TRANSLATING LINGUISTIC AND CULTURAL ASPECTS IN SWAHILI HEALTHCARE TEXTS: A DESCRIPTIVE TRANSLATION STUDIES APPROACH

by

DOUGLAS ONDARA ORANG'I

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SUPERVISOR: DR. MANQOBA VICTOR NDLOVU

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DECLARATION

I, DOUGLAS ONDARA ORANG'I, student number **6134-398-6** declare that this thesis, entitled:

TRANSLATING CULTURAL AND LINGUISTIC ASPECTS IN SWAHILI HEALTHCARE TEXTS: A DESCRIPTIVE TRANSLATION STUDIES APPROACH

is my work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

DO ORANG'I DATE

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ACRONYMS AND ABBREVIATIONS

AIDS : Acquired Immunodeficiency Syndrome

DTS : Descriptive Translation Studies

HIV : Human Immunodeficiency Virus

IFAS : Iron and Folic Acid Supplements

IPA : International Phonetic Alphabet

KCPE : Kenya Certificate of Secondary Education

KCSE : Kenya Certificate of Primary Education

SL : Source Language

ST : Source Text

TC : Tertium Comparationis

Tdap : Tetanus, Diphtheria and Pertussis

TL : Target Language

TT : Target Text

UKIMWI : Upungufu wa Kinga Mwilini

VVU : Virusi Vya Ukimwi

KEY TERMS

Healthcare translation; Descriptive Translation Studies; Linguistic aspects; Cultural aspects; Cohesive devices; Descriptive terms; Text titles; *Tertium comparationis*; Taboos; Illustrations; Translation strategies; Swahili; Norms; Division of texts; Healthcare communication; Text linguistics

ABSTRACT

Underpinned by the premise that any text can be studied as a translation provided it is identified as such, this study theoretically uses Descriptive Translation Studies (DTS) to investigate English-Swahili healthcare texts. The aim of the study was to: identify, describe and analyse linguistic and cultural aspects in the texts; identify, describe, and analyse translation strategies used in the texts; and describe and analyse the use of illustrations in the texts. The study made use of Kruger and Wallmach's (1997) analytical framework. The Tertium Comparationis of the study was descriptive terms, cohesive devices, translation strategies, division of texts, illustrations, text titles, and taboo words. On the linguistic aspects, the study's main findings were: that the English texts use more descriptive terms than the Swahili texts; Swahili texts have a higher frequency use of references because it contains a number of derivational and inflectional morphemes; substitution is sparingly used whereas ellipsis is almost non-existent in Swahili texts in spite of its presence in the source texts; additive and causal conjunctions were the most prevalent in the texts; and inasmuch as there were no significant differences in the use of lexical cohesion in the ST and TT, Swahili texts were found to be more cohesive due to the slightly higher number of lexical items. Regarding the cultural aspects, it was found that translators use euphemism in the translation of words considered taboo and this informed the conclusion that there reigns the euphemism norm in Swahili texts. It equally emerged that strategies used to overcome non-lexicalisation include: use of pure loan words, use of pure loan words preceded by explanation, use of indigenised loan words, use of omission and translation by a more general word. On the other hand, translators used strategies of substitution, use of general words, paraphrasing and cultural substitution to translate words considered taboo. In addition, the study found that illustrations are used in more less the same way both in the ST and TT save for some slight modifications that are done in order to align them with the target culture expectations. Furthermore, the study theoretically effectuated four norms: explicitation norm, explicitness norm, euphemism norm, and illustration norm.

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CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Access to information for all in a language that they understand is touted as one of the basic rights in most countries and Kenya is not an exception. And so, cognisance on how the population is getting more diverse by the day presents a daunting task to those charged with the responsibility of information dissemination. In fact, it cannot get any trickier when the message to be disseminated touches on the health of the said population. The information-rich and multilingual society that we are living in requires use of a language that can be understood by all the parties to convey meaning when communicating. Accordingly, translation of texts into different languages vouches for, to some extent though, access to information that would otherwise have been impossible. It is indeed through translation that intercultural and interlingual communication is enhanced.

Translation is not an isolated process but is rather interrelated with other components such as culture and language. It is therefore incumbent upon the translator to take into consideration all the dynamics at play during the translation process in order to come up with a product that on the one hand, communicates the message from the original text. On the other hand, it should respect the target population's culture. This is because cultures and languages have their unique way of envisaging concepts and seeing realities. As a result, a translation is bound to fail on its purpose of connecting cultures and languages if it is done without due regard to the dynamics therein.

According to Leininger and MacFarland (2002), culture refers to what is learned, shared and values that are transmitted, norms, beliefs and a given group's way of life that guides their thought process, decision making, and actions in patterned ways. In addition, Leininger and MacFarland (2006) consider it a blueprint that guides human actions and decisions. Culture is what distinguishes one group from another and for the group to maintain its uniqueness, then the values of the said group should be recognised and protected. As such, the same is expected in translations and target cultures, to a large extent, determine how translations are received by the target audience. As was noted by Langacker (1999, 16), a cognitive linguist, language is an essential instrument and component of culture and is pervasively reflected in linguistic structures. Accordingly, the nexus between culture and language cannot be ignored in translations and this is in line with Toury (1995) who contends that it is in cultural environments that translations begin to exist and are meant to fill gaps in those environments.

Language is the medium that facilitates socialisation among members of a given setting. Use of language that can be understood by inhabitants of a community breaks boundaries and consequently minimises problems and challenges that would otherwise have been monumental if there were language barriers. Enjoyment of rights by individuals as enshrined in Chapter 4 of the Kenya Constitution (2010) and for the government to guarantee those rights depends to a large extent on use of a language that is accessible to all. In fact, the Kenya Constitution (2010) acknowledges that equality and freedom from discrimination and access to information are fundamental human rights. Take for instance the right to education and healthcare, there can be no meaningful enjoyment of these rights if the people cannot communicate in a language that they are competent in. The languages on focus in the study are English and Swahili. The two languages are different in that English is inflectional and Swahili is polysynthetic (Fromkin, 2000). While Kenya has more than 43 languages (Webb & Kembo-Sure, 2000), it is worth noting, however, that the translation of healthcare texts is not fairly done to all the languages. Most of the translated healthcare texts are skewed towards English and Swahili.

The health sector, in its endeavour to reach as many people as is humanly possible, translates its awareness campaign texts. In fact, the Ministry of Health Bill (2016), states that every person has a right to the highest attainable standard of health which includes progressive access for provision of promotive, preventive, curative, palliative and rehabilitative services. One of the ways through which standards of health are attained is through health texts that are meant to educate and create awareness. Health communication is an art of informing, influencing, and motivating individual, institutional and public audiences about health issues through planned learning experiences based on sound themes (Ratzan et al 1994). They further argue that the aim is to improve disease prevention, health promotion, healthcare policy, and the business of healthcare as well as the enhancement of the quality of life and health of individuals within a community.

The statement of the problem receives attention in the next section.

1.2 Statement of the Problem

Based on the foregoing discussion, this research endeavours to find out how English-Swahili healthcare translators deal with linguistic and cultural aspects as they strive to provide information to the target audience. It is important to appreciate that the information-rich society we are living in and the existence of different languages makes it necessary for information to be provided in a language that is accessible to all. Kenya has two official languages and efforts are made to avail information in both languages. However, the two languages differ in many aspects and translation is the only avenue through which information is availed to speakers.

Translation of healthcare texts is one of the ways health communication is done but it should be borne in mind that these texts portray eccentricities culturally and linguistically. As a result, translating the texts presents a myriad of problems to the translator. For instance, a translator may be posed with a word that is not lexicalised in the target language or a taboo word that is considered offensive. It is, therefore, imperative that we get to understand how translators make decisions in order to overcome the translation problems.

Translation of healthcare texts in Kenya is not centrally controlled and as such, a descriptive study serves to bring into light how different firms approach translation of healthcare texts. It is of paramount importance to find out if they are guided by the same norms that subsequently determine the translation strategy deployed.

Previously, translators dwelt on equivalence of translated texts with their source texts without paying attention to other factors beyond the word. This relegated the translation process to a wrong or right translation. The present study departs from the question of equivalence and instead gives a descriptive-explanatory analysis of the translated healthcare texts accounting for the various translation strategies employed by the translators. To illustrate, translation strategies such as omission and addition may be a basis for not achieving equivalence in prescriptive studies but can be accounted for in descriptive studies.

The nexus between illustrations and translations in healthcare texts remains largely unexplored save for Ndlovu (2009) who gives it a focus in his study. It is, therefore, timely that an investigation is done to shed light on their use in both the ST and TT. The question that begs to be answered is whether translators effect any changes to the illustrations in the translation process and if yes, what informs the changes. Whereas Baker (1992, 42) views the use of illustrations as a strategy to overcome "lack of an equivalent word in the target language" and save on space, this study looks at illustrations from a different perspective. In other words, the

current study proceeds from the premise that both the ST and TT have illustrations unlike Baker (1992) who only focuses on illustrations in the TT only.

The subsequent sub-section focuses on the aim and objectives of the research.

1.3 Aim and Objectives of the Research

This sub-section presents the aim and objectives of the study including how the objectives will be achieved.

1.3.1 Aim of the Research

The aim of the study is to explore the translation of linguistic and cultural aspects in healthcare texts from English into Swahili through descriptive translation studies approach.

1.3.2 Objectives of the Research

The objectives of the study are:

- i. To identify, describe and analyse linguistic aspects in English-Swahili healthcare texts.
- ii. To identify, describe and analyse cultural aspects in English-Swahili healthcare texts.
- iii. To identify, describe, and analyse translation strategies used in English-Swahili healthcare texts.
- iv. To describe and analyse the use of illustrations in English-Swahili healthcare texts.

The first objective endeavours to shed light on the linguistic aspects of the English-Swahili healthcare texts by focusing on Halliday and Hasan's (1976) cohesive devices of references, substitution and ellipsis, conjunctions and lexical cohesion. I purpose to demonstrate how the translators achieve cohesion and if they stick to the ST or there are any changes they make. Equally, the use of descriptive terms is looked into from a linguistic point of view and conclusions made thereof on how translators deal with them.

The second objective of the study seeks to demonstrate how translators deal with cultural aspects in the English-Swahili healthcare texts. Given that culture is so broad, this study has narrowed down the cultural aspects to taboos. The pair of languages in this study is so different and their expression of concepts is equally different; therefore, what is considered taboo in one is not necessarily so in the other. As such, this objective will describe and analyse taboo words in the texts and how translators deal with them.

The study's third objective seeks to deal with the translation strategies used by translators to overcome constraints that manifest in the translation process. This is done in appreciation of the fact that translation is a problem-solving process whereby the solution to those problems

are strategies employed. The study particularly focuses on the strategies used to overcome non-lexicalisation problems, specialised terms and taboo words in the healthcare texts.

The fourth objective of the study seeks to describe how illustrations are used in the English-Swahili healthcare texts. It establishes if the illustrations are the same in both the ST and TT and what necessitates changes, if any. Forasmuch as Baker (1992) fronts the use of illustrations as a strategy used by translators to overcome limitations of space and ensure conciseness, this objective as conceived in the present study departs from her point of view and instead investigates use of illustrations as a stand-alone aspect in healthcare translation.

1.4 Rationale of the Study

The study is vital due to the crucial role played by the health sector in people's lives. Health communication influences, motivates and informs the public on prevention of diseases and how to generally improve their health. It is, therefore, incumbent upon us to carry out a study so as to help in understanding not only the nature of translation but also strategies employed in the translation of the healthcare texts and thereafter come up with recommendations that may see improved translations going forward. Language does not cure but is crucial in provision of healthcare services. In other words, the sheer importance of the health sector demands that translations done in the sector be looked into from a descriptive-explanatory point of view.

The lack of any study which delves into translation of Swahili healthcare texts in Kenya and East Africa at large makes this study apt in order to fill the existing gap and hopefully serve as a basis for future research. Besides, the studies so far on English-Swahili translation have dwelt on literary studies, as can be seen in Shitemi (1997), Zaja (2011), Hadjivayanis (2011) among others, and little attention has been directed to other domains in spite of the interdisciplinary nature of translation studies.

It is worth noting that most studies done on Swahili translation have anchored their arguments on equivalence and little attention, if any, is directed towards other dynamics such as culture in the translation process. The source text is given more prominence than the target text. Conversely, this study departs from the concept of equivalence and is hitched on descriptive translation studies. It provides an opportunity to understand how translators address both linguistic and cultural problems that manifest in the translation process.

Last but not least, the study is handy for policy makers in the health sector, scholars and students in translation studies, departments of culture and language.

Below is a brief focus on the methods of research used in the study.

1.5 Method of Research

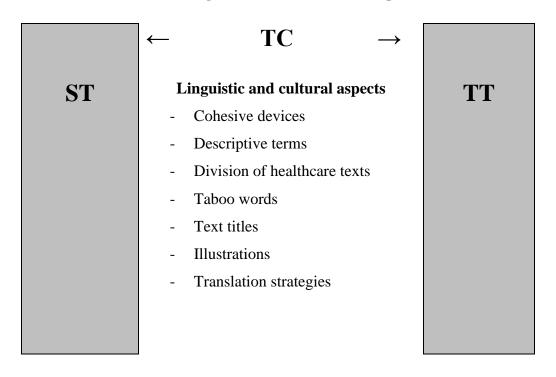
To help in achieving the aims set out in the study and bearing in mind that scholars are gradually shifting their focus to describing translations rather than prescribing how translations ought to be, this study is methodologically situated within Toury's (1995) Descriptive Translation Studies (a detailed discussion in Chapter 3, par. 3.2.1). A corpus of the source text and target text form units of comparison. In tandem with Connor and Moreno (2005), a *Tertium Comparationis* is placed on all textual organisation, from linguistic levels to macro-linguistic levels. Through the juxtaposition of the ST and TT, problems posed in the translation process manifest and norms at play are reconstructed.

The nature of comparative analysis is given more emphasis by Toury (1995, 80) by way of a short reminder:

- (1) Every comparison is *partial* only: it is not really performed on the objects as such, only certain aspects thereof.
- (2) A comparison is also *indirect* in its very essence; it can proceed only by means of some intermediary concepts, which should be relatable to the compared aspect(s) of *both* texts.
- (3) These intermediary concepts should also be relatable to the *theory* in whose terms the comparison would be performed.

The comparison is not done on all objects selected for the study but rather sections which present the researcher with optimum opportunity to reconstruct the source text and identify shifts in the target text. Kruger and Wallmach (1997, 123) aver that *Tertium Comparationis* is the premise upon which comparison of the ST and TT is done both at the macro-level and micro-level. Applied in the present study, the *Tertium Comparationis* constitutes on one part; cohesive devices, descriptive terms and on the other part; taboo words, text titles, division of health texts, translation strategies and illustrations. This is better illustrated in the figure below adopted from Ndlovu (1997, 4):

Figure 1.1: The Tertium Comparationis



ST = Source Text TC = Tertium Comparation is TT = Target Text

Given that translation does not take place in a vacuum, Kruger and Wallmach (1997) equally argue that in comparative analysis, a researcher has to take into account a complex network of relations between the source text and the political, social, cultural, literary and textual norms and on the other hand the conventions of the target text. This is corroborated by Munday (2016, 175) who argued that:

"for Toury, translations first and foremost occupy a position in the social and literary systems of the target culture; they are 'facts of target cultures: on occasion facts of a peculiar status, sometimes even constituting identifiable (sub)-systems of their own'. Their position determines the translation strategies that are employed."

In light of the above, Toury was expounding on Even-Zohar's Polysystem and his earlier works. Toury (2012, in Munday 2016, 175) proposes a three-phase methodology for DTS that incorporates a description of the product. It entails:

- (1) Situate the text within the target culture system, looking at its significance or acceptability.
- (2) Undertake a textual analysis of the ST and the TT in order to identify relationships between corresponding segments in the two texts. Toury calls these segments 'coupled

- pairs.' This leads to the identification of translation shifts, both 'obligatory' and 'non-obligatory'.
- (3) Attempt generalizations about the patterns identified in the two texts, which helps to reconstruct the process of translation for this ST-TT pair.

The above steps are applied to the healthcare texts in order to reconstruct the norms and make predictions on how the translator had to arrive on decisions that informed the strategies employed. Thereafter, generalizations based on the decisions reached by the translator are made. (More details on methodology in chapter 3)

1.6 Corpus

The corpus comprises of healthcare texts in English translated into the Swahili language. The texts on healthcare selected for the study exist in real world context and an effort was made to get all the available texts with their translations to form part of the study.

Below is a table of the selected texts, their titles and publisher. They run close to 240,020 words for both the source and target texts.

Table 1.1: Corpus of the study

Healthcare Text	Title	Publisher
Polio	Vaccinate and protect children under 5 years against polio	Ministry of Health and partners
Measles and Rubella	Vaccination Campaign: Fact sheet	Ministry of Health and partners
Cholera	Stop cholera	Ministry of Health and partners
Hand washing	Wash your hands with soap these critical times	Ministry of Health and partners
HIV/AIDS	Facts and feelings about HIVLife Skills	 MAP International Peace Corps with the Ministry of Health
Pneumonia	Protect your child from pneumonia	Hope LLC and Ministry of Health
Supplements	Iron and folic acid supplements during pregnancy	Ministry of Health and partners
Smoking	Smoker's body	Ministry of Health and partners
Malaria	The Malaria Safe Playbook	John Hopkins and Ministry of Health
Cancer	What You Need To Know About Cancer	American Cancer Society and Ministry of Health

In conclusion, this introductory chapter has highlighted the background to the study, statement of the problem, aims of the study and method of research. It has indicated that the study is anchored on the Descriptive Translation Studies.

1.7 Organisation of the Study

Chapter 1 presents the background to the study, statement of the problem, aim and objectives of the research, rationale of the study, method of research and corpus of the study.

Chapter 2 focuses on the literature review by: contextualising the research, looking at the key issues which underlie it, pointing out at the main points of view and controversies, highlighting the major findings in the area and identifying the gap in the literature to be filled.

Chapter 3 examines the research methodology adopted in the study by giving details on the theoretical and analytical framework.

Chapter 4 delves into the background of the source and target systems by presenting a broader cultural and linguistic context of the English and Swahili healthcare texts.

Chapter 5 carries out a comparative analysis of the source and target texts in the study and discusses the findings thereon.

Chapter 6 draws the conclusion of the study. It revisits the aim and objectives of the study, gives the overview of the chapters, contributions of the present study, recommendations, limitations of the study, and suggestions for further research.

Bearing in mind that there are many scholars who have done research that greatly informs the current study, the next chapter reviews literature that not only contextualises the current study but also highlights major findings in the area.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The previous chapter highlighted the background of the study, statement of the problem, aim and objectives of the study and method of research. It also indicated that the study is anchored on the Descriptive Translation Studies. This chapter reviews literature that contextualises the current study and highlights major findings in the area. It also identifies the gap to be filled by the study.

Translation studies has not been vibrant in Kenya and East Africa as a whole and this is confirmed by Mazrui (2016) who pointed out that East Africa continues to show a certain barrenness in the study of translation. This assertion can be looked at either from the point of view that there is total failure to recognise translation as a profession or its recognition is lacklustre, if at all. In fact, it is not unique to find that those who offer translation services consider it as a 'side job' and this is partly due to the low esteem accorded to translation and the meagre income it generates. It therefore follows that East Africa, being the region where the Swahili language is dominant and it being one of the languages under study, typically has limited literature to be reviewed. This lack of vibrancy is confirmed by the research so far done in the field. That notwithstanding, this chapter thematically reviews, though there is overlapping of some of the works cited, existing literature in the following order: studies done on equivalence and equivalent effect; work done on healthcare translation; studies that inform the current study on language and culture and translation works in East Africa and Africa as a whole focusing on culture and methodology among others.

The following section focuses on equivalence-based studies and how they applied the concept on translation.

2.2 Studies on Equivalence

Though the current study is not equivalence-based, it reviews works done on equivalence so as to understand where translation studies as a field is coming from and where it is headed. Without doubt, equivalence has vibrantly been an area of concern in translation studies for a number of years and scholars who have widely delved into the concept include: Jakobson (1959) on intralingual, interlingual and semiotic kinds of translation; Nida (1964) on formal and dynamic equivalence; Catford (1965) on the concept of types and shifts of translation; House (1977) on semantic and pragmatic equivalence; Koller (1979) on interpretation of

equivalence based on different contexts; Newmark (1981) on semantic and communicative translation; Baker (1992) on word, phrase, grammar, text and pragmatic levels of equivalence; Pym (2007) on natural and directional equivalence among others whose studies have been anchored on equivalence or equivalent effect. In studies that are anchored on equivalence, the ST is given prominence over the TT though various scholars approach it differently with some adopting more accommodative and flexible approaches and others taking rigid ones. It is, however, worthy of note that DTS cannot purport to entirely dismiss the concept of translation equivalence because for texts to be regarded as source and target, they must be or assumed to be equivalent. This is appreciated by Toury (1995) who concedes that what ought to be laid bare is how the said equivalence was literally realised. In other words, DTS accounts for the circumstances under which decisions are made to translate a given text in a given way unlike other equivalence-based studies that prescribe how a translation process should proceed by labelling translations as either right or wrong.

In a study that shows how dynamic equivalence comes into play, Shitemi (1997) looked at fidelity in classical Swahili poetry and their English translations. She found out that classical Swahili poetry have gone through a series of transformations and hence the variant representations in publications by different authors. The study explored the process of collection, documentation and subsequent translations of works under study whereby it was shown that the element of fidelity, especially in the case of initially orally transmitted classical poetic works goes beyond a mere comparison of the original and target audiences. After a comparative analysis, fidelity in translation was seen to take many forms hence the individuality and relativity of each translation text. Shitemi (1997) recommended the necessity to explore the goals and competencies of each translator before analysing the element of fidelity in translation. They include linguistic, thematic, stylistic, referential goals and competencies. It is advocated in the study that there is need to go beyond considering translation texts as mere images of the original texts thus branding them as either good or bad representations. It also adds that analysis of texts should be viewed within the norms of any other literary analysis. While the intent of the present study does not entail looking at fidelity of translated texts, this study is informed by the finding by Shitemi (1997) on the variance of representations due to transformations over time, points to the concept of norms and how they influence decisions made by translators. The findings indicate that norms are dynamic and keep mutating with time. Equally, Levefere (1992) and Hermans (1999) actually posit that constraints are not

absolute but conditioning factors that translators can defy and hence the difficulty of finding true representations of books translated by different authors.

Odero (2017) did a paper on the problems of finding linguistic equivalence when translating and interpreting for special purposes. He focused on translation from English into Swahili and English into French. He argues that with the increased global innovations and observed changes in phenomena, translators ought to adjust accordingly so as to render their messages in the translation process. He based the study on Newmark (1981) communicative and semantic translation. The study noted that there was lack of sufficient terminology to name concepts. Strategies identified to solve the problems of linguistic equivalence include: borrowing, loan/calque, word-for-word translation, transposition, modulation and adaptation. He concludes that finding linguistic equivalence calls for different approaches to translation and interpretation. However, the findings of his study on the lack of sufficient terminology to name concepts is contrary to Kruger and Wallmach (1999) who argue that the necessary terminology is not insufficient in African languages. They further posit that the problem lies in the attitude and that it is possible to use cultural substitution, general terms, indigenised words and paraphrasing as strategies to translate foreign concepts into African languages. By and large, the two studies are significant to the current study since they touch on linguistic aspects and strategies employed by translators. Equally, though the current study is descriptive and does not subscribe to equivalence, Odero's (2017) work helps us to understand how linguistic equivalence is achieved since translating linguistic aspects forms part of our study. It also enlightens on how innovation and the ever-changing world pose constraints to translators.

Focusing on translation and cultural equivalence, Al-Masri (2009) looked into translation losses in Arabic literary texts. The aim of the article was to look into the translation strategies which resulted into cultural losses and to emphasise the crucial role of the translator as a cultural insider. The study was based on the etic-emic and markedness theory as the theoretical framework. A collection of Arabic short stories formed the corpus whereby analysis of figurative language, metaphors, idiomatic expressions and proverbs was done. The study argues that figurative language and cultural terms are unfamiliar and so are marked to the target reader on the grounds of unmarked and should be viewed from the perspective of a cultural insider. The translation of the source text was found to be communicatively successful even though it failed to represent the culture-bound and emotionally charged words which represent the implicit level of the source text. It is also revealed in the study that cultural losses were as a result of the strategies of literal translation, adaptation, deletion and over familiarity. The

cultural losses identified were classified into explicit losses, implicit losses, modified losses and complete losses. The study concludes by indicating that a translator has to assume the role of a cultural insider in order to render a culturally more faithful translation. Even though the current study does not focus on cultural equivalence but rather description of cultural aspects in healthcare texts, the study by Al-Masri (2009) informs the study from the perspective of strategies used and the role of the translator as a mediator between cultures.

The next section highlights what some scholars have so far done on healthcare translation focusing on cultural taboos, strategies of translating healthcare information and accessibility of healthcare texts among others.

2.3 Studies on Healthcare Translation

Healthcare communication is key in any society as it creates awareness among people. However, in situations where the information to be disseminated is not in the language of the target audience, translation is done. It is therefore imperative to review what has so far been done in the healthcare domain and relate it with the present study.

Musa (2017) did an analysis of translation of health information by journalists from English into Swahili with a view to identify challenges that manifest in the translation process. Her study was anchored on Nida's (1964) theory of equivalence. She identified factors that can help overcome the challenges of translating health information by reporters. Borrowing, omission and addition were identified as the three most common procedures used by reporters in an effort to find the equivalence of health terminologies. She observes that equivalence remains a crucial aspect in the translation of medical terminologies. Even though Musa's (2017) study is based on equivalence, it informs the current study from the perspective of health information translation from English into Swahili and how strategies are used to overcome challenges encountered in the translation process though the current study does so from the DTS point of view.

Close to healthcare translation is Munane (2014) who conducted a study on cultural taboos as a factor in interpretation in the medical field. His study adopted the Skopos Theory to show what is needed to be done by interpreters in effectively communicating culturally bound taboo words between medical practitioners and patients. He showed the importance of medical interpreters since miscommunication in hospitals was evident by both the trained and untrained interpreters. Results indicated that the availability of medical interpreters in the medical field positively impacts on patient visits and helps them understand various culturally bound taboo

words as they are interpreted by either paraphrasing or using euphemisms in order to avoid the stigma associated with some of the diseases. Munane's (2014) study though done from the interpretation perspective, is crucial in that it touches on how culture can impede communication in the medical field and goes further to identify strategies that interpreters resort to in order not to go against the patients' norms.

Beyond East Africa, there are scholars who have done studies which have immensely informed the current study. To begin with, Ndhlovu (2012) conducted a corpus-based study on the strategies used by Ndebele translators in Zimbabwe in translating HIV/AIDS texts. She used DTS, Cultural Studies and Corpus-Based Translation studies as theoretical approaches in the study. Ndhlovu (2012) found that when translating specialised terms, Ndebele translators used strategies such as general or neutral word, cultural substitution, paraphrasing and omission. She noted that there was misuse of the omission strategy that led to some valuable information not reaching the target audience. She observed that there was use of pure loan words, pure loan words preceded by an explanation and indigenised loan words were the strategies that contributed to term creation. Semantic shift, compounding, coinage and paraphrasing were the most resorted to strategies in Ndebele. She concludes her study by recommending for the establishment of translation as an academic discipline and profession in Zimbabwe to elevate the quality of translation. Even though Ndhlovu's (2012) study is corpus-based and focuses on English-Ndebele translation, it is crucial to the current study in that it looks at the HIV/AIDS texts which fall in the healthcare domain just like the present study. The current study is wider in scope since it is focusing on healthcare texts on a number of genres.

Still touching on healthcare translation, Ndlovu (2009) did a corpus-based study on the accessibility of translated Zulu health texts. The study investigated translation strategies. Through his study, he shed light on the confrontations faced by health texts' translators in an endeavour which included geographical, linguistic and cultural constraints in trying to make the source texts accessible to the readers they were translated for. The constraints he singled out were linguistic, geographical and cultural. The study identified use of loan words, paraphrasing and cultural terms as strategies employed to translate Zulu health texts though he hastens to add that resorting to English loan words as a strategy impedes understanding due to the unfamiliarity with the English language by rural readers. On linguistic constraints, the study recommends the use of simplification and explication to solve the constraints that manifest in the process of translation. The use of explicit expressions by Zulu translators was not well received by the readers. The study recommended that having the reader in mind and intention

of the translation be primary considerations whenever translations are done into Zulu. The options of reaching Zulu target readers by South Africa health care organisations identified by the study include: direct translation, adaptation, an original Zulu text and non-text (visual/audio) media. This study by Ndlovu (2009) is significant to the current study, though done in a South African setting, since it delves into health texts translation notwithstanding that is done from the accessibility perspective. It also investigated strategies and that forms part of the current study. One other very crucial aspect that informs the current study is the use of illustrations in health care texts. The current study has the use of illustrations as one of the *tertium comparationis*.

