Terminological Challenges and their Impact on the Translation of Specialized Texts: An Analysis of Pharmaceutical Translations from English into Kiswahili

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Abstract

In translation practice, translators experience a number of challenges including lack of equivalents due to variations existing between source and target languages. The attempts to establish equivalents in the target language have always had positive and negative impact on the target language text in particular and the target language in general. The main objective of this paper is to analyze the situation using pharmaceutical translations from English into Kiswahili. Data for this study was collected through documentary review and interview and thereafter analyzed qualitatively. A comparison of pharmaceutical Kiswahili translations with their source language texts shows that the problem of establishing equivalents for specialized terms has resulted into various translation, as well as dilution of special features. Generally, term creation has both positive and negative impact on the translation process and product, and it always presents a rich area of translation studies.

Ikisiri

Katika mchakato wa kutafsiri, wafasiri hukabiliwa na changamoto mbalimbali ikiwamo ukosefu wa visawe kutokana na tofauti zilizopo kati ya lugha chanzi na lugha lengwa. Jitihada za kutafuta au kuunda visawe zimekuwa na athari hasi na chanya kwa wakati mmoja, mahususi kwenye matini ya lugha lengwa na kwenye lugha kwa ujumla. Lengo la makala hii ni kuchambua hali ilivyo kwenye tafsiri za matini za tiba kutoka lugha ya Kiingereza kwenda katika Kiswahili. Data ya utafiti huu ilikusanywa kwa kutumia mbinu za uchambuzi matini na hojaji na zilichambuliwa kwa kutumia mkabala wa kimaelezo. Ulinganishi wa matini zilizotafsiriwa katika Kiswahili na zile za lugha chanzi umeonesha kwamba changamoto ya kupata visawe kwa istilahi za tiba imesababisha matatizo kadhaa, kama vile udondoshaji, upotoshaji, tafsiri finyu, tafsiri pana pamoja na matatizo ya kuchujusha nduni mahususi za matini hizo. Kwa ujumla, makala imehitimisha kwamba uundaji wa istilahi katika mchakato wa tafsiri una athari chanya na hasi, na kwa hakika ni eneo ambalo lina mambo mengi sana yanayoweza kuwafikirisha watafiti wa uwanja huu.

1.0 Introduction

The attempt to translate any technical or specialized text from languages spoken in the communities with higher levels of scientific and technological innovation into the languages spoken in developing or the less developed communities has a great implication to the development and growth of the language (Patience, 2016). The effects are also experienced in the target language translations. Most of the pharmaceutical industries in Tanzania, East Africa and all over the world create the Summary of Product Characteristics (SmPC)¹, normally using English language, which signals technological and innovation transfer. Generally, the language of the majority in East Africa, and Tanzania in particular, is Kiswahili. Consequently, majority of the people who buy the medicine do not understand English and this necessitates translation of these documents into Kiswahili. That means, translating pharmaceutical texts into Kiswahili is key to assisting people to understand and use a particular medicine among the Swahili speakers. However, the translations of pharmaceutical texts from English into Kiswahili represent an interesting and rich area of research about Kiswahili translations. A comparative study of these translations indicates discrepancies that call for a close investigation to understand the challenges and propose some measures that can be used to improve the practice. The main purpose of this article therefore, is to analyze the translation of pharmaceutical texts from English into Kiswahili in order to expose the impact created by terminological challenges.

3.0 Translation and Terminological Challenges

Translation and terminology are branches of applied linguistics whereby each focuses on a specific object. Translation is concerned with expressing a message or semantic contents originally produced in one language. It deals with replacing source language concepts or contents with target language equivalents. Terminology, on the other hand, deals with collecting specialized terms in one language to compile them and produce terminological resources of that language (Cabré, 2010). In a nutshell, while translation deals with the study of the rendering process and the analysis of the translated text, terminology deals with lexical form and content from a certain specialized field or text.

Translation and terminology development have been enriching each other in a number of ways. Cabré (2010) argues that terminology is considered by translators as a tool to solve problems related to non-equivalents while translated documents may serve as a source for extracting terms in terminology development

¹ SmPC is the most important and comprehensive document which details the purpose and characteristics of a given drug. It is a full, official description of a pharmaceutical product, which lists the name of the active substance, its composition, uses, dosages, pharmaceutical forms and known adverse reactions (www.articlesnatch.com, retrieved on 26th January, 2016).

