
MEDICAL TRANSLATION IS AN ART OF SCIENCE

Sheliyna Sivanesan.

Fourth year

Abstract

Translation is an important factor in disseminating a multi – disciplinary knowledge and discoveries in the field of science, particularly in medical field. Therefore, it is called as the art of science. The translators of medical texts face a number of challenges. They include contextual problems, linguistic problems, equivalence etc. This study provides a general overview of the major issues faced in medical translation. It presents the brief history of medical translation. It also discusses certain characteristic features of medical language and will give a clear idea about translating medical articles in an effective way.

Key words-medical translation, experts, semi-experts, laymen, abbreviations, accuracy, medical terminology.

Introduction.

Medical translation is different from other types of translations. Translation is an important factor in spreading out the knowledge and new discoveries in the medical field. Medical translation focuses on the number of subject areas, including pharmacology, medical rescue system, surgery, obstetrics, pediatrics, psychiatry, internal medicine, oncology, cardiology and other fields of specialty. According to Fischbach (1998:1), **“Medical translation may well be the most universal and the oldest form of scientific translation because of ubiquitousness of human anatomy and physiology (after all the human body is much the same everywhere), the long, venerable and well documented history of medicine, and the hitherto uniform character of the language of medicine, at least in the west”.**

Medical thoughts and writings have been emerged in the early days. The history of European medical terminologies dates back to ancient Greece, the 6 -5th centuries BC. The first medical activities were carried out in ancient Greece, Rome

and Egypt. Today's famous Hippocratic Oath dates back to the times of Hippocrates who is considered the Father of Medicine. His cures and healing methods differed from those of the priests of his time, as, unlike these, Hippocrates believed that illnesses were not caused by angry gods, but they had natural causes. Frinculescu summarizes the history of medicine in the following way: Latin was the lingua franca of Western medical writing for several centuries. The roots of Western medicine lie in Greek. Medical learning was transmitted in Latin translations of Greek and Arabic texts, mostly by translators whose first language was not a European vernacular, like Greek. Galen's texts became available in the 13th century in Latin commentaries, with several layers of additions. Medical texts began to be translated into vernacular languages such as French, English, German, Portuguese, and Catalan in the 14th and 15th centuries, almost simultaneously in different parts of Europe. However, at that time, Latin retained its strong position as a pan-European language of science. The situation started to change in France, at the end of the 16th century, and in England, at the end of the 17th century, when several authors began to publish in both Vernacular languages and Latin. But Latin still retained its position longer in other parts of Europe, for example in German-speaking countries" (Frinculescu, 2009:4). Thus, in ancient times, the language of medicine was Greek. The first important collection of medical writings is the so-called Corpus Hippocraticum, a collection of 60 studies. The terminology of these books stands at the basis of today's medical terminology.

From the past, Translation of medical text occupied an important place in Sri Lanka. Dr.Samuel Fisk Green (1822-1884) is the scientific Tamil pioneer who paved the way for the translation of medical text. The first book selected for translation was Dr.Calvin Cutter's Anatomy, Physiology and Hygiene (அங்காதிபாதம், சுகரணவாதம், உற்பாலனம்). Dr.Green did not attempt a direct translation, but his aim was to put it as simply as possible into the Tamil language. In June 1852, the first translated medical text was ready for the press. Maunsell's Obstetrics (மவுன்சலின் பிரசவ வைத்தியம்), Druitt's Surgery (துருவிதரின் இரண வைத்தியம்), Gray's Anatomy (கிரேயின் அங்காதிபாதம்), Hopper's Physician's Vade Mecum (ஹாப்பரின் வைத்தியாகரம்), Wells' chemistry (வெல்சின் கெமிஸ்தம்), Dalton's Physiology (டால்தனின் மனஷசுகரணம்), Waring's Pharmacopoeia of India (வாஜிங்கின் சிகிச்சா வாகடம்) are the medical science works published in Tamil as a result of Dr.Green's planned undertaking. All of these works were translated by Dr.Green and his students. Therefore, the above facts bear the witness for translation of medical text in Sri Lanka.