Aware that there are a number of dynamics that inform the translation process and appreciating that translation is a language activity, the following section sheds light on studies done on language and culture.

2.4 Studies on Language and Culture

Language and culture are joined at the hip in communication and where there are differences between them; translation bridges the gap and enhances communication. After all, "translation is a kind of activity which inevitably involves at least two languages and two cultural traditions," (Toury, 1978, 200). Given that there are definite differences between cultures, the translator navigates a web of constraints in order to come up with a translation which serves its intended purpose. This is corroborated by Nida (1964, 130) who argued that "the problems may vary in scope depending on the cultural and linguistic gap between the two or more languages concerned." Hereunder, studies by some scholars demonstrate how the two are intertwined.

Mutwiri (2013) did a study on literary and untranslational complications in the translation of *The Government Inspector* by Nikolai Gogol from English into Swahili. The aim of the study was to investigate how language and culture influence the translation of the play, find out how terminology development affects its translation, find out how the target audience affects the translation from English into Swahili and examine how untranslatability affects the translation from English into Swahili. The study found out that there were language and cultural elements that could not be adequately captured. Whilst Mutwiri's (2013) study focused on a literary work, it is crucial to the current study as it sheds light on the influence of language and culture on translation based on the two languages on focus.

Focusing on challenges encountered by translators when translating Swahili plays as ST into English as TT, Muruga (2011) used *Maua Kwenye Jua la Asubuhi* by Kithaka Wa Mberia and *Kinjeketile* by Ebrahim Hussein as case studies. The study was anchored on Communicative Translation and his objective was to investigate the challenges encountered when translating proverbs, puns and cultural terminology that are culturally bound from Swahili into English. He made use of comparative analysis to test the communicative translation theory in determining the translatability and untranslatability of culture bound elements. The study concluded that proverbs which are regional are not translatable as they are created in the specific cultural region and puns generally belonged to specific culture and language and are not translatable due to differences in language codes. It was also found that cultural bound terms can be borrowed into target culture in the process enriching it. Given that the study had the English-Swahili language pair as its focus; it informs the current study especially on translation of cultural terms.

Zaja (2011) in what he calls a departure from literary translation in Swahili that was biased towards comparisons that were systematically anchored on minimalist classical linguistic formalism, conducted a research which views translation as an engagement that explores cultural interaction besides it being linguistic. While using examples from selected texts in Swahili, he deems it prudent to look at literary translation as a process of mediation between cultures, a means of perceiving words both in their abstract senses and in contexts of use. The study proposes a theoretical model based on culture, context, temporality and pedagogy and the interrelationship they exhibit in theorising and explications of literary translation. Zaja's (2011) study is a paradigm shift from other studies that gave prominence to equivalence and ignored other factors such as culture and context that largely inform the translation process of any piece of work. It advocates for giving relevance to any given translation to its specific time, domestic audience, environment and historical space. He asserts the need for theoretical reorientation in which literary translation theorists and practitioners understand literary translation not just as a sheer linguistic exchange but rather as a cultural interaction and interlingual exchange that participates in both text production and discursive formation. This study is significant to the current one due to its advocacy for viewing translation as a cultural interaction and giving priority to context and audience in the translation process.

So close to the current study though focusing on selected Swahili translated prose is Hadjivayanis (2011) on norms of Swahili translations. She selected two canonical Swahili translations titled *Alfu Lela Ulela* (The Thousand and One Nights) and *Mabepari wa Venisi*

(The Merchant of Venice) in conjunction with *Msako* (The Search). She also added a number of Swahili children literature for comparative purposes. The study considered translation to be descriptive and target oriented anchored on the polysystem theory. The study sets forth an argument that there are a number of Swahili translation norms operating within the polysystem that have been influenced by a number of active agents including patronage and interference which led to translation occupying a central position within the Swahili polysystem for many decades. In the study, translation strategies such as appropriation, omission and use of unmistakable form of ideological and cultural manipulation have become the norm. Equally, there has been extensive use of situational equivalence whereby what is Swahili substitutes the foreign contexts though she hastens to add that this trend is being redefined. According to the study, some of the strategies have been regarded and accepted as part of the entire Swahili translation system, their ambiguous status notwithstanding. The study concludes that translation norms which range from the ready acceptance of indirect translations being embraced as Swahili literature to the practise of the translator's self-commissioning. She broadly categorises Swahili norms into those that domesticate and foreignise translation literature. The current study has some semblance with Hadjivayanis's (2011) study to the extent that it looks at norms of selected Swahili translated prose using the polysystem theory whereas we focus on translated Swahili healthcare texts.

Ndlovu (1997) investigated translation strategies used in the translation of Alan Paton's (1966) novel, *Cry, the Beloved Country* into Zulu, *Lafa Elihle Kakhulu* (1983). Specific focus was on the transfer of proper names, terms of address, idiomatic expressions, figurative speech and aspects of contemporary life as aspects of culture. He anchored the study within the framework of descriptive translation research whereby one source text was compared with its translation. Ndlovu (1997) used *Tertium Comparationis* as a basis for comparative analysis. He identified transference, indigenisation, cultural substitution, functional equivalent, paraphrase, translation couplet, transposition, omission and addition as strategies used to transfer aspects of culture in Paton's novel. It was noted that in employing the above strategies, certain microtextual shifts resulted in macrotextual modifications of the translated novel as a whole. The study concludes that there was a combination of both communicative and semantic translation methods in an attempt to accommodate the Zulu reader. Though based on a literary work, Ndlovu's (1997) study informs the current study from the culture and strategies of translating point of view. It was also based on descriptive translation studies.

Dukmak (2012) conducted a study on the treatment of cultural items in the translation of children's literature using the case of Harry Potter by J.K Rowling. She located her study within the framework of DTS. Three books from the Harry Potter series: Harry Potter and the Philosopher's Son, Harry Potter and Goblet of Fire and Harry Potter and the Half-Blood *Prince* were covered in the analysis and their published Arabic translations. The books were translated into Arabic by different translators and were analysed with the aim of uncovering the translation norms of each translator. The techniques which were identified as frequently used for the treatment of cultural references generally included standardisation, ideological adaptation, deletion, explication and naturalisation and compensation and cultural transplantation. It was concluded that there is no clear coordination among the three translators notwithstanding the fact that they were commissioned by the same publisher. The translators of Philosopher's Son and Goblet Fire fluctuated between adequacy and acceptability with Goblet Fire translator undertaking a distorted unstated abridgement of the original. The translator of Half-Blood Prince had the strongest norms among all with a clear tendency towards adequacy. Dukman's (2012) study is significant as it informs the current study on cultural aspects of translation and on how translation is a dynamic process that each translator approaches uniquely notwithstanding patronage. It also used DTS as its theoretical framework just as the present one.

The following section delves into translation issues in East Africa as the home of the Swahili language and Africa as a whole in order to show what different scholars feel about the state of translation in the region. The section also reviews the translation methodology brought forth for the comparison of source and target language texts.

2.5 Translation in East Africa and Africa

Translation works in East Africa, though not in large numbers, are mostly done from English into Swahili and vice versa. The dominance of the English-Swahili pair in translations is due to the fact that Swahili is the lingua franca of the East African states. English earned its position by virtue of the fact that it was the language of the colonial powers and it has since been adopted as an official language in the East African countries. It is against this background that a few studies are selected in this section to show the state of translations in East Africa. It should, however, be appreciated that there have been translations into and from other indigenous languages in East Africa and Africa as a whole such as Arabic, Zulu, Yoruba, Amharic among others.

Serena (2013) in an article in Swahili Forum titled 'Of Presences / Absences, Identity and Power: The Ideological Role of Translation into Swahili during Pre-Colonial Period and Early Colonial Times' investigates translation activities in Swahili literature during the two periods. The article shows that the Swahili literature and culture during the pre-colonial period and early colonial times were both a constrained and a constraining activity affecting and affected by political, cultural and ideological environment of the receiving culture. It goes further to indicate that choosing to translate or otherwise from a given language and culture was closely related to practices of accumulation of prestige and power and to practises of identity construction. The paper concludes that translators writing out of their social and cultural background made use of translation to accumulate identities. It also points out that translations were used to gain or construct prestige. It is noted that translations are not devoid of discourses such as power, politics, economics and others that are inevitably echoed either in a veiled or unveiled manner in translations. The current study benefits from this article as it approaches the translation process in a holistic way whereby the factors listed here above are also taken into consideration in the description of translations.

Equally on Swahili Forum, Traore (2013) on 'Translating Culture: Literary Translations into Swahili by East African Translators' discusses the negotiation of meaning with foreign texts by Swahili language and literature. The article selected four prose works: Shamba la Wanyama, Fortunatus Kawegere (1967 translation of Orwell's Animal Farm, 1945); Shujaa Okonkwo by Clement Ndulute (1973, translation of Achebe's Things Fall Apart, 1958); Mzee wa Bahari by Cyprian Tirumanywa (1980, translation of Hemingway's The Old Man and the Sea, 1952) and Barua Ndefu kama Hii by Clement Maganga (1994, a translation of Ba's Une si longue lettre, 1979). The article looks at different strategies used by East African translators who were translating foreign texts into Swahili. The article concludes that notwithstanding the sociological similarities of the authors, a variety of translating strategies emerge ranging from domestication to foreignising. The current study too looks at translating culture albeit in healthcare texts and definitely finds Traore's paper significant especially on translation strategies.

Focusing on Swahili political speeches in Kenya from a discourse analysis point of view, Habwe (1999) sought to explore the problems of cohesion, coherence and pragmatic meaning in the political speeches. He eclectically used Halliday and Hasan's (1976) cohesion approach, Brown and Yule's (1983) Topic Framework approach and Grice's (1975) implicature approach as the theoretical frameworks. The study used data from political rallies to achieve the

objectives. It was the study's finding that political speeches in Kenya exhibit a high sense of topic coherence and signalling a speaker's move from one paratone to another. On cohesion, he concluded that lexical cohesion and reference cohesion were the most prevalent in Swahili political speeches. Habwe's (199) study greatly informs this study given that it focuses on Swahili and Halliday and Hasan (1976) cohesive devices that form part of the *Tertium Comparationis* in the present study.

A recently published book by Mazrui (2016) titled Cultural Politics of Translation: East Africa in a Global Context gives an in-depth investigation of the cultural factors that influence translation in the East African region. It gives fundamental deconstruction of a number of texts that provide the link that exists between the process of translation and socio-political forces. The book advances the argument that translation is an intricate intercourse that is at play between a given culture, history and politics and to take it purely as a linguistic process is fallacious. It particularly traces the translation history in East Africa from the pre-colonial to colonial and to post-colonial periods. He uses examples from texts drawn from different domains such as religious, political, legal, literary and journalistic to argue his case by grounding them in their distinctive socio-political and historical contexts. As a result, he highlights the crucial role played by context in the translation process and unpacks the intricate nexus between not only globalised but also localised forces that that give the translated texts unique identities. He further argues that Swahili translators actually mould the texts to fit the Swahili cultural universe, constantly breathing Swahili life and culture into the textual fabric of the stories. It is worth mentioning here that the moulding is informed by the culture of the Swahili and the norms at play during the act of translation.

The book also provides comprehensive path on how Arabic has influenced the Swahili translations with many Swahili words being borrowings from Arabic. For instance, Swahili has borrowed from Arabic words like *safi* (clean), *shukrani* (thank you), *habari* (news), *nusu* (half) among others. What is evident is that Mazrui's book is a crucial step in the world of translation not only in East Africa but beyond the borders. As would be expected, this book has not been criticism-free. An article in the *Daily Nation* of 6th January, 2017 heavily criticised the book for its claim that East Africa continues to exhibit a certain barrenness in the field of translation as lacking in fact. It argued that Mazrui (2016) intentionally overlooked works by Nairobibased translation theorists such as Zaja (2011), Okombo (1994) among others. It further chided Mazrui (2016) for the condescending manner in which he dealt with women critics in the translation field by not engaging them. A case in point is Shitemi (1997) whom he gives a

peripheral mention in his book and no meaningful engagement. The *Daily Nation* article ends by opining that the book was meant for an American audience. The criticism on ignoring some East Africa theorists, in my opinion, is warranted but I disagree with the assertion that the book was meant for an American audience. The current study finds this book resourceful given that it not only delves into Swahili translations in East Africa but also advocates for translation to be considered as a process informed by a myriad of factors.

Kruger and Wallmach (1997) in a journal article present a synthesis of analytical and theoretical research frameworks meant for researchers in South Africa. They focus on the description of STs together with their translations and the aim of the paper was to address a lacuna in the conventional research methods in the social sciences or the humanities when applied to translation studies that require an interdisciplinary approach to do a comparative analysis. First, the article outlines how one can find the perspective to pursue research in translation studies and underscores the importance of defining a research problem not just as the base but also as a principle that guides a research process. Second, they discuss the significance of background to a translation methodology whereby pertinent questions on data and data collection, theoretical and analytical framework of approaching data are addressed by the researcher. The article also appreciates the evolution of translation as a discipline from the prescriptive theories that laid emphasis on equivalence to the now descriptive oriented theories. Third, Kruger and Wallmach (1997) present seven options for comparative analysis and choosing a corpus. Each option is discussed and a rationale given for choosing any one of them. Fourth, extraction of preliminary information about the texts is discussed and how it leads to a hypothesis for analytically carrying out comparison of texts on both macro-textual and microtextual levels. Fifth, a method for carrying out a comparative analysis of source text and target text is discussed and how one compares texts. It is here that *Tertium Comparationis* is discussed and how it forms the basis of comparative analysis. They also discuss the importance of considering a myriad of other factors that exist between the ST and TT. The journal article provides a comprehensive methodology that researchers approaching their studies from a descriptive perspective can use. Though based in South Africa, the work is relevant to scholars beyond South Africa and the current study finds it relevant particularly on the methodology to employ. In fact, it forms the analytical framework for the present study.

A report prepared by Kelly et al (2012) on behalf of *Translators without Borders* titled *The Need for Translation in Africa* sheds light on the dire need for translation in the African continent. It was done in form of a survey and noted that disparities in information inequality

can be adequately addressed through translation. The report captured how Africa is extremely multilingual which translates into many people being involved in bridging the language gaps by translating information. The survey found that Afrikaans, Swahili and Arabic were the most common mother tongues. The most popular language pairs were in English into and out of French, Afrikaans, Swahili, Arabic, Zulu, Sesotho, Xhosa, Yoruba and Amharic. Based on the foregoing, English was identified as the 'base language'. One aspect that formed part of the survey and is so crucial to this study is the use of translation to support health-related information needs in Africa. It was found out that African language speakers preferred to receive health-related texts in a combination of written and spoken form and that greater access to information in a given people's own language would improve the overall quality of life including the collective health of African countries. In summary, the most significant findings of survey included: the education level of the African language translators is not in doubt since it is ranked highly, African translators face some barriers that are truly unique, translation can address information disparities in Africa, translators are personally affected by the lack of information, the need for spoken language is an undeniable reality and translation tools and peer access are of critical importance. In addition to the significance highlighted above to the current study, this report is crucial since it: points out the need for translation in Africa where the current study is based; highlights the position of Swahili in the translation arena and most importantly shows the importance of translators to have information as regards to translation. The current study describes the translation of healthcare texts in Swahili and helps to bridge the gap of lack of and/or limited information in this domain.

2.6 Summary

This chapter has put the current study in context by reviewing what has already been done on equivalence, translation in healthcare, translation in East Africa and Africa and studies on culture and language. Based on the foregoing reviewed literature, it is apparent that a study focusing on translation of healthcare texts from a linguistic and cultural perspective is long overdue because: no major study has yet been done on the translation of healthcare texts; save for the one work reviewed based in Zimbabwe, the DTS approach has not been applied in the healthcare texts especially on the English-Swahili language pair from a descriptive perspective focusing on the linguistic and cultural aspects. In addition, this study delves into the translation of healthcare texts by giving particular attention to illustrations as a stand-alone aspect unlike in other studies whereby it is given focus from strategy point of view. Undoubtedly, the current study applies an existing perspective to a new situation that needs to be understood and

theoretically add knowledge to the translation studies field. Consequently, the bearing of the current study cannot be overemphasised given the lacuna it fills.

The next chapter discusses the research methodology and theoretical framework for the study.

CHAPTER 3

THEORETICAL, ANALYTICAL FRAMEWORK AND RESEARCH PROCEDURES

3.1 Introduction

The preceding chapter reviewed literature and contextualised the present study that comparatively investigates translated Swahili healthcare texts and their English version counterparts anchored on DTS approach as propagated by Toury (1995). Texts functioning as translations in their receiving culture are automatically accepted by the DTS - a functional and target oriented model. DTS also places norms, time and culture at the centre of translations since they govern how the process proceeds. DTS is relevant for this study due to: its provision for practical analysis of texts in order to decipher the norms and constraints at play on the selected texts at a given culture and historical moment; its non-discrimination of texts to be studied in that all types of texts qualify to be examined under DTS in spite of the dominance of literary translation texts and fallacious assumption that other texts do not qualify - healthcare texts fit the bill to be studied; and its focus on the target culture and the role played by translations unlike the earlier approaches that gave prominence to the source text; and its shyness of purporting to prescribe how translations ought to be done. DTS thence provides a perfect platform for a descriptive study such as the present one. It is, therefore, on the basis of the foregoing that I gathered the Swahili and English healthcare texts to: identify, describe and analyse linguistic and cultural aspects in the texts; identify, describe, and analyse translation strategies used in the texts; and describe and analyse the use of illustrations in the texts.

This chapter is three-pronged in that it presents the theoretical, analytical framework and research procedures applied in this research. Thusly, this chapter, to begin with, dwells on DTS as has been highlighted above and discusses the concept of norms under it as discussed by not only Toury (1995) but also Chesterman (1997) who presents an argument of norms exerting prescriptive pressure. Chesterman came up with product or expectancy norms and process or professional norms. In this case, for the former, it is the expectation of the readers of a given translation who determine the image taken by it whereas the latter regulate the translation process itself (Chesterman 1997, 64-67). Attention is also accorded to translation universals and how they impact on translations and Venuti's (1995) foreignisation and domestication strategies.

Next, this chapter puts into perspective the framework used in carrying out the comparative analysis of the STs and TTs in this study. The present study has adopted the Kruger and

Wallmach (1997) model, that makes use of *Tertium Comparationis*, which takes into account the intricate web of relationships that manifest in the source and target texts.

Finally, the research procedures adopted in the study are presented in detail so as to enable replicability, if need be. It is pointed out that the study is a qualitative research. Equally, the ethical considerations are given attention in this section.

The next section discusses the theoretical framework adopted in the study.

3.2 Theoretical Framework

This section presents the DTS approach and puts it into perspective in relation to the current study. I will, however, briefly provide a background on what preceded DTS before deeply delving into it.

With the prescriptive models becoming unpopular, polysystem theory was born. It shifted the focus from the emphasis on equivalence in translation to a target oriented one that takes into consideration a myriad of factors that shape translations. According to Shuttleworth and Cowie (1997 in Munday 2001,109), polysystem is "a theory that accounts for the behaviour and evolution of literary systems. The approach is seen as a heterogeneous, hierarchised conglomerate of systems which interact to bring about ongoing, dynamic process of evolution within the polysystem as a whole." The hierarchy mentioned here was expounded by Munday (2001) to mean that if at the top of the strata the type is an innovative type then the bottom would be dominated by a conservative one. The mention that the process evolves indicates that the innovative and conservative types are constantly changing and competing (ibid: 109). Consequently, translated literature occupies non-permanent position. Even-Zohar (2005, 40) redefines polysystem as "a multiple system, a system of various systems which intersect with each other and partly overlap whose members are interdependent". He also adds that these systems are hierarchised within the polysystem and not equal. Munday (2016) argues that the interaction and positioning of these systems occurs in a dynamic hierarchy, changing according to the historical moment. Translated literature is ever mutating and the position it occupies in the polysystem can either be a primary or secondary one.

Polysystem theory was a major improvement from the prescriptive theorists since it gave prominence to culture and other factors in the 'system'. Kruger (2000, 34-35) notes "that polysystem appears to have been beneficial to the development of translation studies as a discipline by expanding the theoretical boundaries of traditional translation theory and

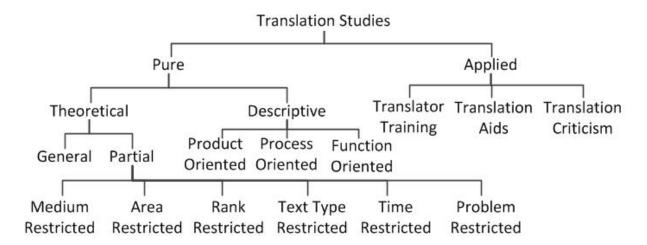
embedding translated literature in a larger cultural context." The selection process of texts for translation is greatly informed by the norms prevalent in a given society. Polysystem theory was used as a framework by Toury (1995) to develop a general theory of translation. According to him, in the literary and social systems, translations have positions and that they are representatives of target cultures' facts. The place of translations in the systems informs the strategies employed by the translators. Toury's (1995) approach is discussed in detail in the subsequent section.

3.2.1 Descriptive Translation Studies

Cognisant that this study is descriptive in nature, it is imperative to situate it within the model of DTS as was propagated by Toury (1995). The work of Gideon Toury can be traced back to the 1972 Copenhagen congress where James S Holmes came up with the idea of '*The Name and Nature of Translation Studies*'. Later Holmes (1988) in a presentation, visualised it as a complete scientific discipline with a possibility of applying wholesomely to the "complex of problems clustered round the phenomenon of translating and translations." In fact, Snell-Hornby (2006, 48) described the introduction of the polysystem concept as one of the most powerful and coherent descriptions offered as yet for translation practitioners. This can be said to be the time when the seed of Translation Studies was sown. According to Hermans (1985), the aim was to set up a new model to be used for studying literary translation based on not only a comprehensive theory but also ongoing research. It should not be lost, however, that most scholars considered Holmes' ideas then as quite far-fetched and in fact Toury (1995) made use of the term 'purport' in reference to his use of the term 'Translation Studies' though he adds that Holmes (1988) had very sound reasons to call it so. That notwithstanding, Translation Studies is now an established branch.

Holmes (1988) divided Translation studies into 'pure' and 'applied' as two main branches as shown in the figure below which was adopted from Toury (1995).

Figure 3.1: Holmes' basic 'map' of Translation Studies



The division as was noted by Toury (1995), took after some bordering disciplines such as Linguistics. The 'applied' branch deals with areas such as translator training, translation aids, translation policy and translation criticism. On the other hand, the 'pure' branch aims to describe particular phenomena of translating and translations, establish general principles by means of which these can be explained and predicted (Holmes 1988, 77-78).

Holmes map has been re-illustrated by scholars such as Toury (1995) and Even-Zohar (1978) by expanding on target oriented DTS. They have advanced an argument that it is an empirical science because it describes, explains and predicts the translation phenomena. Equally, polysystem theory which was originally brought forward by Even-Zohar (1978) has since been developed by Toury (1995) to indicate that translated literature largely depends on literary, cultural and historical elements as its operating context.

The current study is located in the 'pure' branch as it describes the translation of healthcare texts into Swahili and uses the general principles to explain and make predictions on how the translator had to arrive at decisions that informed the strategy of translation. From the foregoing, it can be seen that Holmes is the father of describing translations as they are rather than giving prescriptions on how translations ought to be done as it predominantly used to be the case. Deductively, descriptive translation studies can be said to be empirical because it gives focus to one individual experience in the processing and observing questions. Toury (1995) cites Carl Hempel:

"empirical science has two major objectives: to describe particular phenomena in the world of our experience and to establish general principles by means of which they can be explained and predicted. The explanatory and predictive principles of a scientific discipline are stated in its hypothetical generalisations and its theories: they characterise general patterns or regularities to which the individual phenomena conform and by virtue of which their occurrence can be systemically anticipated." (1952 in Toury 1995, 9)

It can be noted from Hempel's view that DTS is so close to empiricism given that it also describes based on one's world experience and establishes grounds through which predictions and explanations can be done. Clearly, the objectives of empiricism are the very ones covered by the 'pure' branch of DTS. Empirical studies give a description of what is actually happening based on direct observation which is what this study does to Swahili healthcare translated texts. What can also be noted is that DTS looks at translations as a cultural phenomenon that is in existence in a context which is culturally complicated (Rosa, 2010). In the present study, the culture can be said to be intricately complicated because Swahili is both an official and national language in Kenya and should be noted that Kenya is made up of more than 43 different tribes with varying cultures. As a result, translated Swahili texts in Kenya are aimed at readers who are deemed to share the 'Kenyan culture', and the study sheds light on how the translator navigates the translation problems that exhibit themselves and the solutions applied thereof.

DTS is split into three branches – function-oriented study, process-oriented study and product-oriented study that delimit autonomous studies of their own. That notwithstanding, Toury (1995) warns that autonomy of the approaches can lead to reduction of individual studies into mere descriptions and goes further to that state a translator should not assume that the three branches are not just merely related but are rather hard to separate. Thus, one should look into the interdependencies between the branches in an attempt to unravel the translational phenomenon.

Product-oriented study concerns itself with describing translations that already exist (Holmes 2000, 176). The focus can be on the describing or analysing single target text and source text or comparative one that focuses on a number of target texts that are from one source text (Munday 2008, 10). This comparison can be synchronic or diachronic.

Function-oriented study is taken by Holmes (2000, 177) to be a study of contexts rather than texts. It is more concerned with describing functions of translations in their recipient culture. It answers the questions of the when and where of the translated texts and how they influenced the translation process (Munday 2008,11).

Process-oriented study concerns itself with 'the process or act of translation itself' (Holmes 2000,177). It actually tries to read what might have gone through the mind of the translator while translating. In other words, the focal point is on the psychology of the translator.

As was aforementioned, the study makes use of the three approaches, due to their interdependency, in order to describe the linguistic and cultural aspects, the strategies and norms which come into play in the translation of Swahili health texts. In all these, the translator crucially plays the role of a negotiator both from a social and historical point of view and whatever decisions made as indicated by shifts in translated texts provide clues on the translational norms at play.

I consider it important to point out at this stage that DTS presents the notion of assumed translation which according to Rosa (2010, 12) posits three postulates: the existence of a source text; the existence of a previous transfer of some source text features to the target text; and, as a result of this process, the existence of a set of relations associating the translated text with its source text. Consequently, it does not matter if the name of a translator is missing in a text provided the text meets the three postulates.

Having noted the centrality of norms in descriptive studies and their prominence in the current research, the next sub-section discusses the concept of norms from various scholars' points of view.

3.2.1.1 Translation Norms

The ultimate aim of any translation is communication which can be said to be more less a socialisation tool. It is therefore expected that there are some ethos that guide the socialisation process and the ethos have to be shared by members of a given group. The values are commonly referred to as norms in the translation process. Levy 1969 and Even-zohar 1971 (in Brownlie, 1999, 1) were the first to introduce norms to translation and this was later advanced by Toury (1995). It is argued that the environment in the target culture plays a fundamental role in the function of translational norms (Brownile 1999, 2). It is worth of mention at this point that in as far as norms prescribe how translations ought to be done in a given setting, they are objects of study in descriptive translation studies.

Culture in translations manifests itself through norms, as was espoused by Toury (1995), which provide a researcher with a broader perspective of looking at translations as opposed to isolated and arbitrarily selected examples. In this respect, texts are purposively selected and analysed

in order to study translational behaviour. As a consequence, patterns of translational behaviour that are recurrent can be easily identified and generalisations made thereof.

The proposal on the use of norms by Toury (1995) in the analysis of translated texts is taken by Munday (2016) as meant to distinguish trends of translation behaviour, to make generalisations regarding the decision-making process of the translator then to 'reconstruct' the norms that have been in operation in the translation and make hypothesis that can be tested by future descriptive studies (ibid: 176). It emerges from Munday's observation that norms actually determine the end product of the translation process and the 'equivalence' between the source and target text.

Norms are taken as entities from social and psychological field (Hermans 1996, 26). They operate in a society and shape how persons of that given society behave and think of concepts. Norms can be said to be unifying factors of a people in a given culture and points of agreement and disagreement. Persons of a given culture are likely to disagree if one of them goes against what is generally accepted as a way of doing things. Simply put, norms make people of a given culture to be synchronised in the way they do things and think. According to Toury (1995, 51), "norms are the general values or ideas shared by a certain community as to what is right and wrong, adequate and inadequate into specific performance instructions appropriate for and applicable to specific situations provided they are not yet formulated as laws". Applied to the Kenyan context, you find that we have norms in all the 43 and more tribes that live in the country and we then have norms that govern Kenya as a whole. In this case, the norms that govern the country can be said to be superior and take precedence to those that touch on a given community. For instance, the use of Swahili is seen as a unifying factor for all the peoples of Kenya. That notwithstanding, the translated texts must take into consideration what is acceptable and delicately strike a balance that does not go against the norms of any given group be it tribe, religion or special needs group. Accordingly, any translation is norm governed though slight deviations that may come with a price are allowed. Hermans (1991, 162) argues that failure to comply with a norm in some cases does not render the norm invalid. Norms can be said to be supreme and translation rotates around the axis of norms. Any translation that ignores the norms of the target audience can be seen as abnormal by the audience and will not achieve the intended purpose.

Toury (1995) argues that translation is a process that involves making decisions and a translator has a choice of leaning towards the ST norms whereby in this case adequacy is achieved.

Conversely, leaning towards target culture acceptability is achieved. The concepts of adequacy and acceptability are so close to Venuti's concepts of domestication and foreignisation. Norms can be said to be the ones that set the limits on how far the translator can stretch during the translation process. The translation process is largely controlled by norms and these norms dictate what kind equivalence is achieved in the translated texts Toury (2012 in Munday 2016, 177). From the foregoing, the question that begs to be answered is: can there be translation without considering norms? The response to this question is in the negative since in this era of descriptivism, norms are central to translations.

According to Toury (1995), norms can be divided into two broader groups: preliminary and operational norms. Those which influence before the actual translation and concern translation policy, that is, factors that dictate the process of choosing the text types that are to be translated are the preliminary norms whereas those which inform decision making in the process of translation itself are the ones referred to as operational norms. Operational norms are further divided into matricial norms and textual-linguistic norms. The former are concerned with governing the existence of the target language text in terms of location and textual segmentation while the latter play a role in selecting material for formulating the TT in.

Due to the target oriented nature of descriptivism, the source culture does not dictate norms in translation but it is rather an act and event characterised by variability, it is historically, socially and culturally determined, that is, norm-governed Toury (1998 in Hadjivayanis 2011, 81). Norms are dictated by the target culture and they are not static but rather dynamic. What is acceptable at some point in time may become unacceptable as times change. A translator too has to be alive to the changes.

Nord (1991, 96) basing her proposition on John Searle, came up with the concept of conventions whereby she sees their formulation as neither definitive nor binding; they are a matter of mutual expectations and choice for some patterns of regular behaviour. She averred that:

A regular behaviour R of members of a group G, who participate in a repeatedly occurring situation S is a convention if a) everybody follows R, b) everybody expects of everybody to follow R, and c) everybody prefers following R (Searle 1969, 43).

Her argument on conventions is based on Searle who comes up with regulative and constitutive translational conventions. The former generally denote acceptable means of dealing with certain translational constraints that are beneath the rank of a text whereas the latter deal with

what given communities expect and can accept as a translation. The sum total of constitutive conventions forms the general notion of translation as it prevails in a given community (Nord 1991, 100). Whereas Nord (1991) preferred the term conventions, typically they are norms because she talks about acceptable ways of doing translations in a given cultural community. This view is held by Chesterman (1993) who contends that the conventions as put forth by Nord are indeed norms because if violated what follows will be stinging comments Chesterman (1993, 6). Equally, Hermans (1996, 30) holds that there is no clear divergence that manifests between conventions and norms.

In addition to the theorists discussed, Chesterman (1997, 64) made substantial attempt to shed more light on the concept of norms by categorising them into professional and expectancy norms. Professional norms involve the process of translation whereas the expectancy norms are products of the target audience who establish how a given translation should be shaped. From this distinction by Chesterman, it is clear that the scope of this study will not touch on expectancy norms but will rather make use of the professional norms which can be said to be an equivalent of Toury (1995) operational norms. It can be argued, though, that Chesterman's (1997) professional norms entail expectancy norms because the end product influences the decisions made in the translation process. On the same note, Munday (2016, 179) argues the initial and operational norms as propagated by Toury (1995) are actually covered by Chesterman's (1997) norms.

That said, operational norms largely inform this study and given that one of the definitive objectives of this study is to establish strategies actuated by translators as culturally informed by the cultural environment of the target audience and uncover ubiquitous norms.

It is Toury's hope that the cumulative identification of norms in descriptive studies will enable the formulation of probabilistic 'laws' of translation and thence of 'universals of translation' (Munday 2016, 180). Likewise, this study is hoped to add to the accumulation of identification of norms from the Swahili translated healthcare texts point of view.

Having seen the role played by norms in shaping translations, the next section discusses translation universals that shape translations from a linguistic point of view.

3.2.1.2 Translation Universals

There are many translations that have been studied by translation scholars and their finding is that there are typical characteristics that are ubiquitous in almost all translations and can thusly be generalised. As was set out in the objectives of this study, the linguistic aspects of Swahili healthcare texts are an object of study and this cannot be possible without looking at translation universals as propagated by Baker (1993). Translation universals are linguistic features found in TTs but not in the STs and are presumed to be free from any influence that the languages in the translation process may exert (Baker 1993, 243). What is apparent from the definition is that the universals are binding and no language dictates them.

The universals are identified by way of a comparative analysis of the source texts and target texts. In this study, we are using *Tertium Comparationis* to identify the shifts that manifest themselves in the Swahili healthcare texts. A number of scholars such as Baker (1993, 1996 and 2000); Laviosa-Braithwaite (1998 and 2002); Tymoczko (1998); Zanettin (2000); Olohan and Baker (2000); Kenny (2001); Bowker and Pearson (2002); Johansson (2003) among others have discussed the concept of translation universals in detail. The subsequent section delves into translation universals as put forth by Laviosa-Braithwaite (2001, 288-291) in *Routledge Encyclopedia of Translation Studies*.

(a) Simplification and Avoidance of Repetitions Present in the Source Text

Sometimes source texts contain complex language that may not be deciphered by the target audience and that poses a problem to translators. Translators, however, resort to simplification whereby they reduce complexity and make the translated material to be at a level appropriate for the target audience. The ultimate aim of any translator is to ensure that the target audience get to understand what is contained in STs in a manner that does not pose any comprehension challenges. As a matter of fact, translators build bridges between source and target cultures and for the bridge to be found useful by the target readers, then it has to be one that is easily crossed without any difficulty – hence the simplification of target texts. Laviosa-Braithwaite (2001) points out lexical, syntactic and stylistic types of simplification that manifest in TTs.

Lexical Simplification

Blum-Kulka and Levenston (1978 in Laviosa-Braithwaite 2001, 288) define lexical simplification as the process and/or result of using less words. Their definition was reached after drawing evidence from translations done from Hebrew into English and other types of languages. They went further and suggested that lexical simplification operates according to six principles or strategies that are largely informed by an individual's semantic competence in his or her mother tongue. The principles suggested are:

- i. the use of superordinate terms when there are no equivalent hyponyms in the target language;
- ii. approximation of the concepts expressed in the source language text;
- iii. use of 'common-level' or 'familiar' synonyms;
- iv. transfer of all the functions of a source language word to its target language equivalent;
- v. use of circumlocutions instead of conceptually matching high-level words (especially with theological, culture specific or technical terms);
- vi. use of paraphrase where cultural gaps exist between the source and target language. (Laviosa-Braithwaite 2001, 288)

The above strategies have also been noted by Baker (1992, 28) who argues, in her discussion on strategies employed by translators professionally to unlock non-equivalence at word level, that translators resort to superordinate terms in instances where corresponding hyponyms are absent in the target culture or language.

> Syntactic Simplification

Syntactic simplification is the reduction of complexity at the sentence level. Vanderauwera (1985, 289) notes many cases in which not only finite clauses replace non-finite clauses but also suspension of periods through suppression are used in simplification of syntax considered complex. In addition, there is stylistic simplification whereby longer sentences are broken up, elaborate expressions replaced with more concise collocations, repetitions reduced or omitted, information considered redundant done away with, overlong circumlocutions shortened and modifying phrases and words left out.

On the part of avoiding repetition, Shlesinger (1991) and Toury (1991a) have been quoted in Laviosa-Braithwaite (2001, 289) whereby the former while dealing with courtroom interpreting and the latter on literary translation pointed out several instances whereby the repetitions found in the source text are omitted in the target text. Toury notes the propensity to sidestep repetitions prevalent in the ST stands out as one of the most incessant, rigid norms that manifests studies done on translation in all languages. The avoidance of repetition in target texts may be due to the effect that the repetition was intended to serve. The emphasis that was necessary in the ST may not necessarily be required in the TT after all.

(b) Explicitation

In an effort to make translations explicit than the source texts, translations have a tendency to be naturally lengthy than the STs. Klaudy (2001, 80) says explicitation is "the technique of making explicit in the target text information that is implicit in the source text". This concept was first brought forth by Vinay and Darbalnet (1958 in Klaudy, 2001) whereby it was viewed as an endeavour to explicitly present information into the target culture contrary to the implicit presentation in the ST. The information presented explicitly in the TT can be deciphered contextually. Blum-Kulka (1986 in Laviosa-Braithwaite 2001, 289) notes that variations occur in the kind of cohesive markers used in TTs and records cases in which translators lengthen the TTs through addition of words that were not in the ST. The act of inserting additional words increases the explicitness of the target text and definitely results in a longer target text.

Nida (1994) though not using the term of explicitation, has expounded on the concept by dealing with additions, subtractions and alteration as strategies of making adjustments in the translation process. In addition, to the techniques which correlate with explicitation, Nida has come up with the following types: "filling out elliptical expressions, obligatory specification, additions required because of grammatical restructuring, amplification from implicit to explicit status, answers to rhetorical questions, classifiers, connectives and categories of the receptor language which do not exist in the source language", (ibid in Klaudy 2001, 81). Addition of information is crucial in translation due to the difference in cultures, a message translated may not have the intended the purpose and Baker (1992) avers that translators provide information that is not anywhere in the TT in an effort to bridge a cultural gap.

Some scholars opine that explicitness goes hand in hand with readability as was noted by Toury (1995, 227) whereby he said, "there is an obvious correlation between explicitness and readability and proposes to exploit this relationship in experimental studies with a view to assess the varying extent to which the strategy of explicitation may be applied either in different processes of language mediation or in the same type of mediated linguistic behaviour performed under different conditions". It is apparent that explicitation makes the target text more informative by making whatever is unclear in the source text quite clear in the target text.

More examples where translators apply explicitation are given by Vanderauwera (1985) whereby she suggests some techniques to apply. The major techniques she comes up with are: using interjections to show thoughts of a character, expanding passages that are condensed, achieving transparency by adding modifiers, qualifiers and conjunctions, repeating for clarity,

giving additional information, avoiding vagueness, describing correctly, explicitly naming geographical locations and identifying pronouns precisely.

What emerges from the foregoing is that a translator has the licence to make adjustments as he or she deems fit but guided by the target audience in mind. This also brings forth the fundamentality of a translator being part of the target culture into which translation is being done so as to be in a position to know what is acceptable to and enough for them.

(c) Normalisation

This is a technique that tends to normalise what may be considered abnormal in the target text. I find a very thin line between norms as they were discussed earlier and normalisation. Normalisation is more of grammaticality of the language the target text will take and norms touch more on the culture of the target audience. Mauranen (2007) argues that translators sometimes exaggerate in an effort to adhere to the targeted culture's practices and expectations. Languages differ in their structure and it is therefore incumbent upon the translator to do the necessary adjustments in order to reflect the normalcy as is envisaged in the target language. In that endeavour, translators go an extra mile and come up with texts that can be deemed too far from the ST but which the target audience will find close to their practices.

Vanderauwera (1985, 93) is among scholars who found broad data of changes in punctuation, structure of sentences, textual organisation, choice of words and style which made her conclude that they are a demonstration of a universal trend to achieve textual conventionality as per the targeted culture's expectations. This is supported by Baker (1993, 244) who argued that "interpreters and translators tend to round off unfinished sentences, make ungrammatical utterances grammatical and omit false starts and self-corrections present in the source text". She sees normalisation as a resolute inclination for conventional 'grammaticality'. According to her, there is logical ordering of what constitutes a text and any phraseology considered archaic is changed into the most recent one. Her findings are in line with Shlesinger (1991 in Laviosa-Braithwaite, 2001, 290) who found out in the analysis of Hebrew into English interpretations in court that "there was a tendency to complete unfinished sentences, replace ungrammatical source utterances with grammatical renderings, and delete false starts and self-corrections all of which pointed to normalisation".

Close to normalisation is Toury's (1995) law of growing standardisation that he argues guides the process of translation and behaviour. He argues that ST textemes more often than not

undergo conversion into TL and culture repertoremes. In other words, the conventions of the TL influence replacement of what is contained in the source language. These acts of normalisation using the law of standardisation are according to Toury (1995, 268) determined "by age, extent of bilingualism, the knowledge and experience of the translator, in addition to the status of translation within the target culture influence the operation of the law".

Chesterman (2004 in Munday 2016, 185) goes further to pursue the connection between Toury's laws and various forms of universals by coming up with two divisions that he dubbed S-universals and T-universals. S-universals entail universal difference between TTs and their TTs whereby the trend of shifts identified by this model include:

- i. TTs end to be longer than STs;
- ii. Dialect tend to be normalised;
- iii. Explicitation is common;
- iv. Repetition is perhaps reduced;
- v. Retranslation may lead to a TT that is closer to the ST.

T-universals are features that characterise translated language as compared to naturally occurring language, irrespective of the source language. The universals are identified by examining TTs without reference to their STs. They include:

- i. Lexical simplification and conventionalisation (including reduced variety in TTs);
- ii. A contrary move towards non-typical patterns (e.g. unusual collocations such as *do a mistake* rather than *make a mistake*);
- iii. Under-representation of lexical items that is specific to the TL.

Translation universals are part and parcel of the translation process and they greatly govern translational decisions made. As the name suggests, they are universal and hence found in virtually all translations. The arguments above have shown how explicitation, simplification and normalisation are applied in translation.

The subsequent section delves into domestication and foreignisation strategies as developed by Venuti (1995). Though, Venuti (1995) model was meant for literary translation from (or into) American, I found useful for the analysis of norms and translation universals. They are also so close to the Toury's concepts of acceptability and adequacy. It is against that backdrop that they receive attention hereunder.

3.2.1.3 Foreignisation and Domestication Strategies

Venuti (1995, 20) defines the domesticating strategy as an ethnocentric reduction of the foreign text to the target-language cultural values bringing the author back home and refers the foreignising strategy as "an ethnodeviant pressure on those values to register the linguistic and cultural differences of the foreign text, sending the reader abroad". From the foregoing definition, it must be stressed that foreignisation is considered as an act of defying the prevailing norms and instead transferring ST culture and norms into the TT whereas domesticating is adhering to the target culture norms and paying fidelity to what is valued in the target culture.

Another definition was made by Shuttleworth and Cowie (2004, 59) who refer domestication as "a term used in describing the translation strategy in which a transparent, fluent style is adopted in order to minimise strangeness of the foreign text for target readers", and foreignisation as "a term used to designate the type of translation in which a target text is produced which deliberately breaks target conventions by retaining something of the foreignness of the original". It follows that these two strategies are deliberately employed by the translator who does not mind about the repercussions of either of them. The end product is foreseen by the translator and the translation process is customised to achieve it.

The foreignising strategy "signifies the difference of the foreign text yet only by disrupting the cultural codes that prevail in the target language. In its effort to do right abroad, it must do wrong at home, deviating enough from native norms to stage an alien reading experience", (Venuti 1995, 20). Foreignisation does not care about the damage it causes on the target culture and this is not done obliviously but rather intentionally. Venuti (1995) holds the view that foreignisation as a strategy is not only enticing but also preferred in today's translations.

In the examination of the Anglo-American tradition, Venuti (1995) concludes that the prevalent norm is to domesticate. This is, however, partly contrary to his own beliefs because he favours foreignisation since domestication leads to translations that are characterised by fluency and transparency making the translator invisible. He is of the view that translators should be more visible in order to revolt and bring some changes into the circumstances in which translation is theorised on the one hand, and put into practice on the other hand particularly in Anglophone countries.

The adequacy and acceptability concepts propagated by Toury (1995) are so close to Venuti's foreignisation and domestication respectively. That is, if one is adhering to the source language

norms then they determine a translation's adequacy (foreignisation) as compared to the ST source whereas subscribing to norms that originate from the intended audience's culture guarantees acceptability (domestication). Toury acknowledges the fact that even translations that lean towards adequacy exhibit shifts from the ST. It is an uphill task to have a translation that purely maintains all the traits of the ST and on hindsight one which reflects norms of the targeted culture only.

The strategies of domestication and foreignisation have been criticised by Tymoczcko (2000, 36) for lack of strict definition and argues that no convincing ground for the foreignisation strategy is provided. Tymoczcko (2000) also faults Venuti's (1995) failure to specify the degree of foreignisation to be achieved for a given translation to be labelled as foreignized. Another critic of the two strategies is Baker (2010) who sees the dichotomy as so simplistic to be used in describing the real picture of the translation process. The broad generalisation does not appreciate the fact that the same TT can have elements of both strategies as fronted by Venuti (1995). Indeed, this strict division of translations as either domesticated or foreignised does not entirely reflect the reality in the translation process. The tenability of the two strategies is also questioned by Robinson (1998) who termed them elitist. The questions about domestication and foreignisation notwithstanding, the two strategies are ideal in understanding how translators of Swahili healthcare texts bring the readers home (domestication) or take them abroad (foreignisation).

3.2.2 Text Linguistics and Healthcare Translation

Linguistic aspects form part of the present study and it is, therefore, prudent to delve into the notion of text linguistics and how it informs translation studies from the perspective of constraints and strategies resorted to by translators. Before discussing how text linguistics is relevant in the present study, I will look at what text means and how different scholars have given varied definitions.

To begin with, Halliday and Hasan (1976, 1) define a text as any passage, spoken or written of whatever length, that does form a unified whole. According to them, size does not matter and passages whether in the written or spoken form qualify to be called texts. They consider a text as a unit of language in use notwithstanding its form and size. To be precise, form is not seen as priority by Halliday and Hasan (1976) but rather the unit of meaning – semantic unit.

Next, House (1981, 29) defines a text as any stretch of language in which the individual components all relate to one another and form a cohesive whole. Also focusing on holistic

nature of a text, Bell (1989, 162) defines a text as a systematic arrangement of linguistic expressions that form a unitary whole. Widdowson (2007, 4), on the other part, contends that immediately after recognising that a piece of language is meant for communication uses, it is identified as a text. This definition by Widdowson introduces communication as a key component of texts. It essentially points out the fact that texts have to communicate. The healthcare texts in the present study are communicative in nature and that qualifies them to be referred to as texts. Both the STs and TTs in this study are communicative in nature.

It should not be lost to some that textual analysis only applies to the evaluative studies. On the contrary, textual analysis is an important tool to use when describing translations as it unravels the constraints that informed the strategies used to come up with the texts. The shifts at play during the translation process shape a text and it is therefore advisable to consider the textual features when describing translations. Kruger (2000, 80) maintains that

various translation scholars incorporate different aspects of text linguistics in their models, stressing the fact that, although translators usually proceed sentence by sentence in translating, they are never concerned with isolated sentences only, but with sentences in context. In fact, translators know that the translation process entails much more than the mere rendering of the meaning of a sequence of words, phrases and sentences into the TL – meaning is also carried globally in the text. They therefore approach the ST as an integrated whole because they know that they will have to modify it by means of a variety of strategies in order to produce a satisfactory and pragmatically acceptable translation.

The work of a translation critic, based on the foregoing, is to describe the constraints that manifested in the act of translation and which informed not only the shifts but also the variety of strategies used to come up with the target text.

Bell (1989, 163) argues that once we begin to examine texts in terms of their communicativeness, we shall find that we rapidly arrive at the point where we need to ask questions about the functions of texts and about the interconnections between textual features, features of context of communication and features of discourse which manifest these relationships. This is corroborated by Mikhichi (2011) who says that speaking from a linguistic point of view, a text is an act of communication that complies with the textuality standards – the seven of them. The proponents of these standards of textuality were De Beaugrande and Dressler (1981) with other scholars such as Bell (1989), Hubbard (1989) Basil and Hatim (1990) among others. It is also worth noting that Kruger (2000) applied the standards of textuality in the analysis of translated drama texts and Ndlovu (2009) too applied the same standards in the analysis of the accessibility of Zulu health texts.

3.2.2.1 Standards of Textuality

The seven standards put forth by De Beaugrande and Dressler (1981) include: cohesion, coherence, informativity, intentionality, acceptability, situationality and intertextuality. The standards apply to all texts that have a communicative value. Bell (1989, 163) argues that each of the seven is essential and failure to comply with any one of them constitutes overall failure: the 'text' which lacks any of these characteristics is not a text but merely an aggregate of words, sounds or letters. The standards are key in understanding the textuality of a text and Mikhichi (2011) points out that by investigating the textual surface, it is possible to understand how complex surface linguistic features are, do an analysis of the connection of inter-text constituents, and basically get to know both the meaning and motive of the text in relation to restraints imposed by context socially and communicatively. This shows the relevance of the standards of textuality in the description of translations.

According to Bell (1989, 163-164), the standards have been proposed so as to respond to many key questions which the reader and the translator will need to ask about the text. These questions, in my view, can equally be asked by translation critics who study texts with an aim of accounting for the shifts therein. The questions include:

- i. How do the clauses hold together? (cohesion)
- ii. How do the propositions hold together? (coherence)
- iii. Why did the speaker/writer produce this? (intentionality)
- iv. How does the reader take it? (acceptability)
- v. What does it tell us? (informativity)
- vi. What is the text for? (relevance)
- vii. What other texts does this one resemble? (intertextuality)

The above questions point out to what each standard answers. The standards are discussed in detail below.

3.2.2.1.1 Cohesion

De Beaugrande and Dressler (1992, 48) define cohesion as one that has a function of attaching syntactically and lexically, the text together in order to create textual unity. It is a function of syntax in communication that imposes organisational patterns upon the surface text. According to Bell (1989, 165), cohesion consists of the mutual connection of components of SURFACE TEXT within a sequence of clauses/sentences; the process being signalled by lexico-syntactic means. On the part of Hatim and Mason (1997, 15), they define a cohesive text in the sense

that the various elements of the surface text are jointly connected within a sequence of some kind. It is apparent that cohesion is the glue that holds a text together and makes it readable.

Halliday and Hasan (1976) came up with five main cohesive markers in English: reference, substitution, ellipsis, conjunction and lexical cohesion. Taking note of the use of cohesive markers helps a translation critic to provide an explanation for any similarity or difference in texts and subsequently identify the norms at play and strategies resorted to. They can also account for the expansion or reduction of the translated text as compared to the source text. These cohesive devices form part of the *Tertium Comparationis* in the current study.

> Reference

Reference as per Halliday and Hasan (1976, 31) refers to that which cannot be semantically interpreted independently without making reference to something else within the text for their interpretation. There must be retrieval from elsewhere in order to understand fully what is meant. They divided the reference items into two: endophoric and exophoric reference. A reference item is said to be exophoric when it does not name anything but rather signals that reference be made to the context of situation. Endophoric reference is one in which interpretation can be made within the text. It is divided into anaphoric and cataphoric relations whereby the former one looks back in the text for interpretation and in the latter, one looks forward in the text for interpretation.

On the other hand, Baker (1992, 181) defines reference based on its traditional use in semantics for the relationship which holds between a word and what it points to in real world. For instance, the referent *disease* refers to a given disease being discussed or referred to on a particular occasion. In other words, it would be difficult to decipher the kind of disease unless one understands it in the immediate context.

Halliday and Hasan (1976, 37) came up with three types of references: personal, demonstrative and comparative reference. First, personal references are by means of functions in the speech situation through a person. Its examples include: *he, she, I, him, they, our, its* etc. Second, demonstrative reference is reference by means of location, on a scale of proximity. Its examples are: *this, these, that, those, here, there* etc. Third, comparative reference is indirect reference by means of identity or similarity. Examples of comparative references include: *same, equal, identical, better, else, other* etc.

In the example below, the pronoun *it* in sentence two refers to malaria and the possessive pronoun *its* in sentence three also refers back to malaria.

- *i. Malaria* is a dangerous illness that we can get from mosquitoes that breed in non-moving stagnant water.
- ii. It kills over one million people each year most of them in Africa.
- iii. *Its* symptoms include high fever, headache, nausea, vomiting, and convulsions among others.

Reference is key in describing translations as it helps in finding out how translators make use of them particularly in the present study whereby the Swahili and English are said to be agglutinative and isolating respectively.

> Substitution and Ellipsis

Halliday and Hasan (1976, 88) consider substitution and ellipsis as processes within the text: substitution as the replacement of one item by another, and ellipsis as the omission of an item. Even though the two have their definitions, it is worth of mention that ellipsis is taken as a form of substitution whereby an item is replaced by nothing. Substitution can be nominal, verbal, and clausal.

Baker (1992, 187) says that the two cohesive devices are grammatical as opposed to being semantic relationships. She further defines substitution as replacing an item(s) by use of another item(s). The most common cohesive devices used for substitution include so, do(es), did, one(s) and $the\ same$. Due to the differences between the Swahili language and English, the translations cannot be the same as shown in the examples below

- i. English: Do you know smoking is harmful to your health? Yes, I *do* (do replaces *know*)
- ii. Swahili: Je, wajua uvutaji wa sigara ni hatari kwa afya yako? Ndio najua (Yes, I know) (najua can be translated as I know)

Moving to ellipsis, Baker (1992, 187) defines ellipsis as one that includes omitting an item and replacing that item by nothing. It is commonly used to avoid repetition. On the other hand, Halliday and Hasan (1976, 143) argue that an elliptical item refers to one which specific structural slots are left out to be filled from elsewhere.

It is imperative that the use of substitution and ellipsis in healthcare be discussed, as it is done in this study, in order to not only understand how translators deal with them in the translation process but also to comment on their prevalence or otherwise.

Conjunctions

Halliday and Hasan (1976, 226) aver that conjunctive elements are cohesive not in themselves but indirectly, by virtue of their specific meanings; they are not primarily devices for reaching out into the preceding (or following) text, but they express certain meanings which presupposes the presence of other components in the discourse.

Baker (1992, 190) defines conjunction as one that "involves the use of formal markers to relate sentences, clauses and paragraphs to each other. It signals the way the writer wants the reader to relate what is about to be said to what has been said before". The signal can be given to translation critics too and it is not limited to readers. The main relations expressed by conjunctions are: additives, adversative, causal, temporal and continuatives.

The way in which a given language makes use of conjunctions definitely impacts on the translated text and it forms part of the description of any text. This is in line with Baker (1992, 197) who points out that the shortcoming with conjunctions is their reflection of a text's rhetoric and controlling how it is to be interpreted. Baker (1992) further says that the said reflection gives suggestions on the content and argumentation effect of adjusting translations.

Translators have the freedom to choose on how to proceed with translations as is aptly put by Baker (1992, 201-202) that whether a translation conforms to the source-text patterns of cohesion or tries to approximate to target language patterns will depend in the final analysis on the purpose of the translation and the amount of freedom the translator feels entitled to rechunking information and/or altering signals of relations between chunks. Whatever the translator decides to do, every option will have its advantages and disadvantages. Following source language norms may involve minimal changes in overall meaning and noticeable deviation from typical target language patterns of chunking information and signalling relations is likely to result in the sort of text that can easily be identified as a translation because it is 'foreign'. This is similar to Venuti (1995) strategies of foreignisation and domestication. The foregoing shows the inevitable role of conjunctions in translations and that a translation critic cannot afford to ignore them as they are realised differently in different languages.

Lexical Cohesion

Baker (1992, 202) defines lexical cohesion "as the role played by the selection of vocabulary in organising relations within a text". Hoey (1991 in Kruger 2000, 86) refers to lexical cohesion as the most important form of cohesive tie because it is the only type of cohesion that regularly forms multiple relations.

Halliday and Hasan (1976) divide lexical cohesion into reiteration and collocation. On the one hand, when lexical items are repeated including those that were said earlier, words with similar or close meaning used and those with general meaning then reiteration is achieved. On the other hand, collocation involves words that are in one way or the other associated in a given language.

The relationship that accrues through lexical cohesion is not at the level of pairs of words between each other but it rather manifests by way of lexical chains in a text connected to each other in a number of ways. Cohesion is achieved through the said lexical chains and they govern how each lexical item is used contextually in the text. Snell-Hornby (1988) says that in analysing a text, a translator is not concerned with isolating phenomena or items to study them in depth but with tracing a web of relationships, relevance and function in the text. This means that no matter how hard a translator may try; it is not possible to come up with lexical cohesion networks that are similar in the TT to those of the ST and this may compel the translator to settle for words which are somewhat different in meaning or whose association is different. Whenever this takes place, there is introduction of slight or even considerable change in the lexical chains and the ST's associations (Baker 1992, 206). It is worth noting that major shifts take place even in texts that are non-literary like those under the current study. The shifts that occur say a lot about the strategies employed by the translator and that is of interest to a translation critic, just as it is in the present study. Baker (1992) further notes that lack of ready equivalents will sometimes require the translator to resort to strategies such as the use of a superordinate, paraphrase or loan word which results in producing different lexical chains in the target text just as the grammatical structure of the target language may require the translator to add or delete information and reword parts of the source text in a variety of ways. Neubert and Shreve, (1992 in Mikhichi 2011, 51) note that the cohesiveness of a text is a translation's finished product.

3.2.2.1.2 Coherence

Baker (1992, 218) defines coherence as "a network of relations which organise and create a text, that is, the network of conceptual relations which underlie the surface text". Consequently, it is up to the one reading a text to determine its coherence or otherwise. Baker (1992, 219) further notes that coherence of any given text is a culmination of: knowledge in the text, reader's knowledge and real-world experience. That notwithstanding, the reader still holds a key position in determining the coherence of a text aided by the social status, educational background, gender, country of origin, political affiliation, religious affiliation, profession among others. In other words, it is up to the reader to comment on the coherence or otherwise of a given text.

A translator who does not take into consideration all factors that matter to the target audience definitely affects the coherence of a translated text and it will be interpreted differently by different readers. The factors in this case range from language to culture among others. Some readers may find a translated text not to be in conformity with their norms and subsequently reject the text.

Baker (1992, 253) opines that the concept of coherence is challenging and tricky due to the dynamism of factors, which range from linguistic to non-linguistic, which influence it and the changing crucialness that a given factor can take in a particular context. Mistranslation of even one lexical item greatly interferes with coherence of a text.

While describing translations, coherence informs the description because one gets to understand how the translator approached the process of translation and this is because coherence is always a construct in the translated text. It gives a clue on the translation strategies used by the translator.

3.2.2.1.3 Intentionality

De Beaugrande and Dressler (1981) point out that the principle refers to the text producer's attitude that the set of occurrences should constitute a cohesive and coherent text instrumental in fulfilling the producer's intentions, e.g. to distribute knowledge or to attain a goal specified in a plan. Intentionality, therefore, focuses on the aim that a text producer has in mind for his/her text.

Mikhichi (2011, 54) maintains that for a text to qualify as such, there must be the intention that a text be a text and its acceptance thereof so as to be utilised in communicative acts, that is, the writer of the text should have an intention of contributing towards achieving some aim and

the reader should accept that it is, in fact, satisfying some such objective. While satisfaction to the reader is beyond the current study, description of the goal of the selected healthcare texts is done and this speaks to the intention of the producer of the text – the translator.

Neubert and Shreve (1992 in Mikhichi 2011, 56) sum up that intentionality is about what the author's or translator's decisions do to a text and how this affects how the reader receives the text.

3.2.2.1.4 Acceptability

De Beaugrande and Dressler (1981, 7) define acceptability as the text receiver's attitude that the set of occurrences should constitute a cohesive and coherent text having some use or relevance for the receiver, e.g. to acquire knowledge or provide co-operation in a plan. In other words, texts are written to be accepted and this should be in every translator's mind when translating.

Neubert and Shreve (1992 in Kruger 2000, 94) point out that there can be no achievement of an author's basic aims of writing a text if the reader cannot understand the text's purpose. A text's image and acceptance play a big role when it comes to the reception by readers as a communication with a purpose. Acceptability is not about readers believing in the contents of a text but it demands the recipients make a determination on the type of the text the author intended to present to the target audience and the aim of doing so. It is, therefore, right to put intentionality and acceptability side by side.

The translator has to make use of strategies that respect the target audience's culture in order to enhance the acceptability of a text and the role of a translation critic is to identify those strategies that enhance acceptability. For instance, if the health texts in the source language are written in a language that may need censorship, it is incumbent upon the translator to put it in a language that is in tandem with the target audience norms. It is such decisions that are of interest in the current study.

3.2.2.1.5 Informativity

In defining informativity, Beaugrande and Dressler (1981, 9) believe that it relates to the extent to which the occurrences of the presented texts are expected (vs. unexpected) or known (vs. unknown). Texts are translated to disseminate information and therefore informativity of a text can be used as a yardstick to measure the 'textness' of a translated text.

Equally, Neubert and Shreve (1992 in Ndlovu 2009, 65) put it "that a communication situation is a context where information transfer occurs. We say that texts are informative if they provide a knowledge or understanding which did not exist before. If a text tells us nothing new, its information content is low". In other words, texts are translated to communicate new information which is unknown to TL audience and if a text fails to do that, it monumentally fails the test. The translator may make use of some strategies such as omission which may at the end negatively affect the information as was intended in the SL text. In the same vein, strategies such as explicitation, use of footnotes point to the translator's endeavour to make the text more informative. This is because what may be considered obvious in the SL audience may be oblivious to the TL audience.

3.2.2.1.6 Situationality

Situationality is also sometimes referred to as relevance. De Beaugrande and Dressler (1992) define it "as a general designation for the factors which render a text relevant to a current or recoverable situation of occurrence ... the accessible evidence in the situation is fed into the model along with our prior knowledge and expectations about how the 'real world' is organised'.

Neubert and Shreve view situationality as the location of a text in a discrete sociocultural context in a real time and place (1992 in Mikhichi 2011, 58). On the part of Hatim and Mason, "in pursuing the intended goals, translators (as a special category of text receivers and producers) seek to relay to a target reader what has already been communicated by a text producer and presented with varying degrees of explicitness in the text. The question we ought to address at this juncture is whether a given sequence of cohesive and coherent linguistic elements intended to display a particular intertextual potential, is actually appropriate to a given situation of occurrence". This property is known as situationality (1997 in Mikhchi 2011, 58)

It, therefore, means that situations dictate translations. The translator has to respond to the translation need as per the norms of the TL audience. Mikhichi (2011, 58-59) says that the general strategy of the translator is to adjust the text to its new situation. Adjustments may involve a variety of translation procedures, including explicitation, compression, recasting, and textual re-arrangements. The modifications are motivated by the need to preserve the intentionality of the text in its new situation. The translation critic accounts for the translator's strategies while adjusting to the other situation which may be worlds apart from the source situation.

3.2.2.1.7 Intertextuality

Intertextuality is defined by De Beaugrande and Dressler (1981) as the factors which make the utilisation of one text dependent upon knowledge of one or more previously encountered texts. It means that there is a relationship between the original text and translated text in terms of characteristics and they help the readers to distinguish what they already know and what is new. Some texts are produced in editions and it is prudent for the translator to take into consideration the experience the TL audience already have. Readers of texts may not be totally unaware of the content carried in texts and translators must strive to create texts that have linguistic and cultural surface identifiable with them.

In conclusion, this section has discussed the import of text linguistics in translation description and delved into the standards of textuality. The standards play a critical role in that when doing a textual analysis one can understand the complex language features, do an analysis of the connections between parts of a text, and eventually get to know not only the meaning but also the text's intention which can point to the contextual constraints in the communication. Cohesion is central in the present study since it forms part of the *Tertium Comparationis*. On the same note, the discussion on coherence has shown its importance to the translator and cannot be entirely ignored.

The next section discusses the framework adopted for carrying out a comparative analysis for the English-Swahili healthcare texts in the present study.

3.3 Analytical Framework

This section delves into the analytical framework used and in particular discusses Kruger and Wallmach (1997) approach that underpins this study.

3.3.1 Framework for Source and Target Text Comparative Analysis

The early approaches to translation, as has been discussed, were prescriptive and leaned towards equivalence or sameness. Emphasis was laid on the faithfulness of a translation to the ST while ignoring other dynamics that form part of the translation process. Equivalence and equivalent effect studies dominated the stage for a long time till the advent of system theories as propagated by scholars like Even-Zohar (1978), Lambert and Van Gorp (1985), Hermans (1985) Toury (1995), Chesterman (1997) among others. The disregard of other dynamics such as culture in the translation process by the equivalence-based studies made it unpopular. In fact, Kruger and Wallmach (1997) point out that various translation theorists held the view that equivalence, as was conceptualised, had inherent limitations. Nonetheless, the contribution of

equivalence-based studies to the translation studies cannot be wished away. It was an important stage that led to the descriptive approach.

Consequently, scholars gradually shifted their focus to describing translations without paying undue attention to how faithful they are to their source texts. The fact that texts are accepted as translations by their recipient cultures qualifies them to be studied as such. Whereas the prescriptive translation theorists gave rules on how translations ought to be done, arguably from a know-it-all perspective, descriptive translation theorists approach translations from an observation point of view and thereafter make conclusions about them without delving into perfections or imperfections thereof. The work of scholars is to identify shifts which form part of the discovery process only and which subsequently lead to the formulation of explanatory hypotheses. Toury (1995, 85) pointed out that it is through the explanatory hypotheses that the general concept of translation underpinning any corpus under study is established.

Methodologically, the present study is situated in the realm of Descriptive Translation Studies and translated Swahili healthcare texts, which is the product, provide the means through which the process of translation is investigated and conclusions drawn thereof. The approach is target oriented that neither gives room for one to speculate and give subjective opinion nor places the source text at higher status than the target text. It follows, therefore, that the study significantly departs from the equivalence-based studies as was almost the norm previously. Eminent in DTS is the elevation of the target text as the main focus viewed as part of a system where various factors inform the translation process. The target text is not studied in isolation and any attempt to do so will result in drawing misinformed and misleading conclusions that add no value to the translation studies field. Equally, the source text is given focus in descriptive studies since it is by understanding the ST that a translation critic can be in a position to account for any shifts in the TT. In an attempt to describe translations that lead to better understanding of various translations, scholars go outside the text and focus on the description of norms and constraints that shape the translation of texts.

The current study is comparative in nature in that translated Swahili healthcare texts are compared with their originals to identify norms and constraints that inform the translation of linguistic and cultural aspects. The study makes use of Kruger and Wallmach's (1997) *Tertium Comparationis* as a basis of carrying out a comparative analysis in describing the source and target texts. Chesterman (1998) refers to it as equivalence or *Tertium Comparationis* too. Connor and Moreno (2005) highlighted that *Tertia Comparationis* can be placed at any level

of textual organisation, from microlinguistic levels (i.e. phonological, lexical, syntactic levels) to macrolinguistic (i.e. textual).

Kruger and Wallmach (1997, 122) pose a question on how one sets about comparing anything and they give a response by a contrastive analyst James (1980, 169) that I also find relevant and apply in the current study:

The first thing we do is make sure that we are comparing like with like: this means that the two (or more) entities to be compared, while differing in some respect, must share certain attributes. This requirement is especially strong when we are contrasting, i.e. looking for differences, since it is only against a background of sameness that differences are significant. We shall call this sameness the constant, and the differences variables. In the theory of CA [contrastive analysis], the constant has traditionally been known as the *Tertium Comparationis* or TC for short.

In a layman's language, *Tertium Comparationis* can be said to be the common platform of comparison since one cannot do a comparison on texts that do not share attributes that bring them together.

Toury (1995, 77-78) points out that "the kind of problems which are relevant for a retrospective study are reconstructed rather than given: like the appropriateness of the source text itself, they have to be established in the course of a comparative analysis rather than on the basis of the source text alone". It is, therefore, impractical to proceed on this study minus paying attention to both the ST and TT because it is through such juxtaposition that problems which were encountered in the translation process manifest.

The nature of comparative analysis is given more emphasis by Toury (1995, 80) as a short reminder:

- (1) every comparison is *partial* only: it is not really performed on the objects as such, only certain aspects thereof;
- (2) a comparison is also *indirect* in its very essence; it can proceed only by means of some intermediary concepts, which should be relatable to the compared aspect(s) of *both* texts;
- (3) these intermediary concepts should also be relatable to the *theory* in whose terms the comparison would be performed.

The comparison is not done on all objects selected for the study but rather sections which present the researcher with optimum opportunity to reconstruct the ST and identify shifts in the TT.

I want to note at this point that Kruger and Wallmach's (1997) proposed methodology of comparing source and target texts is both theoretical and practical. It is based on Lambert and Van Gorp (1985). The theoretical part concerns the collection of information about the general macrostructural features of the translations by asking and getting answers to the questions below:

- Is the translation identified as such? Or is it identified as an adaptation or an imitation?
- What is the prevailing attitude towards translation in the given period?
- Is the translator's name mentioned anywhere?
- Can the text be recognised as a translation (linguistic interference of the source language, neologisms, sociocultural features)?
- What is the translator's general strategy? Is it a complete or a partial translation (i.e. have large sections been omitted from the translation)?
- Does the translator or the editor provide any metatextual comment in the form of a preface or footnotes?

Kruger and Wallmach (1997, 122)

Based on the above questions on preliminary data, the responses can lead to hypothesis for a comparative analysis of the texts on both the macro-textual level and the micro-textual level.

After having highlighted the theoretical part, I now go back to the concept of *Tertium Comparationis* which falls under the practical part. Kruger and Wallmach (1997, 123) state that "a *Tertium Comparationis* comprises an independent, constant (invariable) set of dimensions in terms of which segments of the target text(s) and source texts can be compared and or mapped onto each other". The *Tertium Comparationis* for the translated Swahili healthcare texts in this study include:

- cohesive devices
- descriptive terms
- taboos
- division of healthcare texts
- text titles
- illustrations
- translation strategies

Kruger and Wallmach (1997) underscore "that in a comparative analysis it is significant to take into account a complex network of relations on the one hand, between the source text and the political, social, cultural, literary and textual norms and conventions of the source system, and on the other hand, the target text(s) and the political, social, cultural, literary, and textual norms and conventions of the target system". The network and process of comparison is diagrammatically represented as shown in the figure below as adapted from Kruger and Wallmach (1997, 123).

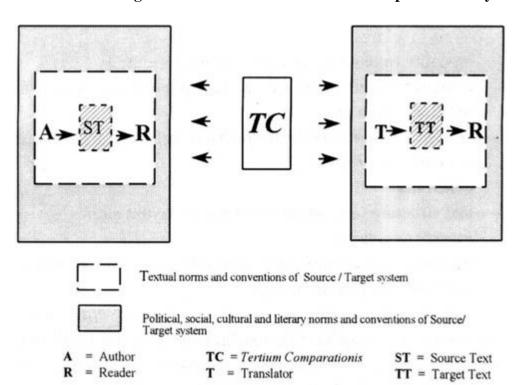


Figure 3.2: Networks of relations in comparative analysis

It is apparent from the above diagram that indeed the network is complex and a translator ought to be conversant with both the ST and TT systems so as to identify translation constraints that manifest in the translation process and eventually produce a translation that is up to the expectations of the target audience without infringing on their beliefs. The above is corroborated by Munday (2016, 175) who argues that for Toury, translations first and foremost occupy a position in the social and literary systems of the target culture; they are facts of target cultures: on occasion facts of a peculiar status, sometimes even constituting identifiable (sub)-systems of their own. The position that is held by a translation informs the translation strategies resorted to by the translator but that cannot be tenable if the translator is not conversant with the systems in the target culture. The foregoing underscores the argument that translators ought

to be insiders of target cultures to avoid coming up with translations that do not meet the expectations of the targeted audience.

In light of the above, Toury was expounding on Even-Zohar's (1978) Polysystem and his earlier works. Toury (2012, in Munday 2016, 175) proposes a three-phase methodology for DTS that incorporates a description of the product. It entails:

- (1) Situating the text within the target culture system, looking at its significance or acceptability.
- (2) Undertaking a textual analysis of the ST and the TT in order to identify relationships between corresponding segments in the two texts. Toury calls these segments coupled pairs. This leads to the identification of translation shifts, both 'obligatory' and 'non-obligatory'.
- (3) Attempting generalizations about the patterns identified in the two texts, which helps to reconstruct the process of translation for this ST-TT pair.

Inasmuch as the DTS approach is target text oriented, it is recommended as a rule of the thumb that a researcher first analyses the source text for worthwhile comparative analysis. Going for the ST first aids the researcher in understanding the constraints and norms at play and subsequently be able to account for decisions made.

As was noted above, collection of preliminary data precedes hypotheses for a comparative analysis and it is here that the *Tertium Comparationis* is determined. The next stage is the practical analysis of texts both at the macrotextual and microtextual levels. In the present study, the translated Swahili healthcare texts are juxtaposed with their English originals and then a reconstruction of linguistic and cultural shifts, use of illustrations and the translation strategies used by the translator identified and accounted for. Heeding Kruger and Wallmach's (1997) advise that every researcher should determine their own categories informed by the nature of research at hand, I have put forth the following areas to comprise the macrotextual analysis for this study:

- titles of the healthcare texts
- division of the healthcare texts in terms of subheadings and chapters
- illustrations

After determining the macrotextual analysis level that gives the overall picture of texts, I move to the microtextual level areas as they were identified by Lambert and Van Gorp (1985 in

Kruger and Wallmach 1997, 123). The terms microtextual and microstructure refer to shifts on the phonic, graphic, syntactic, lexical and stylistic level:

- selection of words (lexical sets, semantic fields, terminology, etc)
- dominant grammatical patterns and formal literary structures (metre, rhyme, etc)
- forms of speech representation (e.g. direct, indirect, free indirect speech)
- metaphors and figures of speech
- terms of address
- modality (passive/active voice, ambiguity, etc.)
- language variety (sociolect, archaic/popular, informal/formal register, jargon etc.)
- cohesive patterns (lexical cohesion, reference, substitution, conjunction, ellipsis)
- coherence
- text structure (e.g. narrative structure; layout etc.)
- aspects of culture
- translation procedures (e.g. substitution, repetition, deletion, addition, compensation etc.).

While cognisant that all the above cannot be viably investigated in one study, the present study settled for the following areas to comprise the microtextual analysis:

- cohesive devices
- descriptive terms
- cultural taboos
- translation strategies

The aspects enumerated above largely provide the current study microstructure level information for comparative analysis. The two levels of macrostructure and microstructure affords this study an opportunity to complete the descriptive phase of the research. The next stage exhibits how contextualisation of the Swahili healthcare texts is done in their broader cultural context so as to offer an explanation of the research.

Kruger and Wallmach (1997, 124) posit that "analysis of the broader cultural context implies that the researcher examines textual, political, social, cultural and literary norms and conventions in both source and target systems, as well as:

contrasts / shifts between macro- and micro levels and between text and theory (norms, models, etc.);

- intertextual relations (with other originals and translations);
- intersystemic relations with other genres and styles".

Adopting this approach assists the researcher in gaining systematic insight into text rules and conventions, leading to questions such as the following posed by Lambert and Van Gorp (1985, 50):

- does translator Y always translate according to these rules? If not, can we explain the exceptions?
- Does s/he write his/her own creative work according to the same rules? If not, why?
- Does the translator conform to the same rules as his/her fellow translators?
- Does the translator show conscious awareness of rules, norms, models? Does s/he theorise about them? If so, is there a discrepancy between theory and practise? On which points?
- Is there any conflict between the translator's norms and the expectations of the target readership?

Lambert (1985, 38) states that the following questions may also provide insight into the source and target systems:

- are the literary norms and models imported or not? Are they traditional or not?
- Which is the dominating literary centre? For how long has this been the case?
- What are the dominating genre rules?
- With which centres does it have links? (Are these from abroad or not? Are these dominating or dominated relationships?)
- From which literary systems do they import texts? Are these translated texts? Who is translating them? According to which selection and translation rules does this happen?
- Are there positive/negative links with literary traditions? (From which traditions and when have there been shifts in these literary traditions? Are these shifts parallel in all literary systems, from which chronological point of view, and from the point of view of norms and models?)
- What are the norms and models within the peripheral subsystems? What are their origins?
- To what extent does the attitude towards tradition influence the attitude towards import?

 Are there any historical revolutions in this respect?

The above questions speak to the open-ended approach by descriptive translation studies. Some of them are relevant to the current study and are responded to. According to Kruger and Wallmach (1997, 124) the questions can be added, and I hereby do so in respect to Swahili healthcare texts. They include:

- What is the health ministry's language policy regarding translation of healthcare texts? If there, is it adhered to?
- Are there non-governmental organisations that translate healthcare texts? If yes, do they collaborate with the ministry or they do it on their own?
- Are there religious groups that have interest in health matters?
- Is there use of illustrations in healthcare texts? If yes, are they the same in both the source and target text?
- Are the healthcare texts translated as a reaction to an outbreak or they are availed after a given period of time?

The questions guide one in describing translations and as Kruger and Wallmach (1997, 124) pointed out that:

it is only once the researcher has completed the comparison at this level, taking into account translation decisions and political, social, cultural, literary and/or textual constraints imposed upon the translator, translating process and the text, will it be clear what the translator's initial norm is. In other words, only now will the researcher be able to establish whether the translator has subjected him/herself to the original text, with the norms it has realised, to the norms of the target culture or, as happens most of the time, whether the translator has managed to effect a cultural compromise.

The foregoing has mapped out how I carry out a comparative analysis of the English-Swahili healthcare texts at the preliminary, macrotextual and microtextual levels. The analysis first describes the source texts so as to gain insight on where the target text is based though descriptive translation studies advocates for the analysis of the target analysis first.

Bearing in mind that a research must clearly show how it proceeded from conception to drawing of conclusions, the next section enumerates the research procedures applied in the present study.

3.4 Research Procedures

This section presents the research procedures used in the study in order to achieve the objectives set. It discusses the research design, data collection, data analysis and ethical considerations.

3.4.1 Research Design

For a research of this magnitude to produce replicable findings, a research design is inevitable since it guides the research from the conception of the research problem to the very final stages of analysis and eventual reporting. I describe, in this section, the research design employed to study the linguistic and cultural aspects of English-Swahili healthcare texts based on the Descriptive Translation Studies approach as discussed in the previous section. Even though a guideline on the method of research used was highlighted in chapter one, I hereunder present a more detailed discussion on the design that guided the study.

Before embarking on the details, it is important to present different definitions of a research design and underscore the vitality of having one in a research. De Vaus (2001, 8) defines a research design analogically that:

when constructing a building there is no point ordering texts or setting critical dates for completion of project stages until we know what sort of building is being constructed. The first decision is whether we need a high-rise office building, a factory for manufacturing machinery, a school, a residential home or an apartment block. Until this is done, we cannot sketch a plan, obtain permits, work out a work schedule or order texts.

Implied, therefore, is that a research design comes before anything else in a research process and that a research project proceeds seamlessly when a clear design is formulated from the beginning. An attempt to collect and analyse data without a clear research design only produces flawed results. The results obtained from a research that has a well-thought-out design are valid and reliable. It is, however, common to confuse research design and method of data collection and this often leads to flawed findings. The research design determines how a researcher applies the research methods to achieve the objectives laid down in a given research.

The research design is dictated by the research questions, aim and objectives of the study and it is against that backdrop that I restate them hereunder.

The aim of the study is to explore the translation of linguistic and cultural aspects in English-Swahili healthcare texts through a descriptive translation studies approach.

The objectives of the study are to:

- a. identify, describe and analyse linguistic aspects in English-Swahili healthcare texts;
- b. identify, describe and analyse cultural aspects in English-Swahili healthcare texts;

- c. identify, describe and analyse translation strategies used in English-Swahili healthcare texts;
- d. describe and analyse the use of illustrations in English-Swahili healthcare texts.

In order to achieve the above objectives, I collected English and Swahili healthcare documents and did a comparative analysis so as to establish the linguistic and cultural aspects of the texts and what problems are encountered in the translation process including the translation strategies used in resolving the problems. To ensure replication of a similar study, I enumerate the procedures followed to arrive at the findings and conclusion of this study.

The current study adopted a descriptive research design. Glass and Hopkins (1984) define descriptive research design as one that involves gathering data that describes events and then organises, tabulates, depicts, and describes the data collection. It can be either qualitative or quantitative and in the present study, it is a qualitative research. Mason (2002, 3) defines qualitative research as "grounded in a philosophical position which is broadly 'interpretivist' in the sense that it is concerned with how the social world is interpreted, understood, experienced, produced or constituted". On the other hand, scholars Denzin and Lincoln (2005, 3) define qualitative research "as an interpretive naturalistic approach to the world. This means that qualitative researchers study phenomena in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them". It gives researchers an opportunity to describe what is observed in their own words. The translated Swahili healthcare texts are studied in their natural form and descriptions made thereof. The qualitative design makes use of non-numeric data. In the present case, it is about how the translated texts can be analysed and give a better understanding on how translators solve translation problems and get a glimpse into how linguistic and cultural aspects are presented in English-Swahili healthcare texts.

3.4.2 Data Collection

Data collection involves gathering information to enable a researcher satisfactorily solve the research problem and achieve the set-out objectives of the study. Data used for this study was collected from healthcare centres within Nairobi County, Kenya. The researcher first visited the headquarters of the Health Ministry situated in Nairobi County and after my enquiry on the availability of healthcare texts, was directed to the department in charge of Disease Surveillance and Outbreak Response Unit. At this department, it was confirmed that they are in charge of awareness campaigns and one way of doing it is through written texts that are mostly done both in English and Swahili. I was advised to write a formal letter (appendix 1)

seeking to be granted permission to use ministry texts and address it to the director in charge of the department. After one week, I went for the feedback and was informed that my request had been approved to collect the research texts.

The researcher was, however, informed that they use healthcare centres as their units of distribution of such texts. To enable me access the healthcare centres, I was given a stamped copy of my letter. Thereafter, I made an effort to visit healthcare centres within Nairobi County. I settled on Nairobi County because it is a cosmopolitan county with the highest number of healthcare centres close to each other and thus quite easy to move from one centre to another. I visited 7 healthcare centres within the county and was able to collect Swahili healthcare texts and their English originals. The health centres visited include:

- Dandora Health Centre
- ii. Mathare North Health Centre
- iii. Mukuru Kwa Njenga Health Centre
- iv. Embakasi Health Centre
- v. Bahati Health Centre
- vi. Njiru Health Centre
- vii. Riruta Health Centre

It was established from the visits that the healthcare centres had the same texts as they were supplied by the department on Disease Surveillance and Outbreak Unit at the ministry. Consequently, no further visits were made to the remaining healthcare centres within the county as they could not have added any new texts for this research.

I used total population sampling technique, which falls under purposive sampling, to collect texts for the study. Total population sampling examines the entire population that has peculiar characteristics and in the present case, texts which were on healthcare in English and their Swahili counterparts formed part of the study. This technique is ideal in situations such as the one facing the present study whereby there is a relatively small number of translated Swahili healthcare texts and considering that healthcare texts are usually not long. The 'smallness' of the sample size informs the use of qualitative research method since it affords the researcher an opportunity to do an in-depth examination of the texts in the study.

The researcher eventually collected 12 source texts and 12 target texts of close to 240,020 words in order to unravel their linguistic and cultural aspects and the translation strategies. It is important to note that the texts contain illustrations, which form part of the *Tertium Comparationis* in the present study, which cannot be quantified. The collected healthcare texts cover a range of issues in healthcare. It can be implied from the available healthcare texts that

the Ministry of Health in collaboration with other partners produce texts mostly to create awareness whenever there is an outbreak and also address diseases that are considered a threat and sensitisation of people considered necessary. This explains the relatively small number of Swahili healthcare translated texts. Given that an effort was made to collect all the available texts on healthcare, the texts collected will yield findings that can be representative of the translation of Swahili healthcare texts.

The collected healthcare texts are on the following topics:

Table 3.1: Bibliographic details of selected texts

English Text	Swahili text	Summary of Content	Size of	Publisher
			English/Swahili	and Year
			texts	
Protect your child from Pneumonia	Kinga Mtoto Wako Dhidi ya Ugonjwa wa Nimonia	 how to prevent pneumonia importance of vaccination 	14,815/13,200 words	Hope LLC (2011)
Facts and Feelings about AIDS	Ukweli na Hisia Kuhusu UKIMWI	 Facts about AIDS How to discuss AIDS with your partner Testing and home care 	13,720/12,950	Map International (1999)
Vaccination Campaign	Kampeini Dhidi ya Magonjwa ya Ukambi na Rubella	 What is Measles and Rubella Symptoms and signs of Measles and Rubella Prevention 	7060/6,720 words	Ministry of Health and Partners (2008)
Vaccinate and Protect	Kinga Watoto Wote Chini ya	➤ What is polio?	3,738/3,560 words	Ministry of Health and

English Text	Swahili text	Summary of Content	Size of	Publisher
			English/Swahili	and Year
			texts	
children	Miakatano	➤ Safety of polio		partners
under 5 years	Dhidi ya Polio	vaccination		(2015)
against polio	Kupitia	vaccination		(2013)
agamst pono	Chanjo			
	Chanjo			
You can	Unaweza	> Causes of	3,410/3,100	Ministry of
STOP	ZUIA	cholera		Health and
cholera	Kipindupindu	➤ How to prevent		Partners
		cholera		(2016)
		> Symptoms of		
		cholera		
TT1 1 2	3.6 '1'	FCC 4	2 (22/225	NA: · · · · · · · · · ·
The smoker's	Mwili wa	> Effects of	2,623/2325	Ministry of
body	Mvutaji	smoking	words	Health and
	Sigara			Partners
Wash your	Jinsi ya	> Importance of	825/799 words	Ministry of
hands with	Kunawa	washing hands		health and
soap	Mikono	using a soap		partners
	Kikamilifu			
Iron and folic	Musessa	➤ Iron and Folic	7,674/7,213	Ministry of
acid	Nyongeza ya Iron na Folic	acid	words	Health
	Acid		words	пеаш
Supplements	Acia	supplementation		
		➤ Nutrition		
		demands during		
		pregnancy		
		> IFAS		
		commodity		
		management		

English Text	Swahili text	Summary of Content	Size of	Publisher
			English/Swahili	and Year
			texts	
Malaria	Malaria	> Causes of	2,236/2,175	John
		Malaria		Hopkins
		➤ Four pillars		Bloomberg
		against Malaria		(2011)
Tdap vaccine	Chanjo ya	➤ What is Tdap?	1,674/1613	Ministry of
(Tetanus,	Tdap	➤ Who should get	words	Health
Diphtheria	-	Tdap		
and	(Pepopunda,	➤ Risks of Tdap		
Pertussis)	Dondakoo na	1		
,	Kifaduro)			
Life Skills	Mwongozo wa	Peer education	61,260/64,460	Peace Corps
	Stadi Za	> Facts about	words	(2001)
	Maisha	HIV/AIDS		
		Communication		
		skills		
		Decision making		
		skills		
		Relationship		
		skills		
What You	Unachofaa	➤ What is Cancer?	5632/5973	American
Need To	Kujua Kuhusu	➤ Signs and	words	Cancer
Know About	Saratani	Symptoms of		Society
Cancer		Cancer		(2016)
		➤ Palliative care		
		and pain		
		management		
		➤ Being a		
		caregiver		

After providing the bibliographic details of the selected texts, I proceed to present theoretical preliminary data that will serve as a foundational basis for practical comparative analysis done in chapter 5 of this study.

3.4.3 Preliminary Data

Before carrying out a comparative analysis, it is recommended that some general macrostructural features of the texts be collected so as to serve as a basis for practical macrotextual and microtextual analysis of the translation texts. The information collected helps to provide a glimpse on the nature of translation. I provide, hereunder, the preliminary data for the twelve texts that form the sample of this study and even though Kruger and Wallmach (1997, 122) provide a list of questions whose responses serve as the preliminary data, it is important to note that not all the questions apply in the present study.

First, the Cholera Swahili text is clearly identified as a translation of the English version though the name of the translator is not provided. The text was translated under the patronage of the Kenya ministry of health, National Police Service, Disaster Management Unit, International Organisation for Migration, The World Bank, JICA, Latter Day Saint Charities, Bayer Healthcare and UNICEF. Both the source and target text make use of illustrations. The text also contains footnotes that provide additional information on how to prevent cholera. Superficially, the general strategy used by the translator is one of explicitation whereby the TT has been expanded and some concepts are explained in detail.

Second, the Measles and Rubella text is clearly indicated as a translation and passes as one that the translator employed a complete translation strategy. The name of the translator is not given even though the sponsors of the project are named. The listed sponsors include Kenya ministry of health, Kenya Red cross, unicef, World Health Organisation, Lions International, Latter-Day Saint Charities, Gavi Alliance, USAID and PATH. The text has made use of illustrations but does not have any footnotes.

Third, the hand washing text is identified as a translation of the English version. It does not give the name of the translator though it is indicated that the text was produced under the patronage of Kenya ministry of health, European Union and unicef. The ST and TT extensively use illustrations. On the face value, the general translation strategy used is complete translation whereby all the sections in the ST are in the TT. There is use of footnotes in both the ST and TT.

Fourth, the polio text is identified as a translation of the English ST. The text has all the sections that are in the ST and so it points to a complete translation strategy by the translator. Except for the sponsors of the project, the name of the translator is not provided. The sponsors are Kenya ministry of health, World Health Organisation, unicef, Latter-Day Saint Charities and Kenya Red Cross. Whereas the text makes use of illustrations, there is no use of footnotes in both the ST and TT.

Fifth, the smoking text is a translation done on complete translation strategy whereby everything that is in the ST is presented too in the TT. It is clearly identified as a translation. The name of the translator is not indicated anywhere but the text has been done courtesy of Kenya ministry of health and World Health Organisation. The text makes use of illustrations to pass the message but there are no footnotes.

Sixth, pneumonia text is identified as a translation of the English ST. The translator though not named, went for the general strategy of complete translation. The text is published by Books of Hope LLC and production sponsored by the Kenya ministry of health and GlaxoSmithKline. The text has illustrations from the first to the last page. It is worth noting that the name of the illustration artist is provided. This text also falls under what is referred to as 'speaking books' whereby one can choose to either read or listen to the audio. The audio is both in English and Swahili. The text has a preface only in the English version.

Seventh, the first HIV/AIDS text is identified as a translation and the name of the translator given. It seems the translator made use of the general translation strategy of complete translation given that all the chapters in the ST are in the TT. The text is published by Map International and The Christian Health Association of Kenya. Its production was supported by agencies such as World Health Organisation, unicef, Norwegian Church Aid, TEAR Fund – UK and the Moore Foundation. The name of the translator is given and even that of the writers. The text has illustrations and the name of the illustration artist is provided. The text has no footnotes.

Eight, the second HIV/AIDS text is identified as a translation that has been translated using the general strategy of complete translation. The text was published by Peace Corps but the name of the translator is not given. It was sponsored by the World Health Organisation, UNESCO, and African Health Specialists. The text makes use of illustrations in both the ST and TT. There is a preface in the ST but missing in the TT.

Ninth, the Tetanus, Diphtheria and Pertussis (Tdap) text is clearly identified as a translation whereby the organisation that did the translation is given. The text was produced by US Department of Health and Human Services and Kenya Ministry of Health. The text does not make use of illustrations. The general translation strategy that manifests is complete translation.

Tenth, the Iron and Folic Acid Supplements (IFAS) text is a translation that is identified so with complete general translation strategy. The TT contains all that is in the ST. The text was produced by the Kenya Ministry of Health and the name of the translator is not given. The text makes use of illustrations but no footnotes.

Eleventh, the malaria text is identified as a translation with a complete translation as a general strategy employed by the translator. The malaria safe book was published by John Hopkins Bloomberg. The corporate partners who support the United Against Malaria campaign include Bill and Melinda Gates Foundation and Roll Back Malaria. The text does not have illustrations but has a preface both in the ST and TT.

Twelfth, the cancer text is identified as a translation though the name of the translator is not given. On face value, it seems the translator adopted complete translation as a general strategy. The text is a copyright of American Cancer Society. It was produced by the Kenya Ministry of Health with The John Hopkins Centre for Communication Programs and American Cancer Society providing technical support. Others who took part in its production are Kenyatta National Hospital (KNH), Moi Teaching and Referral Hospital (MTRH) and Kenya Network of Cancer Organisations (KENCO). The text makes use of illustrations and has a preface both in ST and TT.

3.4.3.1 Summary

Emanating from the preliminary data, it is apparent that the Swahili healthcare texts are produced under the patronage of the ministry of health since in all the texts, there is a ministry logo. It cannot, however, go unmentioned that non-governmental organisations fundamentally contribute to the translation of healthcare texts. In fact, more than one non-governmental organisation sponsor a text and that speaks of the indispensable position the organisations hold in the healthcare sector. It is worth noting, nevertheless, that most of these organisations are foreign owned and some are not even based in Kenya. Besides the organisations, religious groups especially the church take part in the production of the healthcare texts. In addition, the use of illustrations in the healthcare texts applies across the ST and TT.

The foregoing section has presented preliminary data from the sample texts at the theoretical level. The preliminary data enumerated above helps in the practical comparative analysis of the sample texts both at the macrotextual and microtextual level in chapter 5. The subsequent section presents the ethical considerations that underpin the importance of adhering to research ethics.

3.4.4 Ethical Considerations

Ethics refers to the norms of conduct that help in discerning between decent and indecent behaviour. It is a crucial consideration in any research and any violation of the ethical considerations at play in any research may void the findings and conclusions reached. A researcher should adhere to all ethical issues in all stages of the research process. Considering that the study makes use of healthcare texts that are public documents therefore means that there are minimal ethical issues encountered. I sought permission from the Ministry of Health to use the texts by writing a letter informing them on the aims of the study after which permission was granted. Equally, I ensured that the integrity of the study was kept by using relevant research methods that are ideal for achieving the aims and objectives of the study. There is no misleading information included in this study and all the information emanate from data and the conclusions reached draw from the findings of the study. Last but not least, all sources have been accurately acknowledged and referenced.

3.5 Conclusion

This chapter has discussed the Toury (1995) DTS model, that forms the bedrock of the current study, in detail and how it is significant in the study. DTS sees translation as a norm governed activity and translated texts are studied with an aim of unfolding how the translation has been done in a given culture and historical moment. The notion of norms has also been discussed in detail and how they dictate translation processes since they are constraints. Toury (1995) identified three types of norms: preliminary, operational and initial whereas Chesterman (1997) came up with product or expectancy norms and process or professional norms. Norms are taken as objects of study in descriptive translation studies that help in distinguishing trends of behaviour and help to make generalisations regarding the translator's decision making process. Another aspect given attention in this chapter is translation universals which are linguistic features that typically occur in translated texts and are independent of the influence of the specific language pairs involved in the process of translation. Those discussed include: simplification, avoidance of repetitions present in the ST, explicitation and normalisation.

Equally, Venuti (1995) strategies of domestication and foreignisation and their implication in translations have been discussed.

In addition, the framework for the description of source text and its translations adopted in the study has been widely discussed and its suitability highlighted. A detailed presentation on Kruger and Wallmach (1997) model and the use of the notion of *Tertium Comparationis* forming the framework for the comparison of the Swahili healthcare texts and their originals has equally been given prominence. It was noted how it is always prudent for one to make sure they are comparing like and like and the significance of beginning with the source text and then moving to the target text even though descriptive translation theorists advise otherwise. This is important in order to account for the translation decisions and the constraints that were at play during the translation process. It was indicated how the gathering of preliminary data is crucial and how the determination of the *Tertium Comparationis* precedes the analysis of texts both at the macrotextual and microtextual levels.

Finally, the research procedures applied in the study have been discussed. It has been noted that the study makes use of the descriptive research design from a qualitative research point of view and how total population sampling was used to identify the data collected. Preliminary data from the sample texts has also been provided. On the same note, I have also pointed out that the current study does not pose serious ethical issues and that notwithstanding, efforts were made to ensure that there is no ethical oversight in all the stages of the research process.

Toury (1978, 200) points out that translation is a sort of activity which unavoidably touches on, at the bare minimum, two languages and two cultural traditions. It is against this backdrop that the next chapter delves into the background of the source and target systems by giving a broader cultural and linguistic context of the English and Swahili healthcare texts.

CHAPTER FOUR

BACKGROUND INFORMATION ON SOURCE AND TARGET SYSTEMS

4.1 Introduction

Having discussed the theoretical and analytical framework together with the research procedures for the description of Swahili healthcare texts in the previous chapter, I will go on to present background information on the source and target systems in this chapter. As earlier stated, this study investigates linguistic and cultural aspects of English-Swahili healthcare texts and as a result, language and culture are pivotal as will be illustrated hereunder. Accordingly, the goal of this chapter is to present detailed information that will aid in better understanding the context of the English-Swahili healthcare translation. The foregoing will be achieved by focussing on: the place of Swahili and English languages in the Kenyan context; structure of the Swahili language; target culture; healthcare in Kenya; and health communication.

4.2 Language and Culture

Language and culture are joined at the hip and they have a central function to play in translation. Kolowe and Sawalu (2008 in Ndhlovu 2012, 22) point out "that the meaning of a single word or expression is largely derived from its culture". This assertion implies that the meaning of words can change in a given culture depending on how they are used over time. Language is the common denominator of any culture and there is no complete culture without language. I take culture to be the mirror of society and whenever one looks in the mirror, language is part of what is seen in that mirror. It is, therefore, prudent for translators to be alive to the fact that translation transcends just knowledge or proficiency in the language pair involved in the act of translation. A translator should be conscious of the changes that take place in a given setting since cultures are not static – they are evolving even faster with the advent of technology and globalisation. The translator ought to have deep understanding of the language pair and target culture not to mention some other skills that are helpful in any translation process. Language is a medium that facilitates socialisation among members of a given setting. Using easily understandable language that conforms to the norms of the inhabitants of a community helps to break boundaries and consequently minimises problems and challenges that would otherwise have been monumental if there were language barriers. It is against such background that this section discusses the place of English and Swahili languages in the Kenyan context and cultural taboos.

4.2.1 The Place of English and Swahili Languages

Both English and Swahili hold an important place in Kenya since they are official languages with Swahili being a national language too. They enhance communication and cohesive coexistence between various inhabitants of the country. I hold the view that language is one of the tools that facilitate a people's enjoyment of fundamental rights in any jurisdiction. It is imperative to note that enjoyment of rights by individuals as enshrined in Chapter 4 of the Kenya Constitution (2010) and for the government to guarantee those rights depends considerably on making use of an accessible language to all. As a matter of fact, the constitution acknowledges that equality and freedom from discrimination and access to information are fundamental human rights. Take, for instance, the right to education and healthcare, there can be no meaningful enjoyment of these rights if the people cannot communicate in a language that is accessible to all. Language can be a tool for marginalisation and empowerment depending on how and to whom it is used. Use of language in communication that only a section can understand relegates the other section to a helpless position and it consequently becomes a violator of people's rights. Language is a weapon that can either defend or harm depending on how it is used but translating texts into different languages, while adhering to the dynamics of the target culture, serves to defend a given people. Translation is an empowering tool that comes in handy to equitably disseminate information in different languages. Even though Kenya is home to more than 43 languages, English and Swahili classified as inflectional and agglutinative respectively, which are the focus in this study, are used by majority of Kenyans.

4.2.1.1 English

The English language is not only considered prestigious but it is equally seen as the language of the educated and crème de la crème in the Kenyan society. It holds sway over all the other languages given that it is the language of transacting business since the pre-colonial days in all government offices. It was the language of the coloniser and so it gained leverage early in the day and even after independence, it retained its predominant status in formal transaction of government business. Suffice to say that the current Kenyan language policy is greatly grounded on the colonial one. English is the language of instruction beginning from upper primary school upwards and some people arguably consider it as the language that guarantees one success in economic and social spheres. Article (7) of the Kenya constitution (2010) identifies English and Swahili as official languages. Hitherto, English was the only official language in Kenya and Swahili the national language. Even though English now shares the same status in the constitution as Swahili, it is, however, not disputable that English is miles

ahead in terms of clout and one's education level is sometimes, wrongly so, derived from the use of English language. English still remains the favoured language and this is evident in the Kenya Constitution (2010) whereby article 259 (2) states that while construing the very constitution and there exists a conflict between different language versions of it, the English language version prevails. That notwithstanding, English still has fewer users as compared to the Swahili language.

The English language equally holds a special position in the Kenyan education system since it is used as the language of teaching in schools. It is examined in both the Kenya Certificate of Primary Education (KCPE) and Kenya Certificate of Secondary Education (KCSE). In addition, it is also used in the tertiary level and for one to be admitted in higher education courses, a given threshold on the grade scored in English is usually a pre-requisite. According to Muaka (2011, 218) the education system in Kenya implements a subtractive bilingualism due to the elevated position of English at the expense of Swahili. The foregoing led Ogechi and Ogechi (2002, 168) to conclude that the Kenyan education system greatly advantages English.

The predominant use of English in healthcare texts is demonstrated by the many texts that cannot be found in other languages. Even though translation into other languages is done, one still finds some texts that are exclusively in English. It cannot also go unmentioned that healthcare texts are first published in the English language before translating them into other languages. The difference between English and the Swahili language present a perfect opportunity for this study so as to understand how translators solve translation difficulties encountered.

4.2.1.2 Swahili

Swahili is a language of Bantu subgroup of the Niger-Congo language phylum, Grimes (1996 in Lindfors 2003, 6). It derives its name from an Arabic word *Sawahil* which means 'coast' and suffice to say that Arabic is the biggest contributor to the Swahili lexicon. In fact, Akidah (2013, 2) states that 30% of the Swahili lexicon is borrowed from Arabic. Arabic and Persian are counted as the early borrowings in Swahili while English counts for the more recent ones. While Persian is considered as one of the early contributors to the Swahili lexicon, it is counted as one of the lesser contributors whereby it precedes the Indo-Aryan languages (of Cutchi/Kachchi, Gujarati, Hindi, Sanskrit), Portuguese, Turkish, German and French, Lodhi (2000 in Petzell 2005, 86). He argues further that currently all the new words added into the

Swahili language are all from English. Notably, unlike other languages that belong to the Niger-Congo family, Swahili is not tonal.

According to Lindfors (2003, 6), the standardisation of the Swahili language was done in 1926 and it adapted the Latin script. It is now spoken in Kenya, Tanzania, Uganda, Rwanda, Burundi, Democratic Republic of Congo, Mozambique, Southern Somalia, Zambia, Malawi, and The Comoros. It is equally spoken in far flung areas such as Madagascar, Southern Oman, Yemen and the Persian Gulf (Lindfors 2003, 7). According to Akidah (2013, 2), Swahili has about 100 million speakers especially in the eastern and southern parts of Africa. The map below adapted from Mwamzandi (2014, 16) illustrates the East African coast of Swahili settlements.

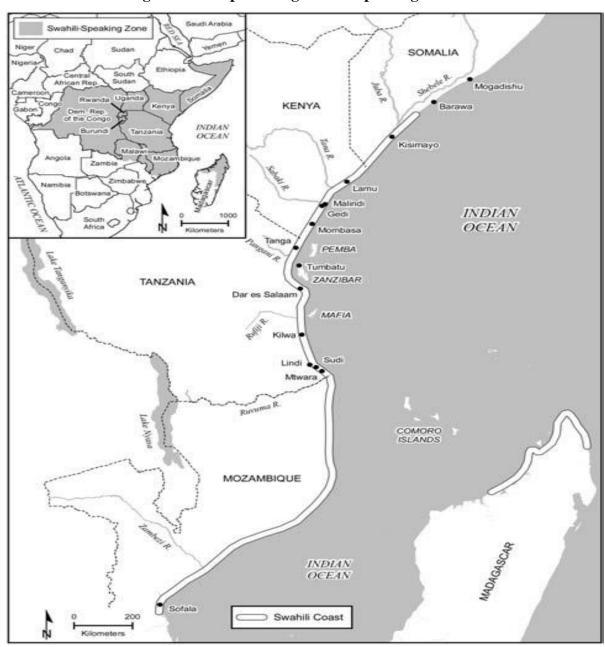


Figure 4.1: Map showing Swahili speaking countries

The refugee factor has also led to the spread of the Swahili language especially into South Sudan and Mogadishu in Somalia. Kenya has been home to many refugees and due to the role of the Swahili language in transacting business in the country, most refugees learn the language and they later spread it to their home countries upon return. The foregoing partly provides an answer to Higgin (2003 in Thompson 2013, 947-948) concern on the high number of non-native Swahili language speakers than native speakers.

In the Kenyan context, Swahili is spoken by the majority and it is considered the language of both the schooled and unschooled. The Swahili language was hitherto a national language but with the Kenya Constitution (2010), it is also an official language together with English. It is the only privileged language that enjoys the status of being not only an official but also a national language. As an official language, it is used for transaction of business in offices, parliament, courts and other formal areas. It is, however, heavily overshadowed by English in official usage despite the fact that Swahili speakers are more than those of English. On the other hand, the status of Swahili as a national language makes it the language of national integration and cohesion. Indeed, the Swahili language breaks ethnic boundaries that exist and greatly enhances communication. This is corroborated by Mazrui (2016, 13) who argues that:

historically Swahili has contributed to the modernisation of East African societies in a number of ways including weakening ethnic loyalties, enabling the urbanisation of individuals, expanding social horizons through new class formations, and fostering greater political participation or involvement of the people in public affairs at various levels.

Ethnicity in itself is not a problem but its politicisation, as argued by Oyugi (2000, 3), has been the overarching cause of conflicts in Kenya since independence. Therefore, the Swahili language facilitates communication among different warring ethnic groups and presents an opportunity for peace making and subsequent peaceful coexistence. In other words, the role of Swahili as a unifying language is indisputable and subsequently many organisations resort to disseminating their information in both English and Swahili.

Swahili is a subject that is compulsory and examinable in both Kenya Certificate of Primary Education (KCPE) and Kenya Certificate of Secondary Education (KCSE). It is also taught in tertiary level institutions. Its performance, however, has not been very impressive and this, in the view of many, is due to the emergence of Sheng language - a corruption of English and Swahili language among other reasons (*The Standard*, 29th September, 2011). The literacy level of people in Swahili notwithstanding, almost everybody in Kenya interestingly understands Swahili. It is the language of both the schooled and unschooled especially in speaking. The

contrast between English and Swahili in Kenya is that if one has not gone to school, they cannot converse in English but they can do in Swahili. While English is taken to be the language of the learned, it is Swahili which equalises people in terms of communication.

Whereas English is the language of transacting international business, the Swahili language is used for everyday business in Kenya. One can argue, as regards the Swahili language, if you want information to reach a wider audience then put it in the Swahili language. The spread of Swahili in Kenya can be attributed to the fact that many people from different ethnicities have settled in different parts of the country and the only way that enhances communication between them is through the use of Swahili. It is therefore evident that many people learn the Swahili language through immersion. It is needless to say, therefore, that stakeholders in the health sector cannot afford to ignore the Swahili language in the provision of services. Of particular concern here are awareness campaign texts that are originally written in English and later translated into Swahili so as to reach as many people as is humanly possible. In the same spirit as that of the health sector stakeholders, it is incumbent upon scholars in the translation sector to look into these translated texts with an aim of ascertaining the factors that are usually at play when translating and how the translator navigates them.

The health sector has embraced a language policy whereby texts prepared in English are made available in Swahili – though this is not fully implemented since there are texts whose Swahili counterparts could not be found. Even the headquarters of the health ministry is named *Afya House* which means *Health House* pointing, to some extent, the status assigned to Swahili by the ministry.

The place of the Swahili language is fast widening not only in East Africa and Africa as a whole but also globally. In fact, to illustrate the expansion of the Swahili language, major international media companies such as British Broadcasting Corporation (BBC), Voice of America (VOA), Deutsche Welle (DW), and Radio China International (RCI) among others have programmes that broadcast in Swahili. In addition, quite a good number of African universities and beyond now teach the Swahili language. In East Africa, especially in Kenya and Tanzania, almost all universities teach the Swahili language. The universities beyond Africa that teach the language include but are not limited to: Harvard, Princeton, Yale, Massachusetts Institute of Technology, Stanford, University of Chicago, SOAS University of London among others. The teaching and broadcasting of the Swahili language has enormously

propelled the Swahili language in terms of research and also led to the exponential growth of its speakers.

Another recent major breakthrough by the Swahili language is its recognition by Twitter, a social networking site, as a language whose words are detected and translated. Previously, Twitter used to wrongly identify the Swahili language as Indonesian. This recognition put Swahili at an advantaged position since it is the first African language to be accorded the status. Still on breakthroughs, the Council of Education Ministers in South Africa approved the teaching of Swahili as a second language to learners beginning the year 2020. They pointed out that the teaching of Swahili in South Africa will help to promote social cohesion with fellow Africans (The Sowetan, 17 September, 2018). The step taken by South Africa fits well in the recommendation made by Ouane and Glanz (2010, 10) on the need to normalise multilingualism to enhance social cohesion and serve the social vision of a given country. It is important to mention here that Swahili forms part of the working languages of the African Union – a continental union of 55 countries in the continent of Africa. That said, I want to point that all languages spoken by citizens in Africa are defined as official by the African Union but Swahili together with French, English, Arabic, Spanish and Portuguese are currently used. This obviously puts the Swahili language at an advantaged position and its growth is guaranteed not only in Africa but also across the borders of Africa. Ironically, the African Union does not use Swahili in any of its communiqués in spite of doing so in English, French and Arabic. Even its website is in those three languages. This begs the question on how a language can be adopted as an official and working language and yet the same body does not use it in its communication to the public. This points to a problem that is hampering a number of indigenous languages that are recognised on paper and their functions enumerated but no implementation is done. Let me hasten to point out that the AU does in some occasions use Swahili in its plenary proceedings. That notwithstanding, the Swahili language has a potential to spread even further in Africa if there is full implementation of Africa Continental Free Trade Area (AfCTA) agreement – which majority of the member states signed in 2018 - since it will ensure that the artificial economic barriers that divide countries in the continent are done away with. The aftermath of the removal of barriers points to increased interaction of peoples from different countries and that interaction can be meaningful when there is a language that facilitates communication. Similarly, in an effort to promote indigenous languages and elevate them from just being used for only purposes of communication but also to transact business, South African Development Authority (SADC) has adopted Swahili as its fourth official language after English, French and

Portuguese (https://www.sanews.gov.za/south-africa/language-board-commends-sadc-recognition-kiswahili). No other language, at least as things stand out now, stands a better chance to enhance integration than Swahili.

At a time when most African indigenous languages are dying and getting endangered (Mberia, 2014, 127) – due to adoption and adaptation of other languages – Swahili provides an array of hope that at least there is a language which is being embraced and has a high potential of spreading all over the world. Swahili will continue to redefine the identity of those who embrace it. In spite of the flourishing of the Swahili language, African languages stand at a very fragile position due to the embrace of foreign languages which are the languages of instruction in schools.

Having provided some background information to better understand the Swahili language, the next section discusses the Swahili structure.

4.2.1.2.1 Swahili Orthography

The Swahili language was hitherto in Arabic script but it now uses the Latin script. The language does not distinguish aspirated consonants and this is considered quite defective on its part. I hereinafter provide a table that shows the Swahili phonemes, IPA symbols, and grapheme to help in understanding how the language is currently written.

Table 4.1: Swahili phonemes, IPA symbols and grapheme

Phonemes	IPA Symbols	Grapheme
Vowels	$[i, \varepsilon, a, u, o]$	a, e, i, o ,u
Voiced bilabial stops	[b]	b
Voiceless postalveolar stop	[tʃ]	ch
Voiced alveolar stop	[d]	d
Voiced dental fricative	[ð]	dh
Voiceless labiodentals fricative	[f]	f
Voiced velar stop	[g]	g
Voiceless glottal fricative	[h]	h
Voiced palatal stop	[f]	j
Voiceless velar stop	[k]	k
Alveolar lateral	[1]	1
Bilabial nasal	[m]	m
Alveolar nasal	[n]	n

Phonemes	IPA Symbols	Grapheme
Velar nasal	[ŋ]	ng'
Palatal nasal	[n]	ny
Voiceless bilabial stop	[p]	p
Alveolar trill	[r]	r
Voiceless alveolar fricative	[s]	S
Voiceless postalveolar fricative	[J]	sh
Voiceless alveolar stop	[t]	t
Voiceless dental fricative	[θ]	th
Voiced labiodental fricative	[v]	v
Velar approximant	[w]	W
Palatal approximant	[j]	у
Voiced alveolar fricative	[z]	Z
Prenasalised bilabial stop	[mb]	mb
Prenasalised alveolar stop	[nd]	nd
Prenasalised velar stop	[ŋg]	ng
Prenasalised alveolar stop	[lt]	nj
Voiceless velar fricative	[x]	kh
Voiced velar fricative	[γ]	gh

> Morphosyntax of Swahili

The Swahili language is agglutinative in nature whereby it largely makes use of prefixing and suffixing. Swahili has SVO as the unmarked word order. Since this study looks at the linguistic aspect of Swahili healthcare translated texts, this section discusses morphology and syntax from the Swahili language perspective.

> Nouns and Noun Classes

Swahili has many noun classes and nouns are classified into singular and plural class morphemes. A noun class is crucial since it obliges verbs and adjectives, which are word classes, to agree with the head of the noun phrase. Each of the noun class has its semantic categories. The table below shows the noun class, semantic category, nominal prefixes and examples in each noun class.

Table 4.2: Noun class, semantic category and nominal prefixes

Noun	Semantic category	Nominal	Examples
class		prefixes	
1	Animate (SG)	m-	Mgonjwa
			'patient'
2	Animate (PL)	Wa-	Wagonjwa
			'patients'
3	Names of trees, plants, body parts,	m-	Mti 'tree'
	Human activities		Mgongo 'back'
4	Plural form of noun class 3	mi-	Miti 'trees'
			Migongo
			'backs'
5	Names of fruits, some parts of the body,	Ji-	Ji-no 'tooth'
	everyday objects, augmentatives, persons		
6	Plural of class 5	Ма-	Me-no 'teeth'
7	Everyday objects, diminutives, persons	Ki-, ch-	Ki-ti 'chair'
			Ch-ama 'party'
8	Plural form of class 7	vi-, vy-	Vi-ti 'chairs
			Vy-ama
			'parties'
9	Inanimate nouns with nasals as initial segment	n	Nyasi 'grass'
			Nyumba
			'house'
10	Plural forms of class 9 and 11	n	Nyumba
			'house'

Noun	Semantic category	Nominal	Examples
class		prefixes	
			Nyasi 'grass'
11	Nouns of objects	u-	Uvimbe 'swelling'
			Ubongo 'brain' Usaha 'pus'
14	Abstract nouns	u-	U-ongo 'lie'
15	Nominalised verbs	Ku-	Ku-tibu 'to treat'
16	Locative of specific place	Pa-	Pa-hali
17	Locative of unspecified place	Ku-	Kw-ahali
18	Locative of inside	Mu-	Mw-ahali

It is worth mentioning that in conforming with Meinhof's reconstruction of proto-Bantu languages, the listing of class 12 and 13, though unattested, have been maintained in the Swahili language (Mwamzandi, 2014, 9).

According to Carstens (1991 in Mwamzandi 2014, 10), nouns generally precede their modifiers and complements save for demonstratives. Class prefixes that agree in terms of class with the noun that is being modified to the root of the adjective in question form descriptive adjectives in Swahili (Mwamzandi 2014, 10). For example, adjectives —*baya* (bad), -*zuri* (good), -*kongwe* (old) can be used with nouns as follows:

M-linzi m-baya huiba dawa kutoka hospitali. (A bad guard steals medicine from the hospital.)

Walinzi wa-baya huiba dawa kutoka hospitali. (Bad guards steal medicine from the hospital.)

M-zazi m-zuri huchukua mtoto kliniki. (A good parent takes a child to clinic.)

Wazazi wa-zuri huchukua watoto kliniki. (Good parents take children to clinic.)

M-gonjwa m-kongwe huwa wa kwanza kutibiwa. (An old patient is the first to be treated.)

Wagonjwa wa-kongwe huwa wa kwanza kutibiwa. (Old patients are the first to be treated.)

The above examples show how the adjective in Swahili is always preceded by the noun and that there must be agreement between the class prefixes and the noun being modified.

The Swahili Verb

SVO is the basic Swahili sentence order whereby agreement markers corresponding to the noun class of the subject and object of the noun phrase are prefixed to the verb stem (Mwamzandi 2014, 17). The Swahili verb can also on its own function as a whole sentence. When comparing the Swahili and English verb, it becomes evident that the former is more complex because it contains a number of derivational and inflectional morphemes that are attached to the verb root. Inflectional morphemes mark negation, tense, reflexivisation, and relative marker while the derivational morphemes mark reciprocal, causative, passive, static, stative, reversive, and relative marker. Swahili verbs have a final position vowel *a* that is taken as a word ending morpheme even though there are a few exceptions (ibid. 17). Below is the general affixes position in the verb root by Abuom and Bastiaanse (2013, 926).

Pre-prefix (Pp) + Subject prefix (Sp) + Tense marker (T) + Object Prefix (Op) + ROOT + derivation (d) + Suffix (s) + Post-suffix (Ps).

Alimfunza

$$A + li + m + funz + a$$

 $Sp T + Op + ROOT + d$

S/he taught him/her.

Hatutamfunza

$$Ha + tu + ta + m + funz + a$$
 $Pp + Sp + T + Op + ROOT + d$

We will not teach him/her

Tunafunzana

$$Tu$$
 + na + $funz$ + a + n + a

$$Sp$$
 + T + $ROOT$ + d + S + Ps

It is evident from the above examples that the Swahili verbal element can function as a whole sentence and this is key in describing translations. Due to its agglutinative nature, one Swahili word can capture what has been said using five or so words in English.

After discussing language and especially giving prominence to the Swahili language, the next section presents information on culture and how it affects translation.

4.2.2 Culture

Article 11 of the Kenya constitution (2010), gives recognition to culture as the foundation of the nation and as the cumulative civilisation of the Kenyan people and nation, and tasks the state to ensure adherence and respect to diverse cultures. Leininger and MacFarland (2000) argue that culture is learned, shared and transmitted values, norms, beliefs and life ways of a particular group that guide their thinking, decisions, and actions in patterned ways. Culture has a huge stake in translation which cannot be overemphasised. There is no translation without culture. On his part, Toury (1995, 29) notes that translations are facts of target cultures that host them. Clearly, translators exist in cultures and their work is a pattern drawn by the operating culture: something which cannot be ignored. The argument of culture guiding translations is corroborated by Ndlovu (1997, 1) who contends that culture conditions the behaviour of the people of a society and is reflected in the language they speak and write. Accordingly, a translation cannot be read and have the intended impact if there is no reflection of the target audience's culture. Culture in translations is the means that justify the end. It shapes to a great extent the final product in the translation process.

Culture is what distinguishes one group from another and for the group to maintain its uniqueness, then the values of the said group should be recognised and protected. As such, the same is expected in translations and target cultures which considerably determine the reception of translations by the target audience. As was noted by Langacker (1999, 16), a cognitive linguist, language is a fundamental instrument and essential component of a particular culture and is pervasively reflected in linguistic structure. Accordingly, the nexus between culture and

^{&#}x27;We are teaching each other'

language cannot be ignored in translations and this is in line with Toury (1995) who asserts that translations, after all, always come into being within a certain cultural environment and are designed to meet certain needs of, and/or occupy certain 'slots' in it. He postulates further that "translators may be said to operate first and foremost in the interest of the culture into which they are translating, however they conceive of that interest".

The translator, therefore, becomes a cultural mediator who ensures that translations correspond to the target culture's expectations without traumatising them. A translator should not just be a bilingual speaker and this is contrary to Steiner (1975, 45) who defined one as "a bilingual mediating agent between monolingual communication participants in two different language communities". I, however, point out that being proficient in the two languages at play in a translation only forms part of what makes one a competent translator. There are many other factors that inform a translation process and Steiner's (1975) definition seems to leave out culture and lays its emphasis on just language. The fact that one is good at Swahili and English should not be construed as the threshold for becoming a translator. Looking at a translator as a cultural mediator, Taft (1981 in Katan 1999, 12) observes that:

a cultural mediator is a person who facilitates communication, understanding, and action between persons or groups who differ with respect to language and culture. The role of the mediator is performed by interpreting the expressions, intentions, perceptions, and expectations of each cultural group to the other, that is, by establishing and balancing the communication between them. In order to serve as a link in this sense, the mediator must be able to participate to some extent in both cultures. Thus, a mediator must be to a certain extent bicultural.

The view by Taft (1981) appreciates both language and culture and introduces the concept of biculturalism which can be defined as the ability of a translator to be conversant with the cultures of the language pair in a translation. In an effort to exhibit the inadequacy of bilingualism as the threshold for a translator, Taft (1981 in Katan 1999, 12) goes further and gives a list of competencies that a translator should possess in the language pair cultures. They include:

- knowledge about society: history, folklore, traditions, customs; values, prohibitions; the
 natural environment and its importance; neighbouring people, important people in the
 society, etc.;
- communication skills: written, spoken and non-verbal;
- technical skills: those required by the mediator's status such as computer literacy, appropriate dress, etc.;

• social skills: knowledge of rules that govern social relations in a society and emotional competence, e.g. the appropriate level of self-control.

From the competencies given above, it follows that translation is presented as a solution to two varying languages in which mediation is necessary. Yet one cannot mediate between cultures if: there is no sufficient knowledge on the practices of a given society – for instance, availability of other traditional healthcare options; is not a coherent communicator; lacks awareness of the social skills and norms that dictate how people behave in a culture; and finally, has zero skills on typing, proofreading, editing and generally computer literacy skills. It should not be that instead of mediating between cultures, a translator produces a translation that flouts the very basic tenets of the receiving culture and beats the logic of translation itself. A translator should not be a violator and possession of the above listed competencies makes him or her non-violent towards the target culture. For the translator of English healthcare texts into Swahili, he or she must understand the Kenyan culture and its values, be conversant with both languages and have the ability to apply technical skills apt in the translation process.

It is possible to unknowingly stereotype a given group when translating and this is one aspect that a translator should be alive to. Stereotypes are sometimes hard for one to be aware of, especially if one is not an insider in a given culture and this without doubt emphasises the fundamentality of a translator being a cultural insider of the target culture in the translation. It is appreciated that whereas there can be accurate stereotypes, inaccurate stereotypes lead to miscommunication (Zhang and Deng 2009, 25). Some aspects of culture are stereotypical and a translator's lack of awareness may end up antagonising the target audience. To stereotype unknowingly may also be referred to as subconscious prejudice to the target readers and the end product of a translation will most likely lack credibility. In this way, the translated texts are not able to solve the intended problem but instead compound it.

There has been a debate on whether culture and cultural diversity refer to one and the same thing. It is fundamental that a distinction is made at this stage due to the nature of the Swahili language in Kenya. Kenya has 43 and more ethnic groups which speak different languages with their distinct cultures, but Swahili translations in the Kenyan context are meant for all the ethnic groups who are assumed to share cultural beliefs not as ethnicities but as Kenyans. The sharing of Swahili by the Kenyans puts them in the same linguistic community and consequently the same culture. This paints a scenario of a culture within a culture. As such, the Swahili translations are meant for a cultural diversity which is defined by Hamde (2008) as a

description of all the people in a society and their own individual cultures. What comes out is that we can have a hierarchy of cultures in a given setting that range from age, race, economic class, religious affiliation to political orientation.

The role of culture in healthcare is also enormous given that how people perceive health problems, and how they process and understand health information is influenced, to a certain extent, by culture. Culture provides the framework through which different groups solve problems.

While appreciating the fact that the 43 and more ethnic communities cannot share absolute culture, I discuss hereunder taboos as seen from the Kenyan culture lens.

4.2.2.1 Taboos

Taboos refer to what cannot be discussed openly due to a possible cause of embarrassment but is rather done in hushed tones especially among equals. They act as a remote control over a people of a shared culture. Crystal (1995, 172) defines taboo as items which people avoid using in polite society, either because they believe them harmful or feel them to be embarrassing or offensive. Taboos are dictated by culture and they limit what is discussed and how it is done. Luffin (2002, 356-357) avers that in every language, some things or concepts, although they do have a specific denomination should not be named in certain circumstances. Such circumstances demand that one chooses another word or a periphrasis, despite knowing the proper word. Luffin (2000) further says that the behaviour to avoid using a specific word is motivated by politeness and fear. This implies that people do not want to offend others knowingly and that desire to be polite compels one to use an alternative word that is acceptable. The repercussions of using a word considered taboo also play a part in choosing one word over another. Though taboo words are not used, one has to be conscious of them lest their usage lead to resentment of the intended message.

Applied in the realm of translation, taboos are constraints that must be overcome by the translator. The translator cannot therefore claim to do an acceptable translation in the target culture if he or she is not conversant with the taboos at play. Taboos are there to be remembered by the translator but not to be used. It is apparent from the foregoing that taboos shape translations since they prescribe what can and cannot be included in the target text. Translation in healthcare has a lot of areas that can be considered sensitive and some of them are not referred to by their names lest one goes against the culture of the target audience. There are

taboos in the Kenyan context that in one way or the other influence the way a health message is translated, understood and put into use.

Discussing anything to do with sex in the Kenyan culture is considered taboo except in marriage between couples and adults of the same age set. And whereas it was a common practice for parents including uncles and aunts to discuss issues relating to sex with their children who were transiting into adulthood, the practise has gradually waned and topics to do with sex are avoided between parents and their children. The situation is not any different in the media since they do not discuss sex related issues directly but rather resort to euphemisms in order to avoid going against the norms of the society. When looking at the language pair in this study, you find that English is more direct in expression of concepts to do with sex as opposed to Swahili which can be said to be conservative. For instance, a question such as: *How many times do you have sex with your wife in a week?* This is in some instances translated as: *Ni mara ngapi mnafanya tendo la ndoa kwa wiki?* Back translated as: *How many times do you do the act of marriage?* The reluctance to discuss sex openly demands that a translator becomes aware of the existence of the taboo since it is a constraining factor in the translation process.

Some sexually transmitted diseases such as gonorrhoea and syphilis are not openly called by their names. Any discussion on them is limited and this can be traced to the manner in which they are contracted. Folosayo et al (2017) point out that sex related matters and sexually transmitted diseases are considered taboo and subjects in their case study were not open in discussing in them. There is, however, a difference on how they are expressed in spoken and written discourse. In written, there is largely free expression of the concepts as opposed to spoken.

Some parts of the body are also considered taboo and are not referred directly by their name. One is considered bad mannered if they refer to both female and male reproductive organs by their name. While the English texts can refer to the male organ for urination and copulation by its name *penis*, that is not the same with Swahili which instead of referring to it as *mboo* opts for *uume* or *sehemu ya siri ya mwanaume*, a euphemism that can back translated as *manhood* and *a man's private part*. Another part of the body that is considered taboo is the *anus* which in Swahili is *mkundu* but it is euphemistically referred to as *nyuma*. Besides the body parts mentioned herebefore, all the other body parts like head, hands, legs, stomach and others can be discussed without any prohibition. Bearing in mind the parts considered taboo are sometimes found in healthcare texts, it is incumbent upon the translator to come up with a

translation that is acceptable and avoid making use of terms that may be considered vulgar or too explicit for the receiving culture to consume.

Condoms are also regarded as taboo. Whenever the health sector is running campaigns sensitising people on the importance of using protection when having sex, they do not in some instances refer to the condoms by their real name. For instance, *use a condom every time you have sex* can be translated as *tumia mpira kila wakati unapofanya tendo la ndoa*. This can be back translated as *use a rubber every time you do an act of marriage*. Clearly, it can be seen that instead of referring to a condom as *kondomu* in Swahili, *mpira* which is a euphemism is used and it, therefore, points to the importance of a translator understanding the norms of a given society. It is also worth to mention that condoms are considered taboo by the Catholic Church because they do not form part of the church's doctrine.

I conclude this section on culture by generally stating that addressing cultural needs of the target audience comes with its challenges that definitely require the translator to amicably mediate. It is, therefore, incumbent upon a research such as the current one to describe how translators navigate various hurdles that are culture-placed and that can render a translation unacceptable, if ignored.

The next section provides a brief overview of the healthcare system in Kenya.

4.3 Healthcare in Kenya

Healthcare in Kenya is under the Ministry of Health which is headed by a Cabinet Secretary. Kenya has a two-tier system of government which comprises of the national and county governments. In this setting, some government functions are done by the national government whereas others are devolved to the county governments. According to the Fourth Schedule of the Kenya Constitution (2010), healthcare is one of the devolved functions and each of the 47 counties in Kenya is in charge of planning, partly financing, monitoring and coordinating delivery of health services in the respective counties. The counties are actually the units where service delivery and resource allocation take place. The national government is in charge of policy and national referral services.

Besides the two levels of government, the church has equally invested heavily in the healthcare sector by running a number of hospitals. It runs and fully funds hospitals and health centres in various communities. The church is, therefore, at the centre of healthcare and whenever it raises issues, they are taken into consideration by other stakeholders. For instance, the church in

Kenya has been known to oppose some government initiatives such as vaccinations on the allegation that they are dangerous. In addition, there are also international organisations such as the World Health Organisation, USAID, and other non-governmental organisations that fund health related projects. Consequently, most healthcare texts are written and translated by these organisations in conjunction with the ministry of health.

The private sector has also immensely invested in the health sector through hospitals and medical schools. The contribution of the private sector can best be illustrated using the total healthcare expenditure of 2012/13 financial year which, according to Kenyan Healthcare Sector Report (2016, 19), indicated that the public sector, private sector and development partners accounted for 34%, 40% and 26% respectively. Moreover, private hospitals are arguably better equipped than public hospitals and their services are preferred in terms of quality. They are, however, not frequented by people from all walks of life in the society since they are way more expensive than public hospitals. This is the reality of the healthcare provision in the country whereby the haves have access to quality healthcare as opposed to the have-nots. That notwithstanding, the private sector is key in provision of healthcare services and it also eases the burden that would otherwise have been placed on the already overburdened public hospitals and health centres.

The bill of rights in the Constitution of Kenya (2010) advocates for attainment of the highest possible health standards for every Kenyan. As a result, the Kenya Health Policy (2014-2030) has defined a set of policy objectives and orientations to be attained in order to accelerate improvements in the health of Kenyans (WHO report). The report also points out that the country still faces a disease burden due to all major disease domains – communicable conditions, non-communicable conditions and violence. It is also noted in the report that there have been significant efforts to improve the management and availability of health information but hastens to add that the absence of non-interoperability of various actors in information dissemination has been a major challenge.

The foregoing has provided some background on healthcare in Kenya by showing that besides the Kenyan government and county governments, the church, non-governmental organisations and world bodies play a fundamental role in the provision of healthcare services in the country. Bearing in mind that translated healthcare texts perform a communicative function, the next section gives some basic attributes of healthcare communication.

4.4 Healthcare Communication

Healthcare communication plays a crucial role in healthcare awareness campaigns to sensitise the populace on infectious, communicable and even chronic diseases. Health communication is defined as "an art of informing, influencing, and motivating individual, institutional and public audiences about health issues through planned learning experiences based on sound themes", (Ratzan et al 1994, 362). They further argue that the aim is to improve disease prevention, health promotion, healthcare policy, and the business of healthcare as well as the enhancement of the quality of life and health of individuals within a community. On the other hand, Rogers (1996, 15) defines health communication as "any type of human communication whose content is concerned with health". Bottomline, I take healthcare communication to be dissemination of health-related information with an aim of creating awareness and demystifying health issues to the populace. Translation of healthcare texts into different languages is one way through which healthcare communication is enhanced since every translated text reaches more audience that would otherwise have been marginalised by language.

World Health Organisation (WHO) has specified accuracy, availability, balance, consistency, cultural competence, timeliness and understandability as attributes to consider in a health program. They precisely mean:

- accuracy the content is valid without errors of fact, interpretation or judgement;
- availability made accessible for the audience;
- balance clear representation of benefits and risks;
- cultural competence accessible to everyone and accounting for minorities (ethnicities, education, income etc);
- timeliness supply information when there is a high demand;
- understandability a language and reading that is appropriate for the specific audience.

The attributes above should be adhered to by the translator and it is of interest to know how a target text is arrived at in spite of the challenges posed. Either way you look at it, communication impacts on healthcare for better or worse and this is enhanced by translation of health information into different languages.

As was discussed in the previous chapter, this research delves into healthcare texts that touch on a myriad of healthcare concerns. I consider it prudent to provide hereafter some background knowledge on those healthcare areas as got from the World Health Organisation (WHO) website.

4.5 Topical Areas in Sample Texts

This section gives a sneak peek of the healthcare areas covered by the texts that were selected to form part of the study. This is done so as to acquaint on the areas that are of concern in the effort to provide global universal healthcare. The information provided hereafter has been obtained from World Health Organisation website (http://www.who.int/news-room/fact-sheets) and it touches on Cholera, AIDS, Measles, Rubella, Polio, Tetanus, Cancer, Tobacco (smoking) and Pneumonia.

> Cholera

Cholera is an acute diarrhoeal infection caused by ingestion of food or water contaminated with the bacterium *vibrocholerae*. It takes between 12 hours and 5 days for a person to show symptoms after ingesting food or water and the disease affects both children and adults. Cholera can kill within hours and researchers estimate that there are 1.3 million to 4.0 million cases reported each year with 21,000 to 143,000 deaths worldwide.

The current pandemic of cholera originated from Asia in 1961 and reached Africa in 1971. The infected can be treated using oral rehydration solution.

> HIV/AIDS

The Human Immunodeficiency Virus (HIV) targets the immune system and weakens people's defence systems against infections and some types of cancer. The most advanced stage of HIV infection is Acquired Immunodeficiency Syndrome (AIDS) which can take from 2 to 15 years to develop depending on the individual. It is a major global public health issue having claimed more than 35 million lives so far. There was an estimated 36.9 million people living with HIV at the end of 2017 with 1.8 million people newly infected globally. The African region is said to be the worst hit with 25.7 million people living with HIV in 2017. So far, there is no cure for HIV though the use of effective antiretroviral (ARV) drugs can control the virus.

> Measles

Measles is a highly contagious, serious disease caused by a virus that is passed through direct contact and through the air. It is spread by coughing and sneezing, close personal contact or direct contact with infected nasal or throat secretions. Young children who are unvaccinated

stand the highest risk of contracting measles and its complications, including death. Even pregnant women who are unvaccinated are also at risk. There is no specific antiviral treatment that exists for measles virus. However, it can be prevented through vaccination. Measles is still prevalent in Asia and Africa.

≻ Rubella

Rubella is an acute contagious viral infection that mostly affects children and young adults. It also affects pregnant women and can cause miscarriage, foetal death, stillbirth or infants with congenital malformations. The disease is transmitted by airborne droplets when infected people sneeze or cough. After infection, the virus spreads throughout the body in about 5-7 days. There are rubella vaccinations.

> Polio

Polio is a highly infectious disease caused by a virus. It mainly affects children under 5 years of age. Polio has no cure but can be prevented. 1 in 200 infections leads to irreversible paralysis. Polio is transmitted by person-to-person spread mainly through the faecal-oral route or, less frequently by contaminated food or water and multiplies in the intestines. The danger of the disease is that as long as a single child remains infected, children in all countries are at a risk of contracting polio. There were only 22 cases reported globally in 2017.

> Tetanus

Tetanus is an acute infectious disease acquired through infection of a cut or wound with the spores of the bacterium clostridium tetani. Most cases occur within 14 days of infection. It cannot be transmitted from one person to another. Whereas anyone can get tetanus, the disease is particularly common and serious in new born babies and pregnant women who have not been sufficiently immunised. Tetanus can be prevented through immunization although people who recover from tetanus do not have natural immunity and can be infected again. The disease remains a public health problem in many parts of the world especially in low-income countries where immunisation coverage is low and unclean birth practices are common.

> Tobacco (Smoking)

Tobacco epidemic is one of the biggest public health threats the world has ever faced killing more than 7 million people in a year. WHO says it kills up to half of its users and of the 7 million deaths, 6 million are as a result of direct tobacco use while around 890,000 are as a result of non-smokers being exposed to second-hand smoke. Second-hand smoke is the smoke that fills restaurants, offices or other enclosed spaces when people burn tobacco products such as cigarettes. It is worth mentioning that 80% of the world's 1.1 billion live in low- and middle-income countries. WHO advocates for the use of graphic pack warning and hard-hitting antismoking advertisements as a strategy to reduce the number of children who want to join smoking and also increase the number of those quitting it.

Pneumonia

Pneumonia is a form of acute respiratory infection that affects the lungs. It is the single largest infectious cause of death in children worldwide. It can be caused by viruses, bacteria, or fungi. The viruses and bacteria are commonly found in a child's nose or throat and can infect the lungs if they are inhaled. It is also spread through air-borne droplets from a cough or sneeze including through blood, especially during and shortly after birth. Pneumonia accounts for 16% of all deaths of children under 5 years old and even though it affects children everywhere it more prevalent in South Asia and Sub-Saharan Africa. Children can be protected from pneumonia. They can also be prevented from pneumonia by immunisation, adequate nutrition, and by addressing environmental factors.

➤ Iron and Folic Acid Supplements (IFAS)

According to WHO (2012) report, it is estimated that 41.8% of pregnant women worldwide are anaemic and at least half of that percentage is assumed to be due to iron deficiency. A pregnant woman is considered to be anaemic if her haemoglobin concentration is low. Low haemoglobin concentrations indicative of moderate or severe anaemia during pregnancy have been associated with an increased risk of premature delivery, maternal and child mortality, and infectious diseases. During pregnancy women need to consume additional iron to ensure they have sufficient iron stores to prevent iron deficiency. Daily oral iron and folic acid supplementation is recommended as part of the antenatal care to reduce the risk of low birth weight, maternal anaemia and iron deficiency. Pregnant women in most low- and middle-

income countries extensively use iron supplements to prevent and correct iron deficiency and anaemia during gestation.

Kenya has a national policy guideline on combined iron and folic acid supplementation for pregnant mothers. The policy outlines that its purpose is to reduce: maternal anaemia, risks of low birth weight, neural tube defects in pregnancy and to improve overall pregnancy outcomes.

> Cancer

Cancer is a generic term that refers to a large group of diseases that can affect any part of the body. It is also referred to as malignant and tumour neoplasms. Cancer's most prominent feature is the rapid creation of abnormal cells that grow beyond the usual boundaries and which can then invade adjoining parts of the body and spread to other organs. The most common cancers are lung, breast, colorectal, prostate, skin and stomach cancer.

Cancer is actually the second leading cause of death globally whereby it accounted for 9.6 million deaths in 2018 alone. It is touted that 1 in 6 deaths that occurs is cancer related. Around one third of deaths from cancer can be traced to five leading behavioural and dietary risks: high body index mass, low fruit and vegetable intake, lack of physical activity, tobacco and alcohol use. Of all these, tobacco poses the greatest risk factor for cancer and is responsible for 20% of cancer deaths.

> Hand washing

Washing hands is one of the most efficient ways of getting rid of germs and subsequently protecting oneself from getting sick. People contract diseases due to failure to: wash hands before handling any food; wash hands before and after eating; wash hands after visiting the toilet; touching surfaces that could be contaminated among others. Creating awareness on the need to wash hands using a soap is seen as one of the cheapest ways of curbing spread of germs that otherwise cause diseases that can be very expensive to treat.

Inasmuch as this work is done in a linguistic department, the contribution of language in healthcare is enormous and the above information tremendously helps one to understand the import of translation and the context in which it takes place. Failure to put information regarding the above discussed areas in a language that can be understood by all that are targeted definitely defeats the logic of coming up with the very information in the first place. Some of the health problems discussed above can actually be prevented if people are sensitised about

them and this sensitisation is only possible in a language that is accessible to the target population. It, therefore, goes without saying that translation makes health information accessible and helps in promoting the achievement of healthcare information dissemination objectives.

4.6 Conclusion

This chapter has presented the background information that contextualises the study. I generally focused on language and culture and their effect on the translation process. It was demonstrated how language and culture are enjoined and how a translator's work is made easier by having deep knowledge on the two aspects especially on the target culture. On the same note, I, first, particularly discussed the place of English and Swahili languages in the Kenyan context as official languages with the latter being also a national language. The Swahili orthography, morphosyntax was also given attention and illustrations given to justify the classification of the language as agglutinating.

Second, what I loosely referred to as Kenyan culture was delved into with a background on how culture informs translations. It was noted how taboos are dictated by culture and thereafter taboos on sex, body parts, use of condoms, and sexually transmitted diseases on the Kenyan context discussed. Third, healthcare in Kenya was highlighted with a focus on the funding and the role of the government, the church and private sector in the state of healthcare in the country. Fourth, the attributes of accuracy, availability, balance, consistency, cultural competence, timeliness and understandability in healthcare communication and their nexus to translation was discussed. Finally, the topical areas covered by the sample texts in the study were presented as put up by the World Health Organisation (WHO). Overall, the chapter has provided insights to help understand the environment in which the translation of Swahili healthcare texts takes place.

I will, in the next chapter, present the findings and interpretation after conducting a comparative analysis of the texts.

CHAPTER 5

FINDINGS AND INTERPRETATION

5.1 Introduction

In chapter 4, background information on source and target systems was discussed. The place of English and Swahili languages, whereby the former is an official language and the latter both official and national language, in the Kenyan context was highlighted. Equally, the structure of Swahili as an agglutinating language was discussed in detail. In addition, attention was given to the state of healthcare in Kenya together with healthcare communication in general. This chapter follows to present findings and interpretation of the study. The findings are presented by conducting a comparative analysis of the STs and TTs in the study premised on Kruger and Wallmach (1997) approach as discussed in chapter 3 of this study. This approach is descriptive-explanatory. Accordingly, this chapter aims to:

- i) present and analyse macrotextual level shifts in Swahili healthcare texts;
- ii) present and analyse microtextual level shifts in Swahili healthcare texts, and;
- iii) identify, describe and analyse translation strategies used by Swahili healthcare translators in translating linguistic and cultural aspects.

At the macrotextual level, focus is given to the titles of the texts, illustrations and division of the texts. On the other hand, the microtextual analysis is on descriptive terms used in the healthcare texts, taboos, translation strategies and cohesive devices. Cohesion is identified as one of the standards of textuality by De Beaugrande and Dressler (1981). The discussion on cohesion here is based on Halliday and Hasan's (1976) five cohesive devices of references, substitution and ellipsis, conjunctions and lexical cohesion.

After discussing the shifts at the two levels, translation strategies used to overcome constraints that manifest in the translation process are discussed. The strategies focus on those that are used to resolve linguistic and cultural constraints. On one hand, strategies that are commonly used to overcome constraints of non-lexicalisation and specialised terms are: use of pure loan word, use of pure loan word preceded by explanation, use of indigenised loan words, translation by omission and translation by use of a more general word (superordinate). In addition, strategies used at sentence level commonly are addition and omission. On the same note, strategies used in the translation of acronyms and abbreviations are also discussed. On the other

hand, strategies used to translate taboo words discussed include: use of general word, use of neutral or less expressive word, cultural substitution, and translation by paraphrase.

The section that follows looks at translation strategies that will later in this chapter be deduced to provide the descriptive-explanatory analysis of the texts.

5.2 Translation Strategies

Before embarking on the macrotextual analysis of the texts, this section delves into strategies employed by translators in their translation. A translation is a response to a non-existence of a given text in a culture that it should exist. In order to respond adequately in filling the lacuna, translators employ strategies in translations as a solution to constraints that confront them. Translations are not smooth sailing and therefore translators opt for different approaches in order to come up with a final product that on the one hand, meets the aspirations of the target audience and on the other hand, passes the message as was intended in the source text. To put it differently, strategies are means to an end used by translators. Translation strategies are not absolutely binding. To put that in perspective, Baker (1992, 6-7) argues that:

strategies are not pre-conceived nor are they suggested as ideal solutions; they are identified by analysing authentic examples of translated texts in a variety of languages and presented as 'actual' strategies used rather than 'correct' strategies to use.

It, therefore, implies that there is no template of strategies that can be applied uniformly across languages even if it is the same text being translated now and again. Translators approach the exercise differently and translations are bound to be as varied as the translators are. The translation strategies discussed in the present study are not presented as the correct and go-to ones, but as those that the translators resorted to in the translation of Swahili healthcare texts, their correctness or otherwise notwithstanding.

To guide us in unravelling the strategies used in Swahili healthcare texts, I invoke Baker's (1992, 27-43) proposed translation strategies:

- i. Translation by a more general word or superordinate in order to overcome lack of specificity in the target language compared to source language;
- ii. Translation by a more neutral or less expressive word with an endeavour to avoid using a term that may have some connotative meaning in the target language;

- iii. Translation by cultural substitution whereby a culture-specific item or expression is replaced with a target language item which does not have the same propositional meaning but is likely to have a similar impact on the target reader;
- iv. Translation by use of a loan word or loan word plus explanation and this is appropriate for dealing with culture-specific items, modern concepts and buzz words. After a loan word is explained, it can be used on its own afterwards;
- v. Translation by paraphrasing using a related word tends to be used when the concept expressed by the source item is lexicalised in the target language but in a different form;
- vi. Translation by paraphrase using unrelated words used in some contexts when the concept being expressed in the source language is not lexicalised at all;
- vii. Translation by omission leaving out what translators deem not to be vital.
- viii. Translation by illustration used when a word lacks an equivalent and there are restrictions on space. (The focus on illustrations in healthcare texts is given a different approach in the present study).

Having looked at translation strategies, the next section presents the practical analysis of the texts. The analysis is done at both the macrotextual and microtextual levels. In doing the analysis, I used two bilingual dictionaries: *A Standard English-Swahili Dictionary* (1939) and *A Standard Swahili-English Dictionary* (1939) both by Oxford University Press. For the monolingual dictionaries, I used *Longman Dictionary of Contemporary English* (1978) and *Kamusi ya Karne ya 21* (2013) by Longman and Longhorn Publishers for English and Swahili respectively.

The macrotextual analysis is given focus in the next section.

5.3 Macrotextual Analysis

The macrotextual analysis on the Swahili healthcare texts focuses on text titles, illustrations and division of texts. First, it endeavours to describe any shifts when it comes to the titles of the source and target texts. Second, illustrations, from the preliminary data in section 3.4.3, have been identified as a common feature in the healthcare texts under study and therefore this analysis sheds light on whether translated texts retain the same illustrations as they are in the source texts. Third, texts are divided differently and healthcare texts too have their own format.

The analysis of the division of texts aims to show if translators adopt the format from the source texts or they come up with a completely different format. The analysis begins with text titles.

5.3.1 Text Titles

To begin with, there is a difference in the titles of the cholera ST and TT. The title of the ST STOP Cholera! has been translated as Unaweza kuZUIA Kipindupindu (You Can Stop Cholera) This shows a difference in the TT in that when back translated it becomes You can STOP Cholera. The translator includes 'you can' in the TT. The translator has also retained the use of the upper-case letters as shown in stop and zuia. Another notable thing about the title is that the ST ends with an exclamation mark whereas the translator deletes it in the TT. It is also worth noting that the ST has the writings National Disaster Management Unit just above the title but the TT does not. The font of the ST is bigger than that of the TT.

The title of Iron and Folic Acid Supplementation (IFAS) text for the ST is *Iron and Folic Acid Supplementation (IFAS)* while the TT title is *Nyongeza ya Iron na Folic Acid (IFAS)* (Addition of Iron and Folic Acid). This title shows that the translator opted to use the very lexical items *Iron and Folic Acid* of the ST and the word order has been changed; for the ST supplementation occurs last while for the TT it occurs before Iron and Folic acid. Despite this interchange, it can be said that there is a near rendition of the ST title.

The first HIV ST title is *Life Skills Manual* and that of the TT is *Mwongozo wa Stadi Za Maisha* (A Guide to Life Skills). The translator has used an equivalent rendering in the titles. It is worth noting though that the ST has other details just above the title that are missing in the TT. Those left out in the TT appear like a summary of what the text entails and they touch on peer education, empowering girls, communication skills, decision making skills, thinking skills, emotional management skills, relationship skills, assertiveness among others.

The second HIV text title is *Facts and Feelings About AIDS* and the TT *Ukweli na Hisia Kuhusu UKIMWI* (Facts and Feelings About AIDS). The title in the TT indicates that it is an equivalent of the ST.

The Cancer ST title is What You Need to Know About Cancer, A Guide for Patients and Caregivers and it is translated as Unachofaa Kujua Kuhusu Saratani, Mwongozo kwa Wagonjwa na Wahudumu wa Afya (What You Need to Know About Cancer, A Guide for Patients and Healthcare Workers). This title is a close rendering of the ST.

Tetanus, Diphtheria and Pertussis (Tdap) ST title is Tdap Vaccine, What You Need to Know and it is translated as Chanjo ya Tdap, Unachohitaji Kujua. Just like the ST has put the Tetanus, Diphtheria and Pertussis diseases in brackets beside the title, the TT has also placed Pepopunda, Dondakoo na Kifaduro in brackets just beside the title. Whereas the translator has provided an equivalent in the ST, it should not be lost that he has opted for *Tdap* acronym as it is in the ST notwithstanding that they derive from the English version of the diseases. *Tdap* stands for tetanus, diphtheria and pertussis but it is used in the TT most probably because of people having got used to it due to ease in pronouncing it and thus has become like a household name. The translator did not want to lose the weight associated with it. It should be noted, however, that even though the English acronym is used, the diseases pepopunda (tetanus), dondakoo (diphtheria) and kifaduro (pertussis) are put in brackets just next to the title. This is corroborated by Peraza et al. (2013, 99) who noted the importance of both authors and translators to bear in mind that acronyms and initialisms are not solely linguistic forms, but they also refer to objective phenomena which are part of a scientific culture and they are cultural referents. Put differently, the retention of acronyms in the TT ensures that the value they hold is upheld and the main communicative function is not compromised.

The text on smoking has the title *The Smoker's Body* in the ST and *Mwili wa Mvutaji Sigara* (The Body of a Cigarette Smoker) in the TT. The translator added cigarette in the TT title to be clear on what the text is about because meaning would have been lost if only *mvutaji* (smoker) was used without adding cigarette. People are used to *kuvuta bangi* (to smoke bhang), *kuvuta glue* (to inhale glue) and many others. According to the *Standard Swahili/English* dictionary, *vuta* means to draw, pull, drag, strain, stretch among others. In the same dictionary *vuta tumbako* (smoke tobacco) is put under special applications category. I derive it that due to the multiplicity of meanings which stem from the word, it was perfectly in order for the translator to add the word cigarette for informativity.

The polio ST title is *Vaccinate and Protect Children Under 5 Years Against Polio* and the TT is *Kinga Watoto Wote Chini ya Miaka tano Dhidi ya Polio Kupitia Chanjo* (Protect Children Under 5 Years Against Polio by Vaccination). There is a close rendering in the translation of the title.

Pneumonia text title is *Protect Your Child from Pneumonia* and the TT is *Kinga Mtoto Wako Dhidi ya Ugonjwa wa Nimonia* (Protect Your Child Against Pneumonia Disease). The translation is an equivalent of the ST title.

The Hand washing ST title is Wash Your Hands with Soap at These Critical Times and the TT title is Jinsi ya Kunawa Mikono Kikamilifu Ukitumia Sabuni (How to Effectively Wash Your Hands Using a Soap) The translation is quite different in that the TT title can be back translated as How to Effectively Wash Your Hands Using a Soap. The TT title points to a text that endeavours to demonstrate the way one can wash hands while the ST points to a text that is giving instructions. The translator equally does not include the critical aspect that is present in the ST title.

The malaria ST title is *The Malaria Safe PLAYBOOK*, a resource guide in the fight against Malaria and the TT title is Kazi Bila Malaria, Muongozo wa Mapambano dhidi ya Malaria (Work Without Malaria, A Guide in the Fight Against Malaria). The TT title can be back translated as Work Without Malaria, A guide in the Fight Against Malaria. The translator opted for a translation of the title that is slightly different from the TT whereby the idea of work without malaria is not in the ST but included in the TT. The translator was cognisant of the effect of malaria on the working class and eventually reducing the workforce, opted to introduce the concept of work in the title. I take it to mean that efforts put in place to fight malaria have a direct impact on the economy of a country. To put this argument on the effects of malaria to an economy into perspective, I invoke Carstensen and Gundlach (2006, 314) who aver that malaria may cause poor health and absenteeism among the workforce. They further argue that malaria infections can reduce the cognitive development and learning ability of children, which may further depress the long-run average skill level and thus the level of development.

The Measles and Rubella text title is slightly different in the ST and TT. The ST has the title *Vaccination Campaign*, *Fact Sheet* and the TT has *Kampeini Dhidi ya Magonjwa ya Ukambi na Rubella*, *Ukweli Kamili* (Campaign Against the Diseases of Measles and Rubella, The Real Truth). When this is back translated it becomes *Campaign Against the Diseases of Measles and Rubella*, *The Real Truth*. Ideally, 'vaccination campaign' should have been translated as '*Kampeini ya chanjo*' but as can be seen above, the Swahili version is different from the original one and this can be deduced to mean that those reading the English version are aware of such campaigns unlike the Swahili readers who may not, hence the brevity. The translator has added some information to the translated text using the strategy of addition to ensure that the readers are made aware of the kind of diseases the material is focussing on.

Equally from the title, it can be noted that the Swahili version does not mention vaccination which means 'chanjo' in Swahili. The translator in this case was confronted with the constraint of resistance against vaccinations in Kenya spearheaded by religious organisations, especially the Catholic Church that made claims about a conspiracy to curb population growth through vaccinations. The Standard Newspaper, one of the leading national newspapers in Kenya, of Friday, May 20th 2016 carried a story titled 'Church misleading Kenyans to avoid vaccination' in which one of the immunisation goodwill ambassadors noted that the Catholic Church Commission of Kenya had been writing text and WhatsApp messages to its members telling them to avoid vaccination. The newspaper article further quoted a letter by the chairman of Kenya Catholic Doctors Association which categorically stated that the church was not supporting public participation in the vaccination campaigns due to their inability to guarantee the safety of the vaccines on the Kenyan population. As a result, people especially in the rural areas became jittery about 'chanjos' (vaccinations) as is commonly referred to in the rural areas. The decision, therefore, to omit *chanjo* from the Swahili title might have been deliberate in order not to scare away potential readers. By dubbing it a campaign, the translator accommodates all as it is seen as a collective effort to get rid of diseases and not necessarily through *chanjo* (vaccination) even though the material is indeed about vaccination.

5.3.1.1 Summary

In conclusion, titles are vitally important in texts since readers first interact with them before getting to read what is contained in the texts. In fact, one can argue that titles can be a turn on or turn off for readers given their strategic location in texts. It has been illustrated above that translators sometimes adjust the text titles in order to suit the expectations of the target audience. For instance, the malaria text has an addition of *Kazi bila Malaria* (Work without Malaria) and the Measles and Rubella text too has addition of *Kampeini dhidi ya magonjwa ya Ukambi na Rubella, Ukweli kamili* (Campaign Against the Diseases of Measles and Rubella, the Real Truth) in its title. The foregoing adjustments to text titles indicate that translation begins right from the titles and translators take into consideration the issues and target culture at play at the time of translation. Overall, the factors that influence the translation of titles include culture, informativity, emerging issues at the time of translation and naturalness, that is, how natural a sentence would sound in the TT due to the difference in language structures.

The next section looks into the use of illustrations in healthcare texts.

5.3.2 Illustrations

Illustrations play a significant role in communication since they reinforce and complement what is written. Mobley (1986 in Ndlovu 2009, 68) argues that illustrations develop motivation and provide information. In other words, illustrations not only make texts interesting to read but equally perform a crucial function of passing the intended information. This, indeed, confirms the old adage that a picture is worth a thousand words. Accordingly, healthcare texts contain illustrations that reinforce the information being passed. As has been noted in the preliminary data of this study, the sample texts here make use of illustrations and it is against that background that I describe them by looking at how they are used in the STs and TTs. In fact, out of the twelve texts that form the sample of this study, ten of them make use of illustrations. Based on the use of illustrations in these texts, I posit that there exists an illustration norm in healthcare texts. I, however, for the sake of clarity point out that the discussion of illustrations in translation presented here is different from the one put forth by Baker (1992, 42) whereby she views translation by illustration as a strategy for dealing with non-equivalence at word level especially when what is being referred to is a physical entity and space is limited. That said, the discussion here is different because illustrations are used both in the ST and TT and neither do they purport to replace a word nor expression beyond the word that is not equivalent. Illustrations are considered as a stand-alone norm in healthcare texts.

The Iron and Folic Acid Supplementation (IFAS) text makes use of illustrations from the cover page to the last page. The texts have been translated into three categories: text meant for the national audience (appendix 4); text meant for the Coast of Kenya audience (appendix 2); and text meant for North Eastern part of Kenya audience (appendix 3). The illustrations used in the TT meant for the national readers has the same illustrations as the ST whereas the illustrations made for the texts meant for other parts of the country have been customised to reflect the women dress code for those areas. The illustrations used are on: a healthcare provider talking to a pregnant woman and on the table there is an illustration of the kind of food the mother should eat, a pregnant mother on a weighing scale, a mother playing with her child, a calendar showing that IFAS should be taken daily, foods that should be taken with IFAS to reduce chances of nausea, a pregnant mother sleeping under an insecticide-treated net and worms that may cause anaemia. What remains constant in all the illustrations is the one depicting the healthcare provider since the text has two types of illustrations whereby one is meant for the patient and the other healthcare provider. Notably, the illustrations for the text meant for the

Coast region in Kenya has a woman wearing a veil (*hijab*) and this shows the consciousness of the translator in respecting the dress code of a given audience.

Cholera text makes use of illustrations in both the ST and TT. What is apparent is that there are different illustrations in the TT and ST to pass the same message. For instance, whereas in the ST we have an illustration of a well-built toilet that is covered with iron sheets, in the TT we have a simple pit latrine that is grass-thatched. Further, in the ST there is an illustration of a person who has just visited the toilet and he is washing his hands using water from a running tap while in the TT that person washes his hands but, there is someone pouring him water from a mug. In addition, the ST has an illustration of people dressed formally but in the translated version we have people who are dressed in the traditional attire.

The malaria text has illustrations in both the ST and TT that are similar. Use of illustrations to depict how unity can help in wiping out malaria and what a malaria-free person can be able to do are apparent in the text amongst others. The illustrations are used sparingly.

The life skills text makes use of illustrations in its presentation of various concepts. It is however notable that the illustrations in the TT are different from those in the ST. The translator opted for different illustrations even though the topics being discussed in the ST and TT are the same. Though the illustrations are different, they have some semblance in the way they pass the intended meaning. Another conspicuous instance in the use of illustrations in the TT is that some topics are tackled without the help of illustrations even though they are present in the ST. There is also a mix of illustrations whereby for instance an illustration used in presenting information about facts about HIV/AIDS and STDs in the ST is used in a different topic such as peer education in the TT. Some of the notable illustrations depict: a group of peers having a discussion; a bridge model for behavioural change; a counsellor speaking to an attentive class of youth; different gender codes etc.

The Facts and Feelings about HIV/AIDS text equally makes use illustrations in both the ST and TT. The illustrations are exactly the same in both texts. Some of the illustrations are about: a group of people having a discussion about AIDS in a restaurant; a family consisting of a man, wife and son discussing the importance of learning about AIDS; a group of people standing together to show how difficult it is to tell who is infected with HIV and who is not; man and wife in bed having sex; a clinic and a healthcare provider injecting patients etc.

This is also true for the Pneumonia text that uses the same illustrations for the ST and TT. The text uses illustrations that demonstrate: a healthcare provider attending to a child held by the mother; a mother holding a crying child who is unable to eat due to pneumonia; mothers holding their babies at a clinic waiting bay etc.

The Cancer ST and TT make use of illustrations. The illustrations focus on: how tumours develop; most common causes of cancer in men and women; modifiable risk factors; signs and symptoms of cancer; diagnosis of cancer; stages of cancer; surgery; chemotherapy; radiotherapy; side effects of radiotherapy; diet and lifestyle management; how to be a good caregiver among others. What comes out in the use of illustrations in the cancer text is that in each aspect about cancer covered, there is use of illustrations that can pass the intended message even without reading what is written. This is an indication that illustrations can actually exclusively be used to disseminate information. The illustrations used in the ST and TT are the same.

On contrast, The Tdap vaccine text does not make use of illustrations in the two texts.

The smoking text has the same illustration for both the ST and TT. It has an illustration of a scary body of a smoker showing how the smoking of tobacco affects different parts of the body. The parts of the body are numbered and information is given regarding each number. The illustration even has an amputated leg as a result of blood vessels blockage due to smoke irritation.

Measles and Rubella text has an illustration of a child held by the mother being immunised by a uniformed healthcare worker. The same illustration is used for the TT. This is the same case with the polio text that also has a similar illustration for both texts. The illustration features one of the polio ambassadors who is also a survivor of polio immunising a child.

The handwashing text makes use of illustrations in both the ST and TT. Notably, the illustrations in the ST are different from those in TT. On one hand, the ST has illustrations on washing hands after: visiting the toilet, breastfeeding, cleaning, changing the baby and before preparing food and eating or feeding the baby. On the other hand, the TT has illustrations on the procedure of washing one's hands from the start to the end. The instances which are termed as critical and in which one should wash his/her hands are just listed in the TT without illustrations thereof.

5.3.2.1 Summary

To sum up, the present study has found out that translators make use of the illustrations and so, they form part of the translation process. That informed the conclusion by the present study that there exists an *illustration norm* in healthcare texts. They perform an informative function more than that of motivation. The illustrations used in the texts in this study indicate that they can actually pass the message even without words. For example, the handwashing text has illustrations that show the process of washing hands using a soap. It, consequently, indicates that illustrations in translations can be used and targeted at a population that is illiterate and semi-illiterate. In fact, illustrations in translation know no literacy boundaries as they can be relatively understood by the literate, semi-literate and illiterate. It is argued that more than 50% of the population in most African countries is considered illiterate and pictures can explain a text to readers who are not able to read (Goetze & Strothotte, 2002). As a result, it is prudent not to lock out people from accessing information that is so vital like healthcare messaging as it goes a long way in saving lives. Similarly, the use of illustrations can be seen as a way of passing a message to readers who, in spite of their ability to read, are slothful to read all that is written. The foregoing is possible because sometimes one illustration can capture what has been said in a number of pages.

Another aspect that emerged about the translation of illustrations is the way in which they are customised in order to meet the expectations of the target culture. To illustrate, the text on cholera has illustrations whereby the ST has a picture of a well-built toilet that is covered with iron sheets, in the TT we have a simple pit latrine that is grass-thatched. Pit latrines are very common in rural areas and the decision by the translator to have a different picture was an effort to make the translation acceptable in the target culture. The use of a modern toilet could not have reflected the reality in most households. In addition, there are illustrations of people dressed formally in the ST but in the TT we have people who are dressed in the traditional attire. The translator in reinforcing his message with illustrations must have decided to use traditional attire so as to identify with the target population. The aim of the translator is to make the translated healthcare text acceptable and appealing to the target audience. The foregoing fits in the broader sense of domestication concept as propagated by Venuti (1995).

On respecting a given people's way of life, the Iron and Folic Acid Supplementation (IFAS) Swahili text is in three versions with the same information but different illustrations. The illustrations in the IFAS text present a classic example of the dilemma which translators face in what I refer to as a culture within a culture. First, we have the larger Kenyan culture and

then some cultures within it. Even though other translators do their work guided by the larger Kenyan culture, the translator of the IFAS text preferred a culture within a culture approach. The three Swahili versions are meant for the Coast of Kenya, North Eastern Kenya and another for other parts of Kenya. The translator of the IFAS text used the dress code of women in the illustrations to be in tandem with the way of life of those regions. Since the texts were meant for pregnant women, the translator respected their culture in that the Coast woman in the illustration was veiled and this is due to the fact that most of them are predominantly Muslim. The other North Eastern text has a woman with illustrations that also correspond with their way of dressing and life in general. The text for other parts of Kenya that are dominantly Christian has an illustration of women with plaited hair and different dressing from the other two. Consequently, it is clear that translators are, indeed, cultural mediators and they first and foremost operate in the interest of the culture into which they are translating (Toury, 1995).

The next section delves into how texts are divided with an endeavour to find out if translators retain the ST format or they do some adjustments to suit the target readers' expectations.

5.3.3 Division of Texts

The discussion on division of texts here focuses on headings and subheadings. This is done in order to find out if translators maintain the subheadings and headings as they are in the ST or there are changes. On the same note, if there are changes, do they involve deletion or addition of a whole heading or subheading?

The Life Skills text is divided into seven parts with sessions in each part. The parts are: the life skills program — background and introduction with two sessions; peer education with two sessions; facing facts about HIV/AIDS and STDs with ten sessions; communication skills with six sessions; decision making skills with nine sessions; relationship skills with ten sessions; and bringing it all together with no session. These sessions focus on different aspects about the part under focus. The TT has the same number of parts and subheadings just like the ST.

The AIDS text is divided into lessons that are preceded by an introduction to the manual and directions on how to use the manual. First, lesson one addresses feelings and attitudes about AIDS and is further broken down into two parts whereby women's thoughts and concerns are in the first part and men's thoughts and concerns in the second part. Second, lesson two discusses facts about AIDS and is equally divided into two parts. The first part explains what AIDS is and answers questions on whether it is God's punishment for sin and a curse too. The second part responds to the question on who is at risk and how the risk can be avoided. Third,

the last lesson explains how the acquired knowledge can be used and has no parts. The TT is too divided into three lessons with two parts in the first lesson but the second lesson has three parts as opposed to two in the ST. The third lesson is the same in both the TT and ST. This text incorporates Christian teachings in all topics discussed – a perspective from the Bible is given and this is partly due to the fact that the text is church sponsored.

Pneumonia text has no chapters or headings but tackles a number of concerns on the disease. The text is designed in such way that each new page handles a new issue. The first pages are a pre-requisite for the subsequent ones as they build on what has already been discussed.

Cholera ST has one heading on how to prevent cholera and proceeds to give details without any subheading but the TT is broken down into subheadings.

The cancer text is divided into seven chapters: introduction; what is cancer; signs and symptoms; treatment; palliative care and pain management; diet and lifestyle management; and care giver. The chapters further have subheadings that focus on a myriad of issues that matter to cancer patients and caregivers. The TT equally has seven chapters but there is a difference in the subheadings in that there are more subheadings in four of the seven chapters than they are in the ST.

Polio text has one title and what follows in the text is a number of subheadings that are presented in form of questions. The questions ask fundamental issues regarding polio and a response is given immediately after. The TT has too taken the same format.

The Measles and Rubella text has just one title with a number of subtitles in form of questions. The whole text provides answers to the main concerns on the diseases. The TT has equally taken the same format.

The handwashing ST has a title at the top followed by an enumeration of critical times one should wash their hands with soap. There are no subheadings anywhere in the text. On the part of the TT, there is a title at the top and no subtitles but what follows are procedures of washing one's hands from the start to the end.

The malaria ST and TT are divided into chapters and subheadings. There are four chapters in each text that focus on: education, protection, visibility, and advocacy.

Iron and Folic Acid Supplementation text is divided into different headings whereby each of them tackles a distinct aspect. The headings are further broken down into subheadings. The TT

has a breakdown at the beginning on what the text entails but missing in the ST. Notably, some subheadings though present in the ST are missing in the TT.

Smoking ST and TT have a similarity in the way they are structured. The texts have one heading and they are then broken down into sixteen subtitles whereby each address health problems associated with smoking.

The Tdap vaccine text is divided into headings and subheadings. The structure is the same in both the ST and TT. The headings are on the importance of the vaccination, Tdap vaccine, target people for the vaccine, risks involved and action to be taken in case there is a serious problem.

5.3.3.1 Summary

In conclusion, it has emerged that translators to a large extent maintain the source text formats and do very minimal adjustments. Though there are instances whereby subheadings are added in the TT as is evident in the Cancer text, we also have the IFAS text where though subheadings are present in the ST, they are missing in the TT. Overall, the division of texts in both the ST and TT give a glimpse on whether the translation is source text leaning or target culture leaning. The healthcare texts exhibit a proclivity of leaning towards the ST format and translators only make minimal changes as seen in the IFAS and Cancer text.

This section has provided details on the macrotextual analysis premised on text titles, division of texts and illustrations. The next section provides details on the microtextual analysis of the texts.

5.4 Microtextual Analysis

As was noted in chapter 3, Toury (1995, 80) points out that comparison is not really performed on all the objects as such but on certain aspects thereof; and that a comparison is indirect in its very essence that can only proceed by means of some intermediary concepts which should be relatable to the compared aspects of both texts. It, therefore, follows that microtextual analysis in the present study is not done on the whole texts as sampled but rather ad hoc coupled pairs that are mapped onto each other with descriptive terms, cohesive devices, translation strategies and taboos as *Tertium Comparationis*.

The next section delves into descriptive terms that are used in healthcare texts.

5.4.1 Descriptive Terms

Healthcare texts deal with health problems that are obviously described in the course of developing and translating texts for the target audience. Bearing in mind that the description of the health problems and conditions cannot be different since they are pointing to the same issue, the subsequent section compares how translators describe them. It is worth understanding if translators opt for less or more descriptive terms than they are in the source text or there is omission and addition of terms in the target text.

Table 5.1: Descriptive terms for Polio

Source text	Target text	Back translation
Poliomyelitis (polio) is a highly infectious disease caused by poliovirus.	Polio ni ugonjwa wa kupooza unaoambukizwa kwa haraka na husababishwa na virusi vya polio.	Polio is a paralysis disease that is highly infectious caused by polio virus.
Is the polio vaccine safe? Yes, it has been tested , the vaccine is safe and effective and approved by WHO.	Je, chanjo ya polio ni salama? Ndio, ni salama na imepitishwa na Shirika la Afya Ulimwenguni (WHO).	Is polio vaccine safe? Yes, it is safe and has been approved by World Health Organisation (WHO).
The risk analysis done showed that 66% of targeted population was still at moderate or high risk of getting polio in case an imported case was to be found in the country.	Utabiti wa hali ya ugonjwa ilipatikana kuwa asilimia sitini na sita wako kwenye hatari kubwa ya mkurupuko wa ugonjwa wa polio nchini kutokana na viwango vya chini vya chanjo.	The risk analysis done was found that 66% are at a high risk of an outbreak of polio in the country due to low levels of vaccination.

To begin with, in the TT, the translator introduces *paralysis* in the description of polio a term that is not used in the ST. This introduction of paralysis in the TT can be accounted for from the Swahili (Kenyan) understanding of what polio is, that is, a disease that causes paralysis and therefore the translation is geared towards achieving naturalness or domestication as per Venuti (2005). Second, the translator has used *safe* and *approved* to describe the vaccine and yet the ST used *tested*, *safe*, *effective* and *approved* to do the description. There is an apparent case of omitting some terms in the TT by the translator. Third, the translator has not used *moderate* though it is in the ST but has instead opted to just use *high risk* and has replaced *imported case* was to be found in the country with low levels of vaccination.

Table 5.2: Descriptive Terms for Smoking

Source text	Target text	Back translation
suffering many serious		A smoker is at a risk of getting infected with bad diseases in the whole body.
Smoking interferes with the mouth's chemistry resulting in tooth decay , bad breath, discolouring	kwenye kinywa na hivyo	interferes with the mouth's working chemistry and
of teeth and difficulty in healing in the mouth	kutoka harufu mbaya kinywani, kubadilika kwa rangi ya meno na kinywa kutopona haraka	change of teeth's colour and

The translator has used an equivalent in describing the diseases caused by smoking and also in describing the interference of smoking with the mouth's chemistry.

Table 5.3: Descriptive Terms for Cancer

cells in the body start to grow and divide out of control. This makes it hard for the body to work the way it should. Cancer is not a death sentence. Cancer is a serious disease but it can be treated well for many people. Cancer is one of the major noncommunicable diseases A biopsy does not make the cancer grow more quickly or spread Radiation treatment are generally painless, but they can cause skin irritation and extreme tiredness. a way it should. A biopsy does not make the generally painless, but they can cause skin intritation and extreme tiredness. a controlled. This makes in a way that cannot be easi controlled. This makes difficult for the bodies work the way they should work the was in a way that cannot be easi controlled. This makes difficult for the bodies work the way they should work the wa	Source text	Target text	Back translation
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tiredness.	they can cause skin	maumivu yoyote, lakini	it can cause skin irritation and
	irritation and extreme	yanaweza kusababisha	extreme tiredness.
	tiredness.	mwasho kwenye ngozi na	
uchovu uliopita kiasi		uchovu uliopita kiasi	

In the description on how cancer happens, the translator has left out the part which addresses how cells divide out of control and instead only included the growth of the cells. The source text uses *serious* to describe cancer and the translator uses *hatari* which means serious or risky in describing it. In addition, cancer is described in the ST as one of the major non-communicable diseases but the translator in the TT leaves out *major* in the description. On the contrary, the translator in the description of radiation treatment has used exact equivalents as in the ST.