(Bowker, 2006). Specialized translation inevitably needs terminology to produce an adequate text in the target language. Apart from being used as the resource to find an equivalent, terminology is used as a means for acquiring knowledge on how to create terms. Translators obtain knowledge on the methods and techniques of creating new terms in the theories of terminology principles and method.

However, in the process of enriching each other, there are certain effects experienced in both translation and terminology development. In this article, we have labeled them as terminological challenges and effects. Cabré (2010) argues that translators are faced with a number of problems. Some are based on the text to be translated while others are caused by the context of production of both the original and its translation. Translators need to recognize whether the challenges and problems are related to terminology or other factors. Since the aim of the article is to analyze challenges related to terminology, the discussion here is also delving on the terminological challenges. Malangwa (2010) discusses the challenges observed in search for equivalent terms in computer science translations from English into Kiswahili during the translation of Microsoft and Klinux computer programs (i.e. localization). Translators applied terminology principles and methods to create new terms due to lack of ready-made equivalents. However, it was observed in the study by Malangwa (op cit) that the practices of creating new terms among translators created terminological confusion in the target language due to lack of proper coordination. It is observed here that while the translators are working hard to solve the problem of non-equivalents, they cause another problem of terminological confusion. The issue of terminological confusion creates effects beyond the texts involved. It affects the users of these texts and the speakers of the language in general. The confusion is based on the correct reference term to be used in their conversation.

Matamala (2010) observes that sometimes the problem of terminological confusion affects much the translators in the future translation assignments. They are later faced with another challenge of choosing equivalent denominations. This is what Malangwa (op cit) calls terminological confusion that affects the target language speakers, including translators. However, Matamala outlines a number of activities which the translators of specialized text need to do when faced with the situation. In the source language text, the translators of specialized text are required to identify the term, know or identify the meaning from the source language text, confirm its specialized nature and know its denotations and the conditions in which they are used in the text. Thereafter, in the target language translators need to know if there is an equivalent term, if not, they should decide what resources can or must be used in order to adapt or create a reasonable denomination and indicate that it is a neologism (See also Sager, 1990; Nchabeleng, 2011 and Ramos, 2015). Translators also need to identify the most

adequate equivalent unit, they should know if the term has a specific grammatical usage and the prototypical combination of the term as well as the phraseology in the field. Translators need to know further, denominative alternatives for a single concept and their pragmatic condition as well as making sure that the selected denominative unit corresponds exactly to the source language concept.

In reading the proposed activities by Matamala, it looks like everything here is simplified. However, as Malangwa (op cit) observed, if there are two teams of translators working on similar texts, as it was for Microsoft and Klinux localization, without proper coordination, they may still end up causing or enlarging the problem of terminological confusion in the target language. For instance, in the localization of computer programmes into Kiswahili there was a variation in the terms created by the two teams (i.e. Microsoft and Klinux teams of translators). The following table exemplifies the situation:

| SL Word or Term | MS Translation | KL Translation |
|------------------|-----------------------|----------------|
| Toolbar | Pauzana | Mwambaa zana |
| Bulleted list | Orodha aridhishe | Orodha tobwe |
| Webpage | Ukurasa Wavuti | Gombo Wavu |
| Website | Wavuti | Tovuti |
| Gateway | Kichanganishi Mtandao | Lango |
| Internet address | Anwani tovuti | Anwani wavuti |
| Install | Sanidi | Sakinisha |
| Keyboard | Kicharazio | Baobonye |
| Navigate | Abiri | Rambaza |
| Recycle bin | Kijalala | Kisuduru |
| Screensaver | Kinusuru kiwamba | Kilezi |
| Save | Akibisha | Hifadhi |
| Offline | Nje ya mtandao | Nje ya mkondo |
| Minimize | Punguza | Finya |

Table 1: A Sample of Terminological Confusion in MS and KL Translations

Source: Malangwa (2010:165)

The variation here is caused by the application of different translation techniques to form these equivalents. In such a situation, speakers of the language may fail to know which one to adopt for their daily conversation. This is what we call terminological confusion.