Now, there are new inventions made and a vast range of knowledge to gain within medical field. Every second there is a message/news from the medical field and that news meet the need to be shared with the entire world. As a result many medical articles and books are constantly written and many of them should be translated. Medical articles are mostly written in English as English is an International language. It is very difficult to understand by the laymen and semi-experts for whom English is a second language or foreign language. Therefore, these writings should be translated into other languages.

Medical language

Medical Language should be more concrete, more personal and more concise without dumping down the content, without losing important information, and without making the tone inappropriately casual. In fact, directness and clarity of medical language normally sharpen the tone and can even help to add precision. In medical language a writer or a translator should focus on the target reader. Normally target readers are classified into three categories. They are Experts, Semi-Experts and Laymen.

For experts:

- * Use (Latin) medical terminology -It often gives a more precise and in-depth description than ordinary terms do.
- * Use passive voice- It keeps the necessary high formality and style, and thereby the credibility of the text. However, active voice is not 'forbidden' and can in many cases be necessary in order to get the correct message across and make the sentence shorter
- * Give more information within a short complex sentence- Experts are used to reading complex language and they do not have time to read unnecessarily long texts
- * Avoid explanatory footnotes- Experts understand the words in medical articles so they do not need explanatory footnotes.

For semi-experts and laymen:

- * Avoid long sentences-makes the sentences short and clear.
- * Use ordinary terminology-because Semi-experts and laymen often do not understand (Latin) medical terminology.

- * Avoid too much information in one sentence-Too much information makes the sentence difficult to understand.
- * Avoid heavy pre-modification. This makes the sentences easier to understand and avoid too much crowded information in one sentence.
- * Avoid nominalizations. Use verb phrases instead. It is easier to read sentences that have a subject and a verb and the language flows better.
- * Use explanatory footnotes- many (Latin) medical terms do not have an equivalent in ordinary terms. In cases should use explanatory footnotes.

Therefore, a medical writing and its translation should reflect these features or characteristics in its way according to the target reader.

Specific Problems that are encountered by a translator while translating the medical text and the ways of overcoming

Many problems are encounter by the translators while translating the medical text. But this section only deals with selective problems that often annoy the translator in translating the text. They are mainly identified as contextual problems, linguistic problems, problems in finding the appropriate equivalent and abbreviations.

- * Contextual problems in medical translation.

Medical translation is not an easy task. The translators of medical texts face number of challenges; these challenges sometimes occur as a result of the lack of contextual understanding. In this case, when a translator is not so much familiar with the particular area of the medical field to which he/she was assigned to translate, then contextual problems are inevitable. This mostly happens to blooming medical translators. By the continuous practice in medical translation the translator can overcome the problems. Following strategies applied by the translators create problems as a result of the lack of contextual understanding.

- › Omission: The translator did not translate a word/phrase mentioned by the clinician or the writer.
- › Addition: The translator added a word/phrase to the translation that was not mentioned by the clinician or the writer.
- › Substitution: The translator substituted a word/phrase for a different word/phrase mentioned by the clinician or the writer.
- › Editorialisation: The translator provided his or her own personal views as the equivalent of a word/phrase mentioned by the clinician or the writer.

> **False Fluency:** The translator used an incorrect word/phrase, or word/phrase that does not exist in that particular language.

For example- Administration of Immunoglobulin, here administration means சிகிச்சையளிக்கும் முறை but not நிர்வகித்தல். So, the translation should be புரதபிறப்பொருள் சிகிச்சையளிக்கும் முறை.

* **Linguistic problems in medical translation.**

Linguistics deals with language. Each language has its own way of expressing the facts. So, every text should be translated according to the linguistic style of the target language. English follows its own syntactical structure as subject+verb+object while Tamil has subject+object+verb pattern. As Tamil is a flexible language it can form sentences by the different syntactic structures. While translating the medical text a translator can also follow the Tamil grammatical structure, but problems can happen in phonology level, when some medical terminologies are unable to translate or when it has no equivalent.

For example, medical terminologies like

N.Saline- நோமல் சேலைன் (it should be transliterated because only medical officers can understand the importance of the N.Saline).

Steroid- ஸ்டெராயிட் மருந்து.

Adrenaline-அதிரனலின் should be transliterated. Because when they undergo translation they will lose their significance.

Morphology-Medical Words formation

Medical translators often deal with a great number of medical terms.

