмульсия (rus.) – эмульсия (uzb.), preperatum (lat.) – preparation, drug (eng.) – препарат (rus.) – препарат ёки дори воситаси (uzb.).

During the research, more than 1680 pharmaceutical terms in English, Russian and Uzbek languages were analyzed. Terms are divided into two large groups: single-word terms and compound terms. During our research, it was found that 63% of pharmaceutical terms are one-word terms.

X.D. Paluanova, E.T. In her research, Shirinova studied the terms by dividing them into components. The composition of one-component terms is diverse, and they can be divided into the following subgroups: simple, affixal and complex terms.

Simple (or root) terms are terms with one component corresponding to the root: glucose - глюкозa - глюкозa, solution - pacmbop - эритма, vaccine - вакцина - вакцина, extract - экстракт - экстракт, vitamin - витамин - витамин (дармондори), capsule - капсула - капсула, granule - гранула - гранула.

Affixal terms are formed mainly by adding word-forming suffixes to the root term: *antiseptic – антисептик – антисептик, hyporeactive – гипореактив – гипореактив*, hyperthermia – гипертермия – гипертермия.

Complex single-component terms include terms containing at least two stem morphemes, the addition of word-forming suffixes is not important: *erythrocytes* — эритроциты — эритроцитлар, *epidemiology* — эпидемиология — эпидемиология, *endocrinology* — эндокринология — эндокринология, *pharmacotherapy* — фармакотерапия — фармакотерапия.

It should be noted that the analyzed terminological units did not belong to one of the types of complex terms that should contain at least three components, in particular, agglutinated (less than three components) terms. It was determined that the terminological units selected for the study consist of at most two stems.

The terms of the second group include terminological units that contain two or more components. Approximately 37 % of terminological units of this type (620 terminological units). Depending on the number of words, they can be divided into two-word, three-word and multi-word content (consisting of four or more words).

In practice, two-component terms are common 539 units (87 %): cardiac glycosides — сердечные гликозиды — юрак гликозидлари, adsorbents (substances) — адсорбирующие вещества — абсорбсияловчи (ютувчи) модда, water treatment — лечение водой — сув билан даволаш.

The next place is occupied by three-component terms, that is, 84 units (5 %): biologically active substance - биологически активное вещество — биологик фаол модда, side effects of the drug — побочное действие лекарства — дориларнинг ножу́я таъсири, oral route of administration — оральный способ введения — огиз оркали қабул қилиш, soft dosage form — мягкая лекарственная форма — юмшоқ дори шакли.

Pharmaceutical terms consisting of three or more lexical units in the target languages more then 1%: preclinical tests of medicines – доклинические испытания лекарственных средств – дори воситасини клиникагача бўлган синов, phases of clinical tests of a medicinal product – фазы клинического испытания лекарственного препарата – дори воситаларини клиник синовдан ўтказиш боскичлари.

In the official documents and literature related to the field of pharmaceutical practice, analysis of scientific articles, regulation of field terminology, its optimization, and unification are devoted to the issues. Currently, there is a layer of acquired lexicon in the current pharmaceutical terminology, and the terminological units of this layer are very quickly entering all languages of the world. In the translation of scientific articles and texts related to the field, the calking method was found to be fruitful.

The terminological criteria of pharmaceutical dictionaries were analyzed, and based on the practice of creating terminological dictionaries as a result of research, we defined the principles of creating a dictionary of pharmaceutical terms as follows:

it is necessary to have a field dictionary that covers the main pharmaceutical concepts in a certain field of science;

it is required to be a translation dictionary intended for the general public, which includes pharmaceutical terminological units in the source language and the target language;

according to its function, it should be normative (consisting of a certain number of terms);

in terms of volume, it is required to have a high capacity compared to existing dictionaries (it is considered a medium-sized dictionary); should include an actively used terminological lexicon related to the field of pharmaceuticals.

Bilingual dictionaries provide for the creation of words through translation, and at the same time through translation, specific linguistic features of pharmaceutical terminological units in different system languages are reflected.

The terminological dictionary used in translation should not only contain words of the source language and their translation equivalents, but should also consist of a dictionary of other synonyms related to the concept of this term. According to the results of the analysis, the following criteria should be taken into account when choosing terms for the dictionary of the pharmaceutical industry: the main criteria of the dictionary, such as appropriateness, thematic suitability, function and volume, require the chronological selection of terms.

Field terms are supplied to the requirements by analyzing the synonymy of the terms in English, Russian and Uzbek languages. Descriptions and analyzes of synonymy, polysemy and neologisms in pharmaceutical field terminology are analyzed in cross-sectional aspect. The language system, especially the synonyms in the terminological system, are also built on the basis of paradigmatic and syntagmatic, derivational relations. Paradigmatic relations are relations that connect other language units on the basis of commonality at a certain time, regardless of the form and meaning of synonyms. Therefore, by comparing the types and meanings of synonymous words or terms, their specific characteristics become clearer. In the language, synonymous words usually form a synonymous series. We can observe this situation in the case of English, Russian and Uzbek pharmaceutical terminology. For example: medicine, drug, remedy, preparation, cure, nostrum, medicament, physic – лекарство, медикамент, средство – дори – дармон, препарат; tablet, pill, lozenge, pastille, troche, pastil – таблетка – таблетка.

In pharmaceutical terminology, synonyms can be classified into four types:

- 2. Semantically synonymous lexemes that differ in terms of the meanings of terminological units. pharmacy, drugstore, apothecary, dispensary, chemist's shop аптека, дорихона, disease, illness, sickness, ailment, disorder, trouble, disturbance касал, бетоб, бемор.
- 3. In the pharmaceutical lexicon, contextual synonymous lexemes that can be used interchangeably in terms of their meaning in the speech situation or context.

pharmacist, dispenser, druggist, pharmaceutist, apothecary — фармацевт, провизор — дорихона ходими, провизор.

4. Stylistic (methodical) synonymous lexemes expressing emotive-expressive feeling in the semantic qualities of field terminological units.

sedative, downer, depressant, calmative, tranquilizing, anodyne, soporific – успокаивающее, успокоительный – тинчлантирувчи.

It should also be noted that synonyms and polysemantic words are important in the communication of the languages being compared, and although they help to decorate the lively conversational speech, they create a somewhat problematic situation in scientific style literature and their translations, which are rich in terms. Because synonymous and polysemantic words could not be a clear expression of the industry term used in any regulatory documents related to pharmaceuticals, and their meanings are not differentiated in practice, it leads to different interpretations of such terms. In this sense, polysemantic and synonymous terms and their variant types in translation (absolute, relative, ideographic, contextual, dialectal, stylistic, mixed synonyms) are encountered in our research.

albumen - альбумины - албумин, оқсил, biopharmacy - биофармация - биофармация, dragee - драже, liquid dosage forms - жидкие лекарственные формы - суюқ дори шакли.

As a result of research analysis, it was found that absolute and relative synonyms make 528 synonyms in English, 475 in Russian, and 502 in Uzbek (see Table 3.1). Most of the terms-synonyms are absolute synonyms and doublets, which make up 61% of the total terms-synonyms in English, 69% in Russian, and 67% in Uzbek. 139 relative synonyms were identified in English, 94 in Russian, and 102 in Uzbek, and this made up 22% of the total number of terms-synonyms in English, 17% in Russian and Uzbek. We can see that abbreviations are used less frequently in bilingual pharmaceutical terminology than other types of synonyms.

Table 3.1:Statistical and comparative analysis of pharmaceutical terms-synonyms in different languages

iniguages						
Pharmaceutical terms-synonyms	English		Russian		Uzbek	
Absolute synonyms or doublets	389	61 %	381	69 %	400	67 %
Abbreviated options	108	17 %	77	14 %	98	16 %
Relative synonyms	139	22 %	94	17 %	102	17 %
Total	636	100 %	552	100 %	600	100 %

In addition to abbreviations, the texts of materials related to the field of pharmaceuticals in English and Uzbek languages also contain full-length and shortened term synonyms.

The phenomenon of polysemy in pharmaceutical terminology was studied, in which, in addition to the phenomenon of polysemy, neologisms that entered the Uzbek language (assimilated and are being assimilated) but have not yet joined the vocabulary were also considered.

T.B., who is considered one of the scientists who studied the phenomenon of polysemy separately from the aspect of language and speech. Nazarova notes that there is an inextricable connection between polyfunctionality and polysemy in words and terms. In his opinion: "... where there are two meanings, there are two words", the scientist brings homonymy and polysemy to the state of complementary and equal phenomena. He also argues that there is a common connection between polysemy and homonymy from a functional-textological point of view.

In fact, polysemantic words are words that have more than one meaning in speech. For example, in the language of the pharmaceutical industry, we can cite the following as an example.

A tablet – таблетка, кусок, планшет, блокнот, планшетный компьютер

Mixtures and two tablets at night, and one tablet in the morning – Микстура и две таблетки на ночь и одна таблетка утром – Аралашма ва иккита таблетка тунда ва битта таблетка эрталаб қабул қилинади

«Notepad» is an act of protest and an act of commemoration disguised as an everyday tablet of paper – «Блокнот» – это акт протеста и акт поминовения, замаскированный под повседневный бумажный планшет – «Блокнот» кундалик қоғоз планшети қиёфасига яширинган норозилик ва хотирлаш актидир.

Alexis gets **a** tablet computer, and Finn and his dad get a camping guide- Алекс получает планшетный компьютер, а Финн и его отец получают путеводитель по лагерю – Алекс планшет (компьютер) олади, Финн ва унинг отаси лагерь қўлланмасини олишади.

It should also be noted that additional, emotional and stylistic meaning cannot make a word polysemous. Because it does not express a separate concept, but only adds some additional meaning to the concept. Ambiguity is based on meaning other than the first concept and imagination. No matter how many meanings a polysemantic (multiple meaning) word has, there is still a semantic connection, a common sign between that object, event, action.

A capsule — лотинча «capsula» сўзидан олинган бўлиб, футляр, қобиқ, қути деган маънони билдиради. Фармацевтика саноати микёсида ишлаб чиқариладиган капсулалар дозаларга бўлинган, қобиқ билан химояланган дори шакли хисобланади.

Drug monitoring — 1) мониторинг концентрации лекарственного препарата в крови и тканях — дори воситаларини қонда ва тўқимада концентрациясини назорат қилиш; 2) список пациентов, получающих специфическое лечение — махсус муолажа қабул қилувчи беморлар рўйхати;

withdrawals — 1) прекращение участия препарата в клиническом исследовании в виду каких-либо причин — айрим сабабларга кура препаратни клиник синовларга куйилишини тухтатиш; 2) снятие лекарственного средства с продажи — дори воситасини сотувдан олиш;

In fact, the fact that polysemy and synonymy are not considered acceptable and normative in any terminological system indicates that the language of this field has not yet been developed. However, inter-term synonymy and polysemy are allowed, because each of these language units has its own explanation, classification in a specific terminological system, and its own interpretation in the dictionary.

In addition to the existence of synonymous, polysemantic lexemes in the pharmaceutical lexicon of the languages being compared, a number of neologisms have entered and continue to enter the Uzbek and Russian languages. It is also worth noting that new words that have entered the language, that is, neologisms, can also have a multi-meaning function over time.

The word *«pain-killer drug»* means, *«pain reliever medication»* but at present can translate this term as *« narcotic medicine»*:

Opioid painkillerdrugs – such as codeine, tramadol and morphine. These are only available on prescription.

Of course, we can find such a situation in the pharmaceutical lexicon of English, Russian and Uzbek languages. The following types of neologisms were found in the teaching of pharmaceutical terminology:

- 1) semantic neologisms considered as a component part of the language, they refer to words taken from another language to designate elements or aspects of other fields.
- generic products дженерики—генерик дори воситалари, validation валидация валидация, bioequivalence биоэквивалентность биоэквивалентлик, licence лицензия лицензия, microsurgery микрохирургия кичик жаррохлик;
- 2) functional neologisms related to the need to add words in the language that define a certain object or situation. In general, this type of neologism allows the terms to make communication in the language more dynamic.
- доза, фармакокинетика, метаболизм, препарат, настойка, экстракт, блистр, конвалюта, драже;
- 3) stylistic neologisms are words used to give a stylistic expression to commonly used words or an emotive-expressive positive tone and stylistic color to a lexeme.
- skin, derm, derma, dermis, epidermis кожа mepu; way of drug administration / way of medicine administration/methods to administer drugs/a route of administration способ введения лекарства дори қабул қилиш усули;
- 4) technical and technological neologisms neologisms of this type are words related to the result of changes in some technical, technological and scientific fields in society. This type of neologisms is the most common and used today.
- антибиотик, антисептик, вакцина, давлат фармакопеяси, гранула, изолятор, линимент, пробиотик;
- 5) neologisms in the form of acronyms and abbreviations (abbreviations are derived from the combination of the initial letters of several terms, which in turn simplify communication in the language).
- GLP Good Laboratory Practice надлежащая лабораторная практика Надлежащая производственная практика зарур лаборатория амалиёти; GMP Good Manufacturing Practice зарур ишлаб чикариш амалиёти;
- 6) neologisms formed by means of word formation (can be formed using various word formation means, i.e. affixes).
- Corona + virus = coronavirus, self + isolation = self-isolating, workcation; фарм + дистрибьютер = фармдистрибьютер, Интернет-аптека, био + технология = биотехнология, нано + технология = нанотехнология, ген + омика = геномика, анти + тела = антитела.

CONCLUSION

In conclusion, it can be recognized that the phenomena of synonymy, polysemy and neologism in the pharmaceutical terminology of different languages are explained by the fact that they serve to enrich the vocabulary of the language.

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