From the discussion above, it is evident that the search for equivalent is not a solution to the problem of non-equivalents. However, Cabré (2010), Matamala (2010) and Malangwa (2010) do not discuss on the other possibility of creating problems in the target language translation product, which is the concern of this

article. A problem or challenge is terminological only when it affects both source language and target language texts. As Matamala (2009) argues, the absence of an equivalent in the target language forces translators to create new terms, paraphrase, use loanwords (usually from the source language) or use language mechanisms (i.e. word formation process). In so doing, sometimes certain effects can be caused in the target language texts. Specialized texts have important linguistic and stylistic features that need to be maintained throughout in the translation process. The application of methods like paraphrasing may dilute the specialized features of the source language text. That means, the translation product becomes diluted and lacks important specialized features. Sometimes, the paraphrase may end up saving too little or too much of the source language concept. Bowker (2006) posited that terminological problems can be caused by the translator's failure to download or interpret the contents entailed in the source language term and in searching the appropriate equivalent in the target language. Cuomo and Rome (2017) assert that some of the common challenges translators face in medical translations are related to ambiguous concepts and problematic terms (i.e. terms which are not semantically transparent). The current study analyzes the situation in the translation of pharmaceutical texts using the SmPC texts from English into Kiswahili and the impact created on the target language text (i.e. the translation product).

4.0 Methodology

This study was done in Dar es Salaam region due to the fact that most of the medical stores and most translators have their headquarters or are normally stationed in some capital cities and Dar es Salaam represents these cities in Tanzania. For instance, most Kiswahili translators and interpreters are found in Dar es Salaam, where they believe that there is a high demand for such services. The data for this study were words, phrases, clauses and sentences which were collected from the SmPC and the labels of packaging boxes of some medicines from different industrial companies manufacturing medicines in Tanzania. In other words, the data for this study was collected through documentary review and interview. The researcher had a documentary review from two big pharmacy shops in Dar es Salaam which were randomly selected. An analysis of the translation enabled the researcher to collect a total of 10 strings, which were observed to have terminological challenges that resulted into various translation problems in the target language text. The validity of the data extracted from these resources was then checked through structured interviews with 5 pharmacists and 5 medical doctors from Kinondoni district, who were also randomly selected. Kinondoni district was picked randomly to represent other districts of Dar es Salaam as it was difficult to conduct a study in the five districts due to financial and time constraints. The checking was also done in the content, especially on translations which were sought to be deviating from the original source language text as well as in the special terms observed and their equivalents. A total of 15 strings were subjected in the check and about 10 strings were confirmed to have effects of terminological challenges. However, for the purpose of the analysis and discussion, and since the 10 strings were recurring and some represented similar effects or problems, only 5 strings together with their target language translations have been used in analyzing the situation and in drawing general conclusions in relation to specialized translations into Kiswahili.

The data for this study was analyzed using a comparative technique, which has been proposed by scholars like Larson (1984). A comparative technique is used to evaluate a translation by comparing it to its source language (SL) text in order to establish whether the text has been translated accurately. The data for this study is presented in a comparative way whereby the SL texts are presented parallel with their corresponding target language (TL) texts for the aim of showing the areas of weaknesses. Terms which created challenges in the translation together with their target language equivalents are highlighted and analyzed qualitatively in the discussions.

4.0 Data Presentation and Discussion

The participants for this study were given a list of 15 source language strings together with their target language equivalents to mark parts of the translations which were not communicating the source language message. The strings were identified or collected by the researcher through documentary review. Out of the 15 strings, 10 strings were marked by the participants to have problems. In comparing the source and target language strings, the participants observed that some translations had problems of overtranslation (saying more than what is present in the source text), undertranslation (saying less than what is present in the source text) while others were distorted. An analysis of the situation indicated that translators of specialized texts from English into Kiswahili were faced with two major terminological challenges. The first challenge is related to terms that they have got no idea of their meanings or concepts. In the interview with the specialists, the respondents argued that some target language translations (strings) have said completely something different. This could be caused by the translators failing to download the content of the source language term. It can be argued here that translators of specialized translations have a responsibility of consulting specialists in the area or various documents in order to obtain the meaning of a particular term.

