MEDICAL TEXTS TRANSLATION PECULIARITIES

Summary. The present article is a general overview on the major aspects in medical translation. It considers certain characteristic features of medical language: terminology, including eponyms and multi-word terms, acronyms and abbreviations, affixation, word compounding, the doublet phenomenon, polysemy and synonymy. The article also describes in general the translation for lay-readers and for professional audiences (expert-expert texts). Attention is paid to qualifications of medical translators, verification and review.

Keywords: abbreviations, acronyms, eponyms, medical terminology, polysemy, synonymy, translator's competence.

S tudy problem. Translation activity is a decisive factor in spreading knowledge, practical experience and new discoveries in the field of medicine and pharmacology. It is also the most important issue in providing healthcare services to foreigners or minorities. Translators of medical texts face a great number of difficulties. They include medical terminology, lexical equivalence of medical texts, readability, quality issues. Medical translation concerns a number of subject areas, including pharmacology, medical rescue system, surgery, obstetrics, paediatrics, psychiatry, internal medicine, oncology, cardiology and other fields of specialty, as well as other disciplines, such as law or administration. Translation is a crucial factor in disseminating knowledge and new discoveries in the medical field globally. Medical translation does not concern a single genre or a homogenous discourse. The translated texts include popularizations, such as textbooks for medical students, popular science book on medicine, but also research papers, conference proceedings, case studies, case histories, discharge summaries, reports and relatively simple texts for patients: information leaflets, consent forms, brochures.

Recent research and publications analyses. Medical discourse comprises a range of forms of communication. Gotti (2008: 24) uses the term specialized discourse as "the specialist use of language in contexts which are typical of a specialized community stretching across the academic, the professional, the technical and the occupational area of knowledge and practice". Three factors are of crucial importance: the user, the domain of use and special application of language. Medical language is used in expert-expert and expert-lay communication, with characteristic features varying from genre to genre, depending on the communicative situation and its participants [2; 3; 7].

Genres used in expert-expert communication such as discharge summaries, case studies and case notes, imaging reports and research papers use numerous specialized terms whose semantic value is taken for granted; the only words or phrases which are explained are those coined or redefined by the author of a paper or a presentation (cf. Gotti 2008). Expert-lay communication covers package leaflets, informed consent documents, patient factsheets etc., which use (or should use) less complex terminology, which is illustrated or explained when it occurs for the first time (cf. Gotti 2008). The main characteristics of specialized medical texts include terminology and syntactic features, such as nominalization, heavy pre- and postmodification, long sentences, use of passives and third person (Askehave & Zethsen 2000) [2; 3].

Highlighting problem parts which have not been solved before. A number of texts are translated due to regulatory requirements concerning new medical products and medical devices or new applications of pharmacological products. What also generates the demand for the translation of medical texts is the need to conform to the formal requirements applicable to clinical trial registration and marketing new drugs, which involves translating the registration documents and other necessary materials to the local language. New findings are published in English, which means that a number of research papers are translated.

A r ticle aims. The demand for medical translation is also the result of emigration. Moreover, translators prepare medical files for patients who seek medical help outside their own country of residence. Translators of medical texts face a number
of challenges, some of which are the subject of re-
search. They include medical terminology, lexical
equivalence of medical texts, readability, quality
issues. This article offers a general overview of the
major issues in medical translation.

Medical translation is considered to be one of the
most complicated and is the most expensive in its
cost in the practice of translation bureaus not only
in Ukraine but throughout the world, and rightly
so, it has its own peculiar features and can cause
serious difficulties for a translator.

**Study main material.** Difficulties are mainly
due to the abundance of complicated medical termi-
nology in various branches of medicine, as well as
special words and abbreviations.

Moreover, one and the same term may have dif-
f erent meanings in various branches of medicine, e.g. *анатомия* and *история*, *хирургия* and *dentistry*
(e.g. «тільця»: in immunology and cytology they
are referred as *bodies*, in *histology* – *corpuscles*, in
dentistry – *cells*, in *pulmonology* and dermatolo-
 gy – *bodies*). Depending on the country and even on
its region the same term can have several mean-
ings and it is necessary to translate it taking into
account the geographical factor. There is a very
important aspect facilitating the work at medical
translation. It is the thorough knowledge of Latin
by the translator, as this language is universal for
physicians around the world.

Most frequently a translator has to deal with sci-
entific texts, ordered for translation not only by the
researchers of higher medical educational estab-
lishments or medical centers and clinics, but just
as well by pharmaceutical companies performing
clinical trials of medicinal products which is neces-
sary for the state registration of medical products
and medical equipment [1; 3; 7].

