CZU 378.091:811.111’42

# ON SOME FEATURES OF MEDICAL TRANSLATION IN TEACHING MA STUDENTS

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**Rezumat:** Dezvoltarea intensă a comunicării profesionale în domeniul medicinei în limba engleză, precum și numărul tot mai mare de profesioniști implicați în comunicarea internațională, a dus la creșterea interesului pentru studiul terminologiei medicale și a problemei traducerii acesteia. Acest articol discută tehnicile de bază ale traducerii textelor medicale și dezvăluie specificul traducerii acestora. Sunt evidențiate problemele cu care se pot confrunta traducătorii la traducerea textelor medicinale.
**Cuvinte-cheie:** text medical; termini medicale; instrucțiuni medicale; tehnici de traducere; prieteni falși ai traducătorului.

In today's globalised world, international cooperation in all spheres of human activity plays an important role. This increases the opportunities for international exchange and cooperation with other countries in the field of medicine. Nowadays clinicians have a possibility to consolidate their forces to fight diseases around the world, helping each other to arrive at diagnosis or to choose suitable treatment. This becomes rather actual living in a challenging period of pandemic. Thus, there is an increased demand for translation of medical texts. The translator makes possible an exchange of information between the users of different languages by producing in the target language (TL or the translating language) a text which has an identical communicative value with the source (or original) text (ST). This target text (TT, that is the

translation) is not fully identical with ST as to its form or content due to the limitations imposed by the formal and semantic differences between the source language (SL) and TL (Комиссаров, Коралова, 1990, p.59).

Medicine has always been one of the indispensable areas of human existence. The term "medicine" itself, in Latin means "healing arts". It is known that medicine as a separate art came into being in ancient India. It is the Indians who are considered the pioneers of medicine. Medicine later spread to other countries, including China, Turkey, Asia, Egypt and some European countries and the first medical texts appeared in those countries. The language of medicine offers intriguing challenges both to medical historians and to linguists (Wulff, 2004, p.187). When translating a specialist medical text, it is not enough for the translator to know the target language perfectly, the specific medical terminology must be taken into account. The translation of the various medical instructions, regulations, guidelines and recommendations to ensure the production and quality control of the medical product ranks a special place in the Art of translation. Misunderstanding or inability of a translator to translate medical instructions correctly might disrupt the patient's treatment and lead to the most adverse consequences.

A competent medical translation of any medical document can save the patient’s life. The quality of the text translation will determine whether the physician is correctly informed about the specific case. Inaccurate translation, misinterpretation of material, incorrectly translated terms can cause various delays or problems, resentment of patients during treatment abroad, for instance. Undoubtedly, the result of treatment also depends on the correctness of the medical translation. Incorrect or inaccurate medical translation may negatively influence the medical practice. This explains the relevance of the study.

There are several main areas of medical translations:

1. *Translation of medical reports*: examination results, extracts from medical records, sick notes, health insurance policies, specifications, epicrisis, etc.
2. *Translation of medical equipment documentation*: operating instructions, equipment assembly instructions, descriptions, manuals.
3. *Medical translation of medication abstracts*: medication dossiers, information for doctors and patients.

4. *Translation of scientific medical literature*: medical articles and publications, textbooks, dissertations, reference books, books.

5. *Pharmaceutical translation*: instructions and descriptions on the use of medicines, leaflets, pharmacy dossiers, etc. (Судовцев, 1985, p.39).

According to Božena Džuganová from Comenius University in Bratislava, medical terms can be basically divided into one-word and multiple word terms. As it was mentioned in her article "*English medical terminology - different ways of forming medical terms*", most medical terms are the combination of two or more parts. If you can successfully interpret each part, you can usually grasp the essential meaning of the word. Thus, interpreting the meaning of a medical term require knowledge of common medical roots, prefixes, and suffixes.

Derivation is considered the most productive type of terms formation in medicine. Derived medical terms can consist of *a prefix*, one or two word roots, and *a suffix* in various combinations.