Apart from the challenge of establishing the exact meaning or concept entailed in a particular term, the translators had another challenge of establishing an appropriate equivalent in the target language. In the interview with subject specialists, it was argued that the translators seemed to understand the concept of the source language term but the equivalent suggested was not "communicating comprehensively", to use the term that was used by one of the interviewees. Hypothetically, it can be argued here that once they failed in the first challenge (i.e. establishing the appropriate meaning), they definitely failed in the second (i.e. establishing the target equivalent term). Hence, create Kiswahili equivalents that deviate from the English terms as analyzed in the succeeding paragraphs.

In studying the pharmaceutical translations, it was observed that when the translators were faced with a term that has no equivalent in the target language and they could not establish its precise meaning, they often resorted to omitting or mistranslating it in the target language text. Moreover, in instances where they managed to get the exact definition of the terms, they sometimes ended up overtranslating or undertranslating certain parts of the text. For example:

TEXT 1

SL Text: A treatment for cough, *colds*, *catarrh* and bronchitis.

TL Text: Dawa ya kuponyesha kukohoa, makamasi, maumivu ya kifua na kadhalika

Source: GOODMORNING SYRUP, 2016

In the above texts, the source language terms *colds* and *catarrh* have been translated all together as *makamasi* (mucus) in the target language text. A careful observation of this translation indicates that *colds* (*mafua*) has been omitted and this is why there is addition of some words or a phrase *na kadhalika* (et cetera) in the target text. When the doctors were interviewed on the accuracy of the technique used to handle such a case, they indicated that the insertion of the phrase *na kadhalika* compensates for the loss created by omitting the term *colds*. It should be also noted that, the insertion of *na kadhalika* (et cetera) may mislead that the medicine can be used to treat several diseases contrary to what is observed in the source language text. The trend of omission was also observed in the following translation:

TEXT 2

SL Text: For fast relief from the itchiness, *redness* and *swelling of skin allergies* and *hay fever*.

TL Text: Kwa nafuu ya haraka, kwa muwasho, *kuvimba ngozi* na *mafua*. **Source:** *SEDITION SYRUP*, 2016

In this translation, it can be observed that the term *redness* has been omitted in the target language text. Also there is a distortion of the term *swelling of skin allergies* as *kuvimba ngozi* is just *swelling of skin* in English. Instead, the translation was supposed to read *kuvimba ngozi kutokana na mzio w*hich represents the source language information. The word *mzio* (allergy) compliments the target language information, which also guides the users of this product. Furthermore, in the above translation (i.e. Text No. 2) there is also a distortion in the translation of the term *hay fever* as *mafua* (mucus/flu). The term *hay fever* could be translated as *homa kali* or *mafua ya mzio* (*hay fever/pollinosis*) in order to create common understanding between the source language users and those of the target language. The following data also illustrate the situation:

TEXT 3

- *SL Text*: To avoid bad breath use 2 *tablespoonfuls* rinse mouth then tilt back head and gargle for 15 seconds. For colds and sore throats use 2 tablespoonfuls at first sign of a cold and gargle for 15 seconds. Do not swallow.
- TL Text: Kuondoa harufu mbaya mdomoni, tumia vijiko viwili kwa kusukutua kwenye mdomo barabara kwenye fizi na meno, halafu inamisha kichwa nyuma kwa sekunde 15 ndipo uteme dawa asubuhi na jioni. Kwa mafua na kuwashwa kooni tumia vijiko viwili vikubwa baada ya kusikia dalili ya mafua na sukutua kwa sekunde 15. Usimeze.

Source: MEDI ORAL, 2016

Tendencies of adding extra information (overtranslation) were observed in other pharmaceutical translations due to poor conceptualization of the medical terms used in the source language text as well as the lack of equivalents in the target language. The different sizes of the spoons in Kiswahili are distinguished by their common use, as *kijiko cha chai* (teaspoon) and *kijiko cha chakula* (tablespoon). Sometimes qualifiers are used to precisely describe them as *kijiko kikubwa cha chakula*. The qualifiers highlighted are intended to give emphasis on the type of spoon to be used in administering the medicine. This kind of clarifications is very common in the pharmacies to assist the users of certain medicines administered to both children and adults, to avoid overdosing the patient. In the following translations, the equivalents provided do not clearly describe the concept entailed in the term *tablespoon*.

As noted above, translations in medical industry should be handled carefully to avoid harming the users of such information. The translations of indications (instructions) like this one can affect the consumers of this product negatively. The first translation of 2 *tablespoonfuls* in the Kiswahili texts, is

translated as *vijiko viwili (2 spoons)*. The target language users, who generally do not understand English, may not be sure of which spoon to use between *teaspoonfuls* or *tablespoonfuls*. The translation offered is a rather generic one, that is, *vijiko viwili* (two spoonfuls) yet the source language text is very specific, that is, *2 tablespoonfuls-vijiko viwili vikubwa* as offered in the second sentence.

It was further observed that contrary to the source language readers who can easily analyze and understand the instructions given, the target language readers are given addition information for more clarifications. For example, *halafu* inamisha kichwa nyuma kwa sekunde 15 ndipo uteme dawa. The information in bold is a clarifications on what the patient should do after the 15 minutes have elapsed (i.e. to spit out the medicine). This information is not in the first sentence of the source language text. It is provided in the last sentence of the text and implied in the first sentence. That means, after the 15 minutes the patient will definitely spit it out. In the interview with a representative of one of the medical stores it was observed that such clarifications are sometimes added by the manufacturing company since they are the ones who either translate or proofread the translations before are placed in the packages. Self translation by authors sometimes gives opportunity for authors to modify their text or add extra information which was not there in the previous text (Whyte, 2002). This is also exemplified by the additional information... asubuhi na jioni (morning and evening) as seen in the translation. This important information, asubuhi na jioni, is missing in the source text.

Lack of equivalents also leads to descriptive translations (paraphrasing) in the target language. The descriptive translations dilute the technical language used in the source language. This was observed, for example, in the following translation:

TEXT 4

- *SL Text*: For the treatment of *cough accompanying bronchitis*, laryingitis and irritation or congestion of respiratory system.
- *TL Text*: Kwa matibabu ya *kikohozi kinachobana na kuvimba njia ya chakula*, koo na kuwashwa au kuziba njia ya hewa.

Source: EMDENYN SYRUP (FOR ADULT), 2016

From the above text and its target language translation, it can be clearly observed that the term *bronchitis* has been paraphrased or descriptively translated as *kuvimba njia ya chakula* in the target language. *Bronchitis* is a technical or specialized term used in medical context as opposed to *kuvimba koo* which is not technical and does not represent the concept entailed in the source language term. For adequate translation, transliteralation (i.e. *Athritisi*) would be suitable for

proper handling and is available in the Kiswahili medical dictionary (see Mwita and Mwansoko, 2003). The translators of this text tried to simplify the term for common users. This is not recommended in specialized translation as it dilutes the terminological features of specialized texts. Sager (1990) and Nchabeleng (2011) argue that the preference of target language users should not guide translation of technical and specialized texts. Users are expected to obtain clarifications from the pharmacists or specialists.

TEXT 5

- *SL Text*: For relief of cough and *its congestive symptoms*. For treatment of hay fever and other conditions affecting *the upper respiratory tract*.
- **TL Text:** Kwa nafuu ya kikohozi na *dalili za kukaba koo* na homa kali na matatizo mengine ya *mfereji wa kupumua*.

Source: EMDENYN SYRUP (FOR CHILDREN), 2016

From the above texts, it can be observed that the italicized terms or words are either distorted or mistranslated. For instance, the translation of a term like *the upper respiratory tract* as *mfereji wa kupumua* slightly captures the source language message. There is confusion in the target language translation on what is exactly affected. The target language text suggests that what is affected is the whole respiratory tract while in the source language we are told that it is the *upper* respiratory tract that is affected. The text is even modified from two different strings to one string. This article considers this kind of translation as distortion of information and dilution of important language features.