A scientific text is more formalized than texts on
general subjects, and it primarily concerns natural
sciences, especially when the translation should be
the most equivalent to the original. Translations of
works in mathematics, chemistry, biology and oth-
er exact sciences consisting of stereotypic phrases
and highly specialized terms are identical to the
original, i. e. they possess full equivalence. The full-
est equivalence is observed in translating texts of
highly specialized nature owing to their unambigu-
ous terminology [1; 5].

The modern language of medicine employs mod-
ern derivatives of Greek and Latin words “with no
concern for etymological purity” (McMorrow 1998:
21). The corpus of Greek and Latin terminology
is still the base of the contemporary medical lan-
guage, which also uses new eponyms, acronyms
and trade names.

Eponyms constitute a considerable portion of
medical terminology; they include names of ana-
tomical parts – e.g. *Fallopian tubes, Adam’s apple*,
names of diseases – *Parkinson’s disease, Alzheimer’s disease, signs and symptoms – e.g. Babinski*
sign, fractures e.g. *Jefferson Fracture*, proce-
dures – e.g. *Heller myotomy*, medical devices – e.g.
*Bard-Parker scalpel* (cf. Meals 2007). Eponyms are
frequently derived from the names of researchers,
but may also be derived from the names of celebrity
patients – e.g. *Lou Gehrig disease*, a common name
for *amyotrophic lateral sclerosis* (cf. Walling, 1999),
fictitious characters – e.g. *Othello’s syn-drome*, or
geographical places – e.g. *Lyme disease*. Eponyms
may be the source of translation problems – the cor-
respondence between eponymous terms and their
equivalents does not necessarily mean that both
source and target terms will be eponymous [2].

**Acronyms and abbreviations** are particularly
peculiar for medical texts. Medical texts do not
contain enough metaphors and other stylistic
means therefore translating specific terminology
and abbreviations is the most difficult thing in the
translation process. An important factor is also
studying the structure of terms and abbreviations
and their use in various contexts.

One of the characteristic features of medical lan-
guage is the presence of acronyms, initialisms
and clipped forms. With English having the status
of the *lingua franca* of medicine, English acronyms
enter other languages and are used both by medical
professionals and patients, especially if no native
aronym is commonly used in the local language
e.g. *MCV, TSH, INR, CRP, LDL, HDL* etc. [2].

Abbreviations (which are especially coming
from Latin) are some of the most often used ele-
ments in written and oral medical communication.
Many terms, such as names of diseases and their
 treatment, names of chemical compounds are sel-
don used in their full, bulky form as it would inter-
fere with effective communication. Wide popularity
of abbreviations in the medical language, undoubt-
edly, provides economy of space and time in the
emergency medical situation. Besides, abbrevia-
tions provide understanding only for health work-
ers, making materials inaccessible for the patient
that is in certain cases expedient for ethical rea-
sons. However, quite often one abbreviation stands
behind several medical terms that undoubtedly
leads to the ambiguity of understanding and con-
siderably complicates the translation. For example,
abbreviation CF has about 20 medical meanings
(Californium, Cystic Fibrosis and so on), as well as
not medical meanings (Compact Flash – a device
for saving data). The following is considered as the
main ways of translating the English medical ab-
breviations: borrowing a foreign abbreviation with
preservation of Latin writing; transliteration (pre-
senting the literal structure of a foreign abbrevi-
uation by the Ukrainian letters); transcription (pre-
senting the phonetic form of a foreign abbreviation
by the Ukrainian letters); descriptive translation
(in the absence of an equivalent abbreviation).

**Polysem and synonymy.** The most desired
feature in the terminology of any discipline is
univocity, which means that one designation refers
to one concept and that one concept receives only
one designation – thus, with this kind of control
over terminology, it would necessarily have two
features: monosemy and mononony (Soubrier
2002, 2014). Desired as they may be, these features
are not always present in medical terminology,
whose terms are, to a certain extent, polysemous,
and – sometimes – synonymous. The examples of
polysemous terms include:

- *inflammation*: a physiological function, a clinical
  condition, a diagnosis (Soubrier 2014), all of which
  are expressed with Ukrainian "запалення";
- *discharge*: secretion ("виділення") or release
  from hospital ("виписка з лікарні").[2, 4]

The same phenomenon can be observed in
translating from Ukrainian into English, where a single Ukrainian term may be expressed by many different English terms:


Several synonymous terms are presented above in the section on eponyms, but they do not by any means complete the list of synonymous medical terms, which also includes e.g. Hashimoto's thyroiditis or "chronic lymphocytic thyroiditis", osteoarthritis also referred to as either “degenerative joint disease” or “osteoarthrosis” or “degenerative arthritis”.

This section is only a brief overview of certain features of medical language, which is the focus of more detailed research papers published in Advances in Medical Discourse Analysis edited by Gotti and Salager-Meyer (2006) or Vol. 4 No. 7 of JAHR (2013) devoted to medical language [2; 4].