A root is the essential component of a word. Many medical roots signify a disease, procedure, or body part. Some roots appear at the beginning of a word, whereas others appear after a prefix. In addition, two or more roots may be combined to form a word, as in *cardi-opulmonary* and *cardi-o-vascular*. Here are some examples of roots used in different positions:

a) a root at the beginning of a word - *angioedema* (angi is a root that means "vessel");

b) a root in the middle of a word - *en**cephal**ic* (**cephal** is a root that means "head");

c) a root at the end of a word - *sclero**derm**a* (**derm** is a root that means "skin");

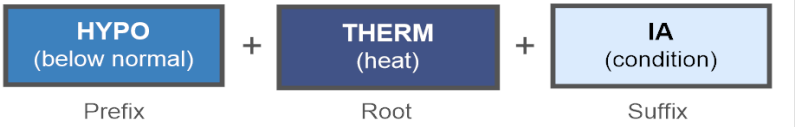
d) a combination of roots - ***phototherapy*** (**photo** is a root that means "light"; **therapy** is a root that means "treatment") (Cohen, 2011, p.5-6).

To determine the meaning of a prefix in a medical term, consider a familiar word that begins with the same prefix. For example, the prefix **anti-** has the same meaning – against - in ***antihistamine.***

A suffix is one or more letters attached to the end of a root. When a suffix begins with a consonant, a combining vowel, such as **o**, is placed before the suffix. Common use of suffixes in medical terminology includes adding a **-y** to a word to denote a procedure, such as

***gastroscopy***, which means endoscopic examination of the stomach (Ehrlich, Schroeder, 2015, p. 4-5).

Breaking a word down to its component parts should help translators determine the meaning of an unfamiliar term. For example, "***hypothermia"*** has the prefix **hypo-** (below normal), root **therm** (heat), and suffix **-ia** (condition) (Cohen, 2011, p.6).




- ***myo***cardium = myo- (prefix) + card(ium) (root).
- ***endo***card***itis*** = endo- (prefix) + card (root) + *-itis* (suffix).
- cyto***logy*** = cyt(o) (root) + *-logy* (suffix).

To familiarise students with medical terms, we suggest the following exercises:

a)

| **Definition** | **Correct answer** | **Possible answer** |
|---|---|---|
| *Bad, difficult, painful* | | -algia |
| *Excessive, increased* | | Dys- |
| *Surgical removal* | | Hyper- |

b)

| **Definition** | **Correct answer** | **Possible answer** |
|---|---|---|
| *White blood cell* | | acute |
| *Rapid onset* | | prognosis |
| *Turning the palm of the hand upward* | | supination |

e) Find the misspelled word in each sentence. Then write that word, spelled correctly, on the line provided: *The medical term meaning inflammation of the tonsils is tonsillitis*.

**Compounding** is considered the second most productive type of word-formation for medical terms. A compound word is a fixed expression made up of more than one word, e.g. *human being, blood donor, hay fever, Black Death.*

Compound words may be written:

*a)* as two/three words: *blood pressure, blood group, heart attack, sleep walker, central nervous system;*

*b)* with a hyphen: *life-span, collar-bone, birth-control;*

c) as one word: *gallstone, haemophilia, leucocytopenia, pseudopolycytemia*.

While derivation and compounding prevailed in the past and preferred Latin and Greek roots and affixes, nowadays a syntactic way prevails – the **forming of multi-word phrases**, e.g. *Acquired Immune Deficiency Syndrome, Bovine Spongiform Encephalopathy, Severe Acute Respiratory Syndrome, Irritable Bowel Syndrome*, which successively undergo process of abbreviation because they are too long and uneconomical.

**Eponyms** are names derived from a proper noun. They may originate from the name of a person, place, or thing. In the medical field, diseases, organs, procedures, or body functions can be eponyms; hence, they are frequently capitalized. Examples of eponyms include *Alzheimer's disease, after Alois Alzheimer, and Babinski sign, after Joseph Babinski*.

Examples of eponyms for medical conditions include:

a) *Addison's disease*, a syndrome resulting from insufficient production of hormones from the cortex of the adrenal gland;

b) *Alzheimer's disease*, a type of irreversible dementia;

c) *Cushing's syndrome*, a syndrome resulting from the production of excess cortisol from the adrenal cortex.

Parts of the body named for their discoverers include:

a) *Bartholin's glands*, located in the female perineum;

b) *Cowper's glands*, located beneath a portion of the male urethra;

c) *Wernicke's center*, a speech center in the brain.

Medical devices such as *catheters* (i.e. tubes passed through body channels) are often named for their inventors; for example:

a) *the Foley catheter* is an indwelling urinary catheter;

b) *a Hickman catheter* is a central venous catheter inserted for long-term use;

c) *a Malecot catheter* is a tube used for gastrostomy feedings;

d) *a Swan-Ganz catheter* is threaded into the pulmonary artery.

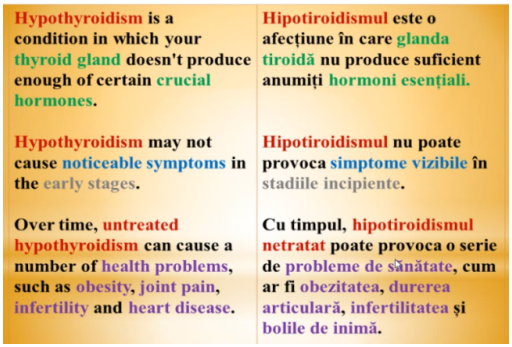
The next type of word-formation is **abbreviation**. An abbreviation is a shortened form of a word or phrase.

There are many ways of forming medical abbreviations. Abbreviations can be in the form of:

- Letters: The abbreviation for chest x-ray is CXR.
- Shortened words: The abbreviation “tab” is short for “tablet.”
- Acronyms: The acronym CPR stands for **c**ardio**p**ulmonary **r**esuscitation (Cohen, 2011, p.8-9).

Abbreviations and symbols should be used cautiously, especially when medications are involved. The difficulty of translating shortened words is that the grammatical information about the word is cut off with the ending, its appearance becomes blurred and the only clue as to which of the words of the same name is used by the speaker is the context*: chem(istry?)* the speaker uses is the context: *chem (istry? ist?); bact (eriological? eriology?*).

Any medical text is characterised by a particular style that meets the aims and objectives of the content of the scientific literature. The main feature is the brevity of the material and clarity of wording. The language of a medical text is characterised by a lack of emotional intensity, figurative comparisons, metaphors; elements of humour, irony, etc. A medical text also contains medical terminology, which are complex lexical systems such as chemistry, botany, pharmacognosy, pharmacology names of medicines. The specific nature of such texts is that the translator must avoid any remarks and additions while translating it. For, instance, working with the disease’s description, the students tried to highlight some parts of medical texts in different colours thus to point out *personal information, current diagnoses, symptoms, procedures, findings, anatomical sites*, etc.




When confronted with the text to be translated, the translator's first concern is to “understand it by assessing the meaning of language units in the text against the contextual situation and the pertaining extralinguistic facts” (Комиссаров, Коралова, 1990, p.59). While analyzing the translation of 15 instructions for medicines from English into Russian and

Romanian, we have identified and systematised the following lexical translation techniques:

1. Calque or literal translation. For instance, *dental pain* = “durere de dinți”/*”*зубная боль”; *abdominal pain = “durere* abdominală *“/* “абдоминальная боль”.

2. Transcription. For instance, bronchial *asthma* = *“*astmul bronșic”/ *“*бронхиальная астма”; *anaesthesia* = “anestezie”/ “анастезия”; *hepatitis* = “hepatită “/ “гепатит”.

3. Transliteration. For instance*, ibuprofen* = “ibuprofen”/ “ибупрофен”; *hydrochlorid* = “clorhidrat”/ “гидрохлорид*”*.

4. Descriptive technique. For instance, *erythema multiforme* = “eritem multiform exudative”/ “мультиформная экссудативная эритема”; *coated tablet = “*comprimat acoperit”/ “таблетки, покрытые оболочкой.

When working with medical texts containing a lot of specific terminology, translators often encounter difficulties with their translation in the form of "translator's false friends", where the English words are “in harmony” with Romanian or Russian words, but have different meanings. For example, “*pernicious anaemia”* - using the transcribing technique, the translation is “anemie pernicioasă “/ “перниционзная анемия”. But in fact, the correct meaning of this term is “gastrită atrofică”/ “атрофический гастрит”.

In summary, this paper argued that translating medical texts requires special knowledge and attention. It is important to note that in translating medical terminology, common lexical and grammatical transformations used in texts of any genre are applied. The high percentage of terms translated using a selection of stable lexical units, as well as explication, indicates that medical terminology in Romanian or in Russian has its own established linguistic tradition, while the methods of calque, transliteration and transcription draw attention to the fact that medical terminology in general has an international character, tends to maintain lexical unity due to the desire to copy special vocabulary from one language to another.

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