From the discussion above, it is evident that when examining the translations against their source language texts, there is a clear deviation in terms of terminological features and content. As for the words of Ramos (2015), translators have always been guided more or less by their own intuition in dealing with the various challenges during the translation process. This has caused persistence of translation problems in most of the target language text. For instance, translation quality assurance procedures are not implemented and consequently, there are always concurrencies of poor translation products. Conformity to specialized fields in the translation process is imperative. Translators who deal with specialized texts, should always try hard to read with experts' eyes in order to achieve adequacy to the needs of specialized drafters and target readers as well as the non-specialized reasoning, rules of interpretation, resources, procedures and discourse. Priorities should be determined in order to obtain an adequate translation product.

In addition, translation process should not be guided by generalist impressions of fluency and readability. Translators have the onus to use the most appropriate terms, style and register. Translation of a fair average quality is correct and readable but a top quality one is fluent, efficient, most readable and ergonomic in that both content and form are more than adequate (Anesa, 2014 and Ramos, 2015). This is against what we observed in the above medical translation, where by omission, undertranslation, distortion and overtranslation are the common subjects. Ramos maintains that the demand for quality has been a catalyst for both translation process and product due to the challenges experienced in the texts. However, studies on the challenges experienced in the translation process should guide problem-solving strategies for quality translation product. This study also has uncovered terminological aspects through which translators, producers and users of medical texts should consider while translating or using translated SmPC texts. In the texts that were assessed, it was observed that translators tend to translate those texts in a more simplified manner, which in turn, dilutes the specialized feature (terminological features) in the target language translation. As noted above, specialized texts are characterized by use of technical or specialized terms. This requires their subsequent translations to bear those features.

Lastly, it has been observed that the process of establishing equivalents for the specialized terms in Kiswahili is both challenging and tedious. The challenge is caused by the lack of ready equivalents as well as the social and time pressures. As observed in the translations, words that lacked equivalents were dropped in the translation process, mistranslated, undertranslated or overtranslated. Sometimes the translators decided to provide a simplified descriptive translation that ended up in producing a long translation compared to its source language term (see Text No. 4 above for cough accompanying bronchitis-kikohozi kinachobana na kuvimba njia ya chakula). The reason behind this simplification is to produce translations that are appealing to the users (i.e. Swahili speakers). In other words, this kind of simplification is social driven in the sense that translators are trying to make sure that the translations produced are user friendly (Malangwa, 2010). While achieving this goal, all attempts are done to the expense of text specific terminological features that define or characterize the text. This is also the observation by Nord (2005) who asserts that the initiatives to categorize the texts for translation into specific text types or groups enable the translator to decide on the more effective translation strategies or techniques and methods. This means, by assigning the SL text to one of these text types, the translator can decide on how to deal with the equivalence postulates which has to be observed in the TL text. Lvóvskaya (2000) concurs that the text type to be translated also conditions specific factors which together with the general factors determine the translation strategies and options. That means, a full comprehension of the text and the decision of the equivalents in

the TL cannot be achieved without access to the full range of the subject matter and the structural features in that field of study or knowledge which the text belongs. The emphasis behind this argument is that translators whether in Kiswahili or other languages should handle texts according to their types, both in content and stylistic features. They should work hard to maintain the features of that particular text type while deriving the content in the TL.

5.0 Conclusion

Translators of specialized texts require a mixed or hybrid competency in order to carry out satisfactory translation, including competency related to specialized terms, knowledge of the subject matter and translation techniques or procedures for handling specialized terms The data presented in this study show that translators are experiencing the challenges of lack of equivalents and they fail to get definitions or concepts entailed in the medical term. Consequently, the translations offered have problems of distortion, omission, undertranslation, overtranslation and expansion or descriptive translation, which affect negatively the target language text. Some of the translations lost the features of specialized terms while others missed some important information due to omission and/or undertranslation. It is argued here that translations used for sensitive communication, like pharmaceutical or medical translation, require careful handling, revising or evaluation and editing to make sure that all important information and feature of the source language text is included in the target language text. Furthermore, translations of this nature must be handled carefully so as to avoid confusion and/or risking people's lives as in the translation of 2 tablespoonful-vijiko viwili. Moreover, translators of scientific texts are encouraged to apply direct translations/literal translation instead of communicative translation as it results into dropping some terms that are important or paraphrasing and losing important stylistic features. Lastly, translators of these texts should always involve specialists in the area in order to obtain professional interpretation or proofreading of the content in order to produce quality target language translations.

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