Translation of the texts belonging to general scientific or medical subjects requires selecting a correct translation variant of the polysemic medical terms: excluding those relating to social and political texts, journalism and oratorical speech; the commonness of this category is due to the fact that the translated material is directed to forming or changing public opinion and due to its abundance with language elements of polemic: language cliches, rhetorical structures, literalisms, newspaper cliches, social and political terms, estimated words, slang and popular speech. Whereas, translation of medical texts require translating from one language into another of specialized medical publications and texts of private character which content is directly connected with the person’s health. A special position of this category translation is defined by the elevated responsibility of a translator, increased requirements to the accuracy of the translation and observing confidentiality of private data, as well as pronounced heterogeneity of the used terminology [1; 3].

Medical translation includes translating the texts of the general medical and pharmaceutical direction, it is rightly possible to call medical translation one of the most difficult specialized translations and it is even possible to allocate it as a special type of translation activity. In the process of medical and pharmaceutical texts conversion a translator constantly compares a source text of the original with the translated variant, every time switching from one language to another. In this process the set of the translator’s actions is divided into the actions relating to the source medical text and respectively to the translation text, i.e. in this process a translator at first perceives and understands the text of the original and then, on its basis, he forms the translated text. Thus, medical translation is made by a translator based on two interconnected stages of the translation process, namely: the first stage includes extraction of information from the original medical text, and the second stage is selecting the needed translation means and methods for implementing the medical translation [1; 5].

The extraction of information from the original medical text is the first stage of the translation process, which is related to informative translation. Informative translation represents translating the texts which main function consists in informing some data, the information transfer; it makes no art and esthetic impact on the reader. Observing the clearness and strictness of a statement, refusal of indirect, descriptive designations of objects, wide use of stamps and stereotypes of special vocabulary is characteristic of informative translation, both in the English and in the Ukrainian languages. However more detailed analysis shows that strictness of using terms and habitual formulations is in general more peculiar to the Ukrainian special texts.

Therefore a translator quite often feels obliged to make «stylistic editing» of the original, to enter an exact term instead of a paraphrase, to explain what is specifically meant, to replace an author’s construction with a more habitual stamp. A translator is to report fully and precisely the thought of the author, giving it the shape inherent in the Ukrainian special text and without transferring peculiar features of the English original to the Ukrainian text. In the English text there prevail personal forms of a verb whereas in the Ukrainian text there are more impersonal or indefinite-personal constructions. Prevalence of simple sentences which average over 50% of the total number of sentences in the text is characteristic of informative texts in English. At the same time the number of compound sentences is rather small. This phenomenon is unusual for the corresponding style in Ukrainian where compound sentences are used very widely.

To avoid mistakes when translating, it is necessary not to trust in the seeming coincidence of the meaning with a similarly sounding word in the target language, as well as to seek to seize all lexical and stylistic subtleties of both the source language and the target language. In the presence of the slightest doubt, both explanatory and special dictionaries should be used.

Medical texts are characterized by a peculiar building of sentences (the grammatical relations between words become clear only at the account of sense), the sentence structure (the problem of defining the logical accent in the sentence), an unsuccessful building of sentences is also possible, abounding with developed definitions, making it difficult to understand connection between the words. All this leads to ambiguity of the text being translated. Quite often the structure of an English sentence abounds with difficult grammatical constructions (infinitive and participial phrases) complicating the definition of a logical accent in the sentence. From the point of view of grammar sentences can be divided into translated practically without changes, translated by means of the changed word order; requiring partial syntactic and lexical changes; requiring descriptive translation sentences that are difficult in every respect [1; 3].

**Conclusion.** Thus, the complexity of medical translation consists in the huge and promptly growing vocabulary of medicine, abundance of synonyms and idiomaticity of the professional medical language, prevalence of abbreviations in medical communication, grammatical difficulties of the English sentence. Successful performance of this kind of activity requires a close acquaintance with medicine. For this reason the best translators of medical texts are graduates of medical schools. Ideally, a medical translator would not be a medical professional,
but an especially trained translator, i.e. a linguist who underwent appropriate training, a view which is also supported by IMIA (2009: 4-5). According to IMIA (International Medical Interpreters Association), medical documents should be translated by professionals who have “a native or near-native, formal level of language proficiency, analytical capabilities, and deep cultural knowledge in the source and target languages” (2009: 3), other requirements include at least college level formal education covering courses in translation theory and practice, proficiency in the source and target languages, expert knowledge of the subject matter terminology, terminology research skills and adequate writing skills. Other components of medical translator competence include: application of translation strategies, relevant procedures, conventions or standards, use of medical databases, text banks, dictionaries, CAT tools etc. as well as certain psycho-physiological features such as decision making, thoroughness, honesty etc.

References: