

Specific features of neologisms' translation in the field of modern medical prosthetics

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Paper received 11.04.21; Accepted for publication 19.04.21.

<https://doi.org/10.31174/SEND-Ph2021-251IX74-06>

Abstract. This article is devoted to the study of the features of translation of neologisms in the field of modern medical prosthetics. Translation of neologisms is a complex area of translation activity and since the emergence of new lexical units it requires deep analysis and search for variations of its adequate translation. It should be mentioned that, as the study showed, the main feature of the translation of neologisms in this area is the use of a descriptive method, which gives a deeper and clearer understanding of the newly formed term.

Keywords: *neologism, translation, lexical unit, prosthetics, medicine.*

Introduction. Modern world full of various impressive technical achievements in the field of medicine tend to innovation and scientific breakthroughs. Every year researchers working in this field make various discoveries that can turn the world of science upside down and provide enormous opportunities for people who were previously considered incapable of leading a normal life. This is reflected in the lexical component of different languages of the world because scientific discoveries can not only enrich the technical component of science but also significantly contribute to the replenishment of the lexical stock of the language. Every year there are more and more newly formed lexical units (neologisms) that require careful study and determination of their impact on the modern lexical content of different languages.

Overview of publications on the topic. The topic of translation of neologisms is quite relevant and is in demand nowadays so many scientists work in this field of linguistic research. Among modern scholars who work in this field of translation we can mention such names as Garmash O.L. [1], Zabotkina V.I. [4], Kolodyazhna T.Yu. [6], Kozachenko I.V. [7] etc.

The aim of the article is to study the features of the translation of neologisms in the field of the latest scientific developments in the sphere of human prosthetics.

Materials and methods. Scientific articles on the latest methods of human prosthetics based on modern technical innovations were taken as material for the study. In the process of researching this topic, we used methods of systematic analysis of scientific information, the method of analogy and generalization.

Results. Medical research in the modern world can be considered actual and relevant, because "the globalization processes that have spread all over the world in recent decades, contribute to the expansion of knowledge and technology around the world, which makes the demand for translation in this medical field extremely popular" [5, p. 108]. However, there is a problem of finding a translator who will be able to reflect all the intricacies of this translation properly and have good knowledge in the specificity of this translation. Unfortunately, "amateur translators usually do not conduct meaningful research on the ways how to translate the terms that have previously been translated in the medical literature, which leads to very heterogeneous translations" [2, p. 159], which can cause misinformation and misunderstandings.

The problem of adequate translation in the modern world is becoming more common, because medical tourism becomes popular with the development of scientific and technological progress in many countries. This phenomenon (medical tourism) is gaining popularity and is used by thousands of people every year.

Influenced by modern scientific discoveries and popularization of world trends in the latest scientific medical developments, "in recent years the demand for professional medical translation has been growing at an extremely large rate. There is a logical explanation for this which is based mainly on such important facts as:

- rapid development of medical tourism (Israel, USA, Germany);
- emergence of the latest equipment, the use of which requires the translation of instructions;
- involvement of foreign medical professionals for cooperation;
- import of new medicines;
- participation in various medical researches". [5, p. 109]

Medical tourism is becoming a new sphere that requires highly qualified specialists in the medical field who will be familiar with all the latest scientific developments and will be able to provide qualified and accurate translation in this field. Every year the need for such translators will only spread, because according to Yegorkina A.V.: "The growth rate of the global medical tourism sector is one of the highest compared to other tourism segments. Another 50 countries declare the development of medical tourism at the level of state policy. In this sector, all the tools of global marketing have been created in a complete network. The world hosts a large number of scientific conferences on medical tourism. Medical tourism has given rise to a new concept of modern healthy eating. Unable to solve a medical problem in his country a patient chooses a country, a doctor and a clinic where he can be offered some good modern and timely study, treatment. In the context of global economic competition, the phenomenon of medical tourism causes medicine to develop faster" [3].

Thus, the emergence and rapid development of medical tourism contributes to the spread and promotion of translation activities, because qualified care requires adequate and reliable translation in the field of medical innovation and progress.

Every year more and more new and impressive

discoveries in the field of medicine appear in the world, but, unlike in previous centuries, modern discoveries are based not only on a medical basis, but also on the junction of medical and technical components. The rich variability of modern methods of prosthetics, organ transplants and various types of implants has led to the need for adequate translation in this area. This, in turn, creates a need for professional translators who will be able to work at the intersection of two fields - medical and technical, which will require candidates to be familiar with all the intricacies of modern scientific advances and the ability to provide professional assistance as needed.

Therefore, the field of translation studies must meet modern requirements for the translation of the latest scientific medical developments and aim to disseminate them and understand them correctly by both doctors and their patients.

In recent years, the field of prosthetics has undergone tremendous progress and dynamic movement. Modern scientists are trying to invent not just prostheses, but "smart" prostheses that will completely reproduce the work of the lost limb.

Among the most common and relevant scientific discoveries of the modern world are:

- the latest methods of prosthetics (a new version of the artificial arm - i-limb quantum. I-limb prostheses use a patented technology that allows you to "read" muscle impulses. The i-limb functionality is implemented using software that describes a set of standard movements and grips, and allows you to adjust the compression force. The bionic arm is able to perform many simultaneous precise movements (flexion and rotation of the shoulder, elbow and wrist, as well as finger grips), converting electrical signals from the muscles and transmitting them to the built-in computer that controls the electric drives.

Leg prosthetics. BiOM Ankle myoelectric prostheses are equipped with microprocessors and sensors, thanks to which it is possible to instantly automatically adjust the angle of the foot and the level of cushioning.

- transplantation of biomechanical organs

Heart prosthesis. Another important area of bioprosthesis is the creation of an artificial heart. In general, research in this area can be divided into two groups: designing a biomechanical heart or "growing" a biological one. Developments of the first type have been going on for a long time. The main problems that have not been solved for a long time were related to the creation of a powerful and at the same time rather small power supply, as well as the strength of the materials of the artificial heart, which, unlike biological, is not able to renew itself. Today, there are projects that to some extent solve these problems.

- implantation of various chips under the skin (different kinds of such chips are already used to help people with diabetes to fight the disease and control its effects on the body).

Thus, modern science offers us more and more innovative developments, which cause the emergence of a large number of neologisms. Therefore, it will be important to consider this problem more detailed in the aspect of translation studies. All the latest inventions and scientific achievements can be attributed to neologisms - newly formed lexical units.

According to Kolodyazhna T.Yu., neology as a term is

considered by scientists in two ways. "On the one hand, it is the science about new phenomena and new language units in the language system, which has an international character, because the emergence of new lexical units is obvious for many languages. On the other hand, neology acquires national specificity when it is considered as a set of tumors in a particular language, their features and factors influencing the development of the language system" [4, p. 126]. The central concept in neology is the neologism, "the main feature of which is the novelty of the lexical unit in the social consciousness within a certain period of time. There are many different definitions of the term "neologism", but all scholars refer to the neologism as a new word that has appeared in the language as a result of various changes in society, and new meanings of existing words" [1, p. 22]. In our study, we will rely on the latest interpretation of this concept.

The translation of neologisms is characterized by specific approaches, because sometimes it is very difficult to translate a newly formed term using transliteration only.

Modern neologisms need special attention, because without understanding the nature of the invention sometimes it becomes impossible to convey its exact meaning in translation.

Any translation more or less tends to transform words. Translation transformations are involved when an interpreter is unable to find an analogue in the language of translation, or such an analogue is simply absent. Usually translation transformations are divided into:

- lexical (transcription, transliteration, tracing);
- grammatical (literal translation or grammatical substitutions);
- complex lexical and grammatical transformations (descriptive and antonymous translation).

When translating neologisms in the field of modern medical research, the usage of complex lexical and grammatical transformations (descriptive method) is the most common and appropriate. This is due to the fact that very often the newly formed neologism does not carry a clear concept, so in order to achieve the adequacy of its translation it is necessary to use a descriptive method that can reflect its nature.

Now we will look more detailed.

For example, the term i-limb quantum cannot be transmitted by transliteration or tracing because it does not explain the nature of this word. In such case we need to know more details about this invention to have wider understanding of its nature and meaning. That is why we can translate it as I-limb quantum is an artificial biomechanical arm prosthesis, or a bionic arm.

The term BiOM Ankle (BiOM Ankle - bionic foot) is a little bit more understandable due to the presence of the word ankle, but also requires a descriptive method of translation, because a person who doesn't have a lot of knowledge in the medical field will not always be able to understand the meaning correctly.

The term SynCardia refers to a bionic prosthesis of the human heart and, like the previous neologisms, requires a descriptive translation method.

Thus, as we see, the emergence of modern names of prostheses requires not only sound or graphic transmission of the term, but also needs more detailed explanation of this neologism, which explains the use of a descriptive method

in the translation of these terms. As noted by Kozachenko I.V.: "Descriptive translation can be done in several ways. Descriptive translation is primarily an explanatory tool, as it explains the essential elements. An explanatory translation can be compared to an interpretation of a word. However, the disadvantage of this method of translation is verbosity" [7, p. 167]. Thus, the descriptive method tends to expand the meaning of the word, but in some areas, such as modern medical developments, this method helps to find an adequate version of the translation of the neologism.

Conclusions. In modern global development of

scientific and technological progress, the emergence of medical tourism, there is an urgent need in providing an adequate translation in the sphere of modern scientific medical achievements and inventions. Every year there are more and more newly formed lexical units that need appropriate translation, and in most cases also some explanation of the newly formed neologism. This causes a significant demand for translation, because the conveying of the meaning of modern neologisms in the field of medicine can be considered one of the most relevant areas of translation studies.

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