Medical terminology is always defined as a set of words which accurately describe human body and its processes in a scientific manner. Medical terms are often based on the concept of word roots, prefixes and suffixes. A root word contains a primary meaning of a medical term. Majority of words are derived from Latin or Greek language because medical field was developed by the western world. Latin roots are used to create words describing anatomical structures whereas Greek roots are used to create words describing a disease, treatment or condition. For example, the Greek root 'nephris' used in terms that describe a kidney disease; the Latin root 'ren' describes an anatomical structure of a kidney. Sometimes a word root is combined with a vowel and then we may talk about a combining form.

A suffix is defined as a word element which is placed at the end of a word and therefore changing its meaning. In medical terminology suffixes usually denote a pathology, surgical procedure or symptom.

Prophylaxis - தொற்றுக்கைக்கு ஏதுவான நிலைக்குத் தடுப்பு சிகிச்சை.

A prefix is defined as a word element which is added to the beginning of a word root. A prefix changes word's meaning and usually describes a position, direction or negation. An example of a prefix is hyper- meaning excessive, not normal which can be observed in a word Anaphylaxis - கடும் ஒவ்வாமை.

Medical translators should have deep knowledge in Latin and Greek root words, because a large number of medical terminologies are based on them. Otherwise the translator will face difficulty in translating medical terminology.

* Problems in finding the appropriate equivalent.

It is very important that the translator should not depend only on the lexicons like dictionaries, glossaries to find the meaning of the equivalents because sometimes the equivalent may be an older one or sometimes it may not be a scientific word. It is very important that a medical translator should have a healthy communication with the medical officers and other experts in the field. Then only they can absorb the appropriate equivalents.

For example,

□ Mucous membrane -rspr;rt;T is a normal equivalent, not used by the medical officers but rPunkd;rt;T is the appropriate equivalent.

› Immunity-Neha; vjpu;g;G rf;jp is a normal equivalent epu;g;gPldk; is the appropriate equivalent.

Further, based on the target readers these equivalents too vary.

› Mucous membrane

Experts - சீரமென்சவ்வு

Semi - experts and laymen - சளிச்சவ்வு

› Immunity

Experts- நிர்ப்பீடனம்

Semi - experts and laymen- நோய் எதிர்ப்பு சக்தி. Therefore, translators should have a clear mind of the use of terminology and their equivalents.

* Abbreviations.

Abbreviations are used very frequently in medical field. They boost efficiency as long as they are used intelligently. They are very difficult to understand because of their shortened form, sometimes, one abbreviation may have different explanation in different field so, it may lead to ambiguity. Periods (stops) are often used in styling abbreviations. Prevalent practice in medicine today is often to forego them as unnecessary. Further, Robert Taylor in his book has mentioned about using abbreviations as follows.

“The writers should be careful about the use of jargons, abbreviations and acronyms. Some jargons originate with young clinicians. The terms are often shorthand and may be derogatory. However, the careful medical writer uses such terms rarely. If jargons or slangs were used the writer should be sure about the purpose and should provide with the meaning. (Taylor Medical Writing, A Guide for clinicians, Educators and Researchers (second edition, 2011, 126-127))”. Therefore, he states “Avoid jargon, be accurate in what we say, and be careful with abbreviations and acronyms. For example,

- * நீர் வெறுப்பு நோய்த் தடுப்பு மருந்து (ARV).
- * சுத்தமான கோழி முளையகல வளர்ப்பு தடுப்பு மருந்து (PCEC).
- * சுத்தமான கல ரேபிஸ் தடுப்பு மருந்து (PVRV).

These are the major problems that a medical translator faces very often. They can be avoided by using the appropriate techniques and strategies.

Conclusion

Medical Translation is an art of science. This art should be preserved by every medical translator through an effective translation. But translating medical texts is a great challenge. It meets the need of an excellent knowledge of source and target languages as well as very good knowledge of medical terminology and special areas of medicine in general. One should have in mind that rendering medical texts that it is often more than just translating words from one into another language; it is working with terms concerning someone's health and even life, so it is better to avoid word for word translation and it should be done as sense-for-sense. The translator must be aware of complexity of medical translation and take into consideration all areas of difficulties, because making mistakes in medical translation may lead to serious consequences.