Table 5.4: Descriptive Terms for Cholera

Target text	Back translation
Kipindupindu ni ugonjwa	Cholera is a
hatari unaosababishwa na	dangerous disease
viini vinavyoenezwa kupitia	caused by germs
kwa kinyesi.	spread through stool.
	Kipindupindu ni ugonjwa hatari unaosababishwa na viini vinavyoenezwa kupitia

Whereas the translator used *hatari* to describe cholera which is an equivalent to dangerous as used in the ST, the translator has omitted diarrhoea from the TT and hence the equivalent descriptive terms *excessive* and *watery* used to describe diarrhoea are not in the TT.

Table 5.5: Descriptive Terms for Measles

Source text	Target text	Back translation
Measles is a highly infectious	Ukambi ni ugonjwa hatari wa	Measles is an
and serious disease caused by a	kuambukiza unaosababishwa	infectious and
virus. Complications may	na virusi. Madhara yake	dangerous disease
include one or a combination of	yanaweza kuhusisha moja au	caused by a virus. Its
the following: severe	mchanganyiko wa dalili hizi:	effects may include
diarrhoea, severe pneumonia,	kuhara sana, homa ya mapafu	one or a combination
ear infections (otitis – media)	(nimonia), maambukizo ya	of the following
with sometimes presence of	masikio (otitis – media) wakati	symptoms: severe

Source text	Target text	Back translation
pus from the ears, brain damage and blindness.	mwingine yanayohusisha kutokwa kwa usaha,	diarrhoea, pneumonia, ear
	kuharibiwa na ubongo na upofu.	infections (Otismedia) sometimes with the presence of pus, brain damage and blindness.

In the description of measles and its effects, the translator has largely used the terms as used in the ST save for in the symptoms whereby in the TT *severe* has been dropped in the description of pneumonia.

Table 5.6: Descriptive Terms for Rubella

Source text	Target text	Back translation
Rubella is a highly infectious	Rubella ni ugonjwa hatari wa	Just like measles,
viral disease that can cause	kuambukiza unaosababishwa na	Rubella is a
serious health complications	virusi na unaoweza kusababisha	dangerous
to new-borns such as birth	madhara mabaya ya kiafya kwa	infectious disease
defects, including heart	watoto wanaozaliwa kama vile	caused by a virus
problems, loss of hearing and	kasoro za maumbile, matatizo ya	and can cause
eyesight, and brain damage.	moyo, kupoteza uwezo wa kusikia na	serious health
	kuona, na kuharibiwa kwa ubongo.	effects to children
		being born such as
		birth defects, heart
		problems, loss of
		hearing and sight,
		and brain damage.

The ST has described Rubella as a highly infectious disease but the translator in the TT describes it as a dangerous infectious disease. It is apparent that there is a slight difference in the description.

Table 5.7: Descriptive Terms for Pneumonia

Source text	Target text	Back translation
Pneumonia can become	Ugonjwa wa nimomia	When Pneumonia disease
severe or dangerous and	unapokidhiri, humfanya	becomes severe, it makes a
make the child unable to	mtoto ashindwe kula na	child unable to eat or drink
eat or drink. The child can	kunywa chochote. Mtoto pia	anything. The child can also
become unconscious or	anaweza kupoteza fahamu	lose consciousness or even
even have fits	ama hata kupatwa na kifafa.	become epileptic.

Even though dangerous is used in the ST to describe pneumonia, the translator has omitted it in the description and just uses *unapokidhiri* which can be translated loosely as severe.

5.4.1.1 Summary

Regarding descriptive terms used in the texts, there emerged a tendency to describe vaccines as *safe*. All the texts focusing on vaccinations indicated that the vaccine is safe and the same was replicated by the translators. The texts on measles and rubella, pneumonia, polio and Tdap have described the vaccines as safe with no side effects. On the same note, the translators have too included that in the TTs. For instance, is the polio vaccine safe? Is a question posed in the ST and also in the TT as *Je, chanjo ya polio ni salama?* There is no TT that omitted the description of a given vaccine as safe and this indicates that the translators are aware of the importance of assuring the readers about the safety of vaccines. The endeavour to give assurance on the safety is not unfounded. It stems from sustained campaign by anti-vaccine movements as captured by Fielding et al (2018, 307) that many commentators apportion the blame for the growing incidences of communicable diseases on an increase in anti-immunisation activism. I concur that so many conspiracy theories have indeed poisoned people's minds on the safety of vaccinations and some have shied away from taking their children for the vaccinations. In Kenya, the disinformation and misinformation bedevilling the issue of vaccines has been propagated largely by the church, mainstream media, social media

and politicians. It, therefore, follows that translators cannot leave such a crucial aspect of safety in translating healthcare texts bearing in mind that healthcare texts are meant to enlighten the masses.

It also emerged that the English language uses more descriptive terms as opposed to the Swahili texts. The translators of Swahili texts are informed by naturalness in the description of health problems and symptoms and this makes them to leave out what is contained in the ST. Worth noting is that no descriptive term was added in the TT in all the texts and this informs the assumption that translators of healthcare texts into Swahili make use of less descriptive terms. But the question that begs to be answered is not on the terms that are left out by translators but rather the motivation behind it. In describing the polio vaccine, the translator left out *effective* and instead used salama (safe) due to the fundamentality of safety to the target audience. Assuring the safety of the vaccine is so key given the misinformation fed on the masses. In A Standard English-Swahili Dictionary the equivalent of effective is defined as kuleta linalokusudiwa (attaining the intended purpose) and imepitishwa (has been approved), and I take this to mean that at the time of translating what was considered important is the safety of the vaccine, as discussed in the previous paragraph, hence, if it is safe and approved, it is effective. No approval can be done by a government agency on something that is not effective. Overall, the leaving out of effective does not compromise the intended meaning as it is in the ST. Conversely, the leaving out of effective by the translator can be seen from the perspective that the target audience can construe it to mean that the vaccine is effective in achieving what the anti-vaccine agents were propagating.

In addition, in the description of cancer, the ST describes cancer as one of the major non-communicable diseases but the use of major has been left out in the TT. It is deduced thence that the translators avoid using terms that may serve to scare the target audience given that cancer is still riddled with many myths in the Kenyan society. For instance, some erroneously argue that it is contagious, it is for people infected with HIV, spread through antiperspirants and hair dyes among others. Based on the foregoing, translators opted to leave out words that may sound scaring to already scared readers.

This section has presented the descriptive terms that are used in healthcare texts. It has shown how translators sometimes use different terms and also opt for equivalents in translations. The next section examines the cohesive devices that form one of the seven standards of textuality by De Beaugrande and Dressler (1981).

5.4.2 Cohesive Devices

Cohesive devices form part of the *Tertium Comparationis* in this study. Cohesive devices are discussed under the concept of cohesion as one of the seven standards of textuality propagated by De Beaugrande and Dressler (1981). The other standards include coherence, informativity, intentionality, acceptability, situationality and intertextuality as briefly discussed in 3.2.2.1. Back to cohesion, there have been definitions by various scholars including: Halliday and Hassan (1976, 4) who put it that the concept of cohesion is a semantic one since it refers to relations of meaning that exist within the text, and that define it as a text; De Beaugrande and Dressler (1992) define cohesion as one that has a function of attaching syntactically and lexically, the text together in order to create textual unity. It is a function of syntax in communication that imposes organisational patterns upon the surface text; Bell (1989, 165), cohesion consists of the mutual connection of components of SURFACE TEXT within a sequence of clauses/sentences; the process being signalled by lexico-syntactic means; Hatim and Mason (1997, 15), define a cohesive text in the sense that the various components of the surface text are mutually connected within a sequence of some kind; and Baker (1992, 180) defines it as the network of lexical, grammatical, and other relations which provide links between various parts of a text.

Having given various definitions of cohesion, the analysis of healthcare texts under study proceeds on the basis of five main cohesive devices as identified by Halliday and Hasan (1976). The devices include: reference, substitution, ellipsis, conjunction and lexical cohesion. The ST and TT are mapped together so as to demonstrate how they manifest in the two languages and cultures.

5.4.2.1 Reference

Baker (1992, 181) defines the term reference as traditionally used in semantics for the relationship which holds between a word and what it points to in real world. For instance, the reference *disease* would therefore be a particular disease that is being discussed or referred to on a particular occasion. In other words, it would be difficult to decipher the kind of disease unless one understands it in the immediate context. Baker also adds that reference is a device which allows the reader/hearer to trace participants, entities, events, etc. in a text (1992, 181). I proceed, hereunder, to present the use of references in the healthcare texts under study.

ST: Cholera is a dangerous disease caused by germs that make a patient to pass excessive watery diarrhoea, leading to death within 3 to 4 hours if not treated quickly.

TT: Kipindupindu ni ugonjwa hatari unaosababishwa na viini vinavyoenezwa kupitia kwa kinyesi. Viini hivi husababisha mgonjwa kuhara na wakati mwingine kutapika kwa wingi. Hali hii husababisha mgonjwa kupoteza maji na madini mwilini na kuwa mnyonge. Kipindupindu husababisha kifo kati ya masaa matatu au manne mgonjwa akikosa kutibiwa kwa haraka.

Whereas the ST did not make use of references and communicates its message in just one sentence, the TT uses anaphoric references. As can be seen, the TT has four sentences and the first reference can be seen in *unaosababishwa* which can be back translated as *it is caused* and the reference *u*- anaphorically refers back to *kipindupindu* (cholera). Also, *hivi* (these) refers to *vinavyoenezwa kupitia kwa kinyesi* (are spread through stool). Equally, *hii* (this) in the TT is an anaphoric reference that refers to *kuhara na wakati mwingine kutapika kwa wingi* (diarrhoea and sometimes vomiting a lot).

ST: Cook food thoroughly and eat it while **it** is still hot. Ensure all food is stored safely.

TT: Pika chakula hadi **ki**ive vizuri na ukile kingali moto. Hakikisha chakula chote **ki**mefunikwa na kuwekwa vizuri.

The ST uses the referent *it* to refer back to food and the same with the TT whereby *ki*- in *kiive* (well cooked) and *kimefunikwa* (has been covered) is too used to anaphorically refer to *chakula* (food).

ST: Pneumonia can be prevented by the new pneumonia vaccine. Many children with pneumonia in Kenya don't get proper healthcare, so vaccinations are the best way to keep children healthy. The vaccine is safe, works well and **it's** free in government health facilities. **It's** important that your child gets all the three doses of the pneumonia vaccine.

TT: Kupitia chanjo mpya ya PCV 10, unaweza kumkinga mtoto wako kikamilifu dhidi ya nimonia! Mara nyingi, watoto wengi wanaoambukizwa nimonia nchini Kenya hawapati huduma bora zaidi za afya. Hivyo basi, chanjo tu ndio njia bora ya kumkinga mtoto wako kila wakati. Chanjo hii ni salama, inafanya kazi vyema, na inapatikana bila malipo katika zahanati na hospitali za umma. Hakikisha kwamba mwanao amepata dozi zote tatu za chanjo ya nimonia.

In the ST, the pronoun *it* in the second sentence anaphorically refers to the pneumonia vaccine and in the third sentence it refers to the fact that vaccinations are the best way to keep your children healthy. It can be seen that in the TT, the translator has used more references than they are in the ST. The *u* in *unaweza* (you can) anaphorically refers to the parent who may have a child whom the pneumonia vaccine is meant for and *wa* in *wanaoambukizwa* (those who are infected) refers back to *watoto* (children). *Ku* in *kumkinga* (to protect him/her) refers to the agent whereas *hii* (this) is a demonstrative pronoun referring to *chanjo* (vaccine) and it is notably not present in the ST because that bit of information has been added in the TT.

ST: Vaccines prevent children from getting sick. Vaccines help your child's body to make 'antibodies' **that** fight disease. Antibodies are like security guards in the body and kill the bad germs **which** could make your child sick

TT: Chanjo humkinga mwanao dhidi ya maradhi. Chanjo hufanya hivyo kwa kuupa mwili nguvu spesheli almaarufu 'antibodies' zinazokabiliana na maradhi kila yanapotokea. Nguvu hizi ni kama 'walinzi mwilini' wanaopigana na kuua viini vinavyosababisha ugonjwa.

There are two instances of reference in the ST, *that* and *which* referring to the aforementioned antibodies and germs respectively. On the other hand, the TT makes use of references as seen in *humkinga* (it protects) whereby *hu* refers back to *chanjo* (vaccine), *hivyo* (that way) refers to the fact already mentioned *kumkinga mwanao dhidi ya maradhi* (prevention of your child from getting sick), *zi*- in *zinazokabiliana* (that deal) to anaphorically refer to antibodies, *ya*- in *yanapotokea* (when they occur) to refer to *maradhi* (disease), *hizi* in *nguvu hizi* (this energy) is a demonstrative pronoun, the prefix *wa*- in *wanaopigana* (that fight) to refers back to *walinzi mwilini* (antibodies) and *vi*- in *vinavyosababisha* (that causes) to refers to *viini* (germs).

ST: When **you** go for your child's vaccination, make sure **you** have your Mother and Child booklet. The nurse will check **this** booklet to see which vaccines need to be given to your child. **She** will tell **you** how each vaccine protects your child.

TT: Kila unapompeleka mtoto wako kupewa chanjo, hakikisha una kitabu cha kliniki. Kitabu hiki humsaidia muuguzi kujua ni chanjo ipi anayofaa kumpa mtoto. Wakati huo huo, muuguzi atakufafanulia jinsi kila moja ya chanjo hizi humlinda mwanao.

In the ST, you is anaphorically used to refer to a parent or guardian that takes a child for vaccination while *this* is a demonstrative that refers to the booklet. The reference *she* refers

back to the nurse. On the other hand, in the TT *u*- in *unapompeleka* (when you take him/her) refers to the parent or guardian exophorically, *hiki* (this) is a demonstrative that refers to *kitabu hiki* (this book), *hu*- in *humsaidia* (it helps) also refers back to the book. In addition, *a*- in *anayofaa* (he/she is supposed) and *atakufafanulia* (he/she will explain) refers to *muuguzi* (nurse), *hizi* (this) is a demonstrative referring to *chanjo hizi* (these vaccines).

ST: You'll be told what vaccines your child will get on each visit. Ask the nurse if you have any questions or are worried about anything – she'll help you and make sure you understand. The nurse will explain why some vaccines are given at the same time and it is safe – and why it is important.

TT: Muuguzi atakuelezea chanjo anayopaswa kupewa mwanao kila unapotembelea kliniki. Pia atakueleza kwa nini baadhi ya chanjo hizi hutolewa wakati mmoja, na vile vile manufaa yake. Iwapo una wasiwasi wowote, muulize muuguzi na atakusaidia kuelewa yote unayopaswa kujua.

You in the ST refers to the parent or guardian who takes a child for vaccination and it is used four times but the reference for the same in the TT is used six times. She refers to the nurse in the TT just as a in atakueleza (he/she will explain) and atakusaidia (he/she will help you) in the TT. We also have u in unayopaswa (what you should) refers to the parent or guardian. It is notable that the TT has hizi (these) which is a demonstrative pronoun that refers to chanjo hizi (these vaccines) and hu- in hutolewa (it is given) refers to chanjo (vaccine). Another notable aspect is that whereas the ST has two sentences, the TT delivers the message in three sentences.

ST: It's important that children are vaccinated at the right time – this is at 6 weeks, 10 weeks and 14 weeks. Your child must get all their vaccinations fully to ensure they are protected and cannot get sick often. If you've missed these vaccinations and your child is younger than one year, take him or her to the clinic and they can still get their vaccinations.

TT: Hakikisha mwanao anapata chanjo dhidi ya nimonia katika umri unaofaa wa wiki 6, wiki 10 na wiki 14. Ni sharti apewe chanjo zote ili kumkinga kikamilifu na kuhakikisha kwamba hawi mgonjwa mara kwa mara. Iwapo mtoto wako hajapewa chanjo hizi na bado yupo chini ya umri wa mwaka mmoja, mpeleke katika kliniki ili apewe chanjo hizo.

In the ST, *it* cataphorically refers to the fact that children ought to be vaccinated at the right time even though this reference is missing in the TT. The reference *they, him* and *her* refer to children who should be protected from pneumonia. *You* refers exophorically to the parent or guardian who may not have taken their child for vaccination. In the TT, we have *ha* in *hakikisha* (you make sure) which is an exophoric reference to the parent or guardian charged with the responsibility of taking the child for vaccination and *u*- in *unaofaa* (that is right) refers to *umri* (age). The prefixes *a*- in *apewe* (is given), *m*- in *kumkinga* (to protect him/her), *mpeleke* (take him/her) and *yu* in *yupo* (he/she is) refer to the child. *Hizi* (these) in *chanjo hizi* (these vaccines) is a demonstrative reference. Overall, the number of references in the TT are more especially when you look at those that refer to the child.

ST: Smokers have twice the risk of developing cataracts. **This** is the clouding of the eye with lens that blocks light and may lead to blindness. **It** can be brought about by the constant irritation of the eye by tobacco smoke; or as a result of difficulty to differentiate colours (mucular degeneration) resulting from tobacco use.

TT: Wavutaji sigara wamo katika hatari maradufu ya kushikwa na ugonjwa wa macho (cataracts) kuliko wenzao wasiovuta. Ugonjwa huu hufanya kiwingu kwenye mboni ya jicho (sehemu inayopitisha mwanga), hali ambayo huzuia mpenyo wa mwanga na mara nyingine husababisha upofu. Ugonjwa huu unaweza kusababishwa na mwasho wa jicho unaotokana na moshi wa tumbaku; au kutokana na matatizo ya kutambua rangi (kuona kiwi) kutokana na matumizi ya tumbaku.

While there are only two instances of reference in the source text, there are seven cases of reference in the TT. In the ST, the referent *this* refers back to development of cataracts and *it* in the third sentence refers to cataract itself. In the TT *wa* in *wamo* (they are) refers anaphorically to *wavutaji* (smokers) and there is two-time use of the demonstrative *huu* (this) in *ugonjwa huu* (this desease). The use of *hu*- in *huzuia* (it blocks) refers to the condition of clouding that blocks light and the second use of *hu*- in *husababisha* (it causes) refers to *ugonjwa wa macho* (cataracts). *U*- in *unaotokana* (it is brought by) refers to *mwasho wa jicho* (eye irritation).

ST: Smoking reduces blood flow to the penis resulting in impotence. **The chemicals** may also damage sperms leading to the babies born with birth defects and even miscarriages. **These** interferences can lead to infertility.

TT: Uvutaji wa sigara hupunguza usambaaji wa damu kwenye mboo na hivyo kusababisha ugumba (uhanithi). **Kemikali hizo** pia zinaweza kuharibu shahawa na hivyo kusababisha watoto kuzaliwa na madhara ya nyakati za kuzaliwa na hata wakati mwingine mimba kutunguka. Mvurugo **huu** unaweza kusababisha ugumba.

In the ST, *the chemicals* is used as a co-reference to smoking and *these interferences* is used to refer to the effects of reduced blood flow to the penis. The TT equally has used the references of *kemikali hizo* (those chemicals) and *mvurugo huu* (these interferences) in the same way.

ST: AIDS is a preventable disease. It can be prevented if people know which behaviours could cause them get the AIDS virus, and if they change these behaviours.

TT: Ukimwi ni ugonjwa unaoweza kuzuiliwa. Unaweza kuzuiliwa kama watu watatambua tabia zinazoweza kuwapa viini vya ukimwi, na kama watazi geuza tabia hizi.

In both the ST and TT, the message is delivered in just two sentences whereby the former makes use of four references and the latter uses ten references. *It* in the ST refers back to AIDS and *them* and *they* refer to people who should know behaviours that cause AIDS. Then there is a demonstrative reference *these behaviours* that refers to those behaviours that can cause AIDS. On the TT part, the reference *u*- in *unaoweza* (that can be) and in *unaweza* (it can be) *ku*- in *kuzuiliwa* (can be prevented) refer to AIDS. *Wa*- in *watatambua* (they know), *zi*- in *zinazoweza* (that could cause) and *zi* in *watazigeuza* (they change) refer to *tabia* (behaviour). The last one is the demonstrative *hizi* (these) in *tabia hizi* (these behaviours).

ST: John thinks **he** can get AIDS from working in the job with a person who has AIDS. **He** also thinks that people with AIDS do not have to use condoms because **it** is too late.

TT: Yohana **a**nafikiri kwamba **a**naweza kupata UKIMWI kwa kufanya kazi pamoja na mtu aliye na viini. **A**nafikiri kwamba watu walio na UKIMWI **ha**wahitaji kutumia mipira kwa sababu muda tayari **u**meshaisha.

The ST makes use of three references whereby the personal pronoun *he* refers to John both in the first and second sentence, whereas *it* in the second sentence refers to the fact it will be too late for infected persons to use a condom. In the TT, the prefix *a*- in *anaweza* (he can), *anafikiri* (he thinks) refers to Yohana and *ha*- in *hawahitaji* (they don't have to) refers to *watu walio na ukimwi* (people with AIDS) and *u*- in *umeshaisha* (it is already over) refers to *muda* (time).

ST: People with AIDS need to know that God loves **them**. In fact, the Bible says that God loved **them** so much that Jesus suffered the curse of God for **them** and died for **them** so that **they** can live with God forever.

TT: Watu wenye ukimwi **wa**nahitaji kujua kwamba Mungu **a**nawapenda. Kwa kweli, Biblia **i**nasema kwamba Mungu **a**liwapenda sana hata Yesu **a**kachukua laana ya Mungu juu yake na **a**ka**wa**fia ili **wa**weze kuishi na mungu milele.

The ST uses five references whereby the pronoun *them* is used four times and *they* once to refer to people but the TT uses references eight times whereby three refer to people, one to the Bible, two to God and two to Jesus.

ST: If your partner(s) or children have HIV, **they** need to get into care. Encourage **them** to come to the clinic and see a provider.

TT: Ikiwa mpenzi/wapenzi au watoto wako **wa**na virusi vya UKIMWI, **wa**nahitaji kuwa katika utunzi. **Wa**shawishi **wa**je kliniki ili **wa**muone mhudumu.

The ST makes use of two references *they* and *them* to refer to partners and children but the TT makes use of five references using the prefix *wa-* in *wana* (they have), *wanahitaji* (they need), *washawishi* (implore them), *waje* (they come) and *wamuone* (they see) to refer to partners and children and exophorically to the one whose partner(s) and children need to see a service provider.

ST: AIDS is a problem and we have the power to do something about it.

TT: UKIMWI ni tatizo sugu kwenye nchi yangu, na tuna uwezo wa kulishughulikia.

In the ST we have two references whereby *we* exophorically refers to those who can do something to curb the disease and *it* refers to AIDS. On the part of TT, there are three references and *tu*- in *tuna* (we have) exophorically refers to people who can joins hands in the fight against the disease just as *li*- in *kulishughulikia* (to deal with it) anaphorically refers back to *tatizo* (problem).

ST: Sometimes the doctor will need to put a radiation source inside **you**. When that happens, **it** is called implant. **This** implant is put very near or right inside the tumour.

TT: Wakati mwingine, daktari **a**tahitajika kuweka kifaa cha kutoa miale ndani ya mwili wako. **Hilo li**napofanyika, huitwa 'implant'. Kifaa hicho **hu**tiwa karibu na uvimbe **huo** au ndani.

The ST has used three references and the TT five references. The three in the ST, *you* exophorically refers to the cancer patient, *it* anaphorically refers to the putting of the radiation source inside the cancer patient and the demonstrative pronoun *this* refers to the implant. In the TT, the reference *a*- in *atahitajika* (he/she will be required) refers to *daktari* (doctor), *hilo* (that) is a demonstrative referent, *li*- in *linapofanyika* (when that happens) refers to the putting of the radiation source inside the cancer patient, *hu*- in *hutiwa* (it is put) refers to *kifaa* (implant) and *huo* (that) is a demonstrative referent.

ST: Complementary therapies are **those** that are not part of your medical treatment, but that can safely be used along with your medical treatment. **They** should not be used instead of your medical treatment. **They** can help relieve certain symptoms of cancer or side effects of treatment.

TT: Huduma ya ziada ya afya ni **ile** ambayo si sehemu ya matibabu rasmi, lakini **i**naweza kutumika sambamba na matibabu rasmi. **Ha**ifai kutumika kama kibadala cha matibabu rasmi. Huduma **hiyo i**naweza kusaidia kupunguza athari ya saratani au madhara andamizi ya matibabu **hayo**.

There are three references in the ST and five in TT. In the ST, *those* refers to complementary therapies that do not form part of the patient's treatment just as the two-time use of *they* to refer to complementary therapies. In the TT, *ile* (that) refers to *huduma ya ziada* (complementary therapies) and the same applies to the use of the prefix *i*- in *inaweza* (it can) and *ha*- in *haifai* (they should not). *Hiyo* (that) and *hayo* (that) are used as demonstrative references to refer to complementary therapies and treatment respectively.

ST: Tell your family and friends about your cancer as soon as **you** feel up to **it**. **They** might feel hurt or left out if **they** haven't heard about **it** from **you**. Explain what kind of cancer **you** have and how **it** will be treated. Let **them** know that no one can catch **it** from **you**. Explain that **you** are getting treatment to get better.

TT: Waambie jamaa wako na marafiki kuhusu saratani uliyo nayo mapema kadri unavyohisi una nguvu za kusema. Wanaweza kukasirika au kuhisi kupuuzwa iwapo hawatasikia kutoka kinywani mwako. Eleza ni aina gani ya saratani uliyo nayo na jinsi

itakavyotibiwa. **Wa**fahamishe ili wajue kwamba hakuna anayeweza kuambukizwa saratani hiyo kutoka kwako. **Wa**eleze kwamba **u**naendelea kupokea matibabu ili hali yako imarike.

There are twelve cases of references in the ST whereby the two-time use of *they* and *them* refer to family and friends, *you* in all the instances exophorically refers to the cancer patient, *it* in the first sentence refers to action of telling family members and friends and in the third and fourth sentences it refers to cancer. In the TT, *wa*- in *waambie* (you tell them) and *wafahamishe* (inform them) are exophoric references to a cancer patient just as *u*- in *uliyo* (that you), *unavyohisi* (when you feel), *una* (you have) and *unaendelea* (you are on). *Wa*- in *wanaweza* (they can) and *ha*- in *hawatasikia* (if they don't hear) refer to family and friends. In *itakavyotibiwa* (how it will be treated), *i*- refers to *aina ya saratani* (type of cancer) while *i*- in *imarike* (get better) it refers to *hali yako* (your condition).

ST: Tetanus, diphtheria and pertussis are very serious diseases. Tdap vaccine can protect us from **these** diseases. And, Tdap vaccine given to pregnant women can protect new-born babies against pertussis. **These** diseases are caused by bacteria.

TT: Pepopunda, dondakoo na kifaduro ni magonjwa hatari sana. Chanjo ya Tdap inaweza kutulinda kutokana na magonjwa haya. Na, wanawake wajawazito wanapopewa chanjo ya Tdap inaweza kuwalinda watoto walio tumboni kutokana na kifaduro. Magonjwa haya husababishwa na bakteria.

The ST makes use of the referent *these* two times whereas the TT has nine instances of references to refer to vaccine, diseases, people who may get Tdap and pregnant women.

ST: Poliomyelitis (polio) is a highly infectious disease caused by the poliovirus. The disease spreads fast and causes paralysis and even death.

TT: Polio ni ugonjwa wa kupooza unaombukizwa kwa haraka na husababishwa na virusi vya polio. Ugonjwa huu husababisha kupooza na hata kifo.

This is co-reference whereby *the disease* in the ST refers back to *polio* that is already previously mentioned. The translator equally rendered an equivalent translation since the TT uses *ugonjwa huu* to refer back to *polio* that is mentioned at the beginning of the preceding sentence. The prefix *u*- in *unaoambukizwa* (that is infectious) anaphorically refers to polio, *hu*- in *husababishwa* (it is caused) and *husababisha* (it causes) likewise refers to polio.

5.4.2.1.1 Summary

To begin with, in spite of there being anaphoric, cataphoric and exophoric reference types, the healthcare texts exhibit an inclination towards the use of anaphoric reference. The preference for anaphoric reference can be explained on the basis of the texts at hand and their intended purpose. Cognisant of the purpose of healthcare texts to inform the masses and the fact that anaphora is the use of a referent to refer to something or a term earlier mentioned, it thence explains why healthcare texts prefer the use of anaphoric reference. Healthcare texts are prepared with the assumption that the target audience is ignorant of the contents therein as backed up by Ratzan et al (1994) who contend that health communication is an art of informing, influencing, and motivating individual, institutional and public audiences about health issues through planned learning experiences based on sound themes. It emerged that translators too just like it is in the ST, prefer the use of anaphoric reference.

It was also evident that Swahili healthcare texts have a higher frequency on the use of references for cohesion as opposed to English texts. In fact, in some instances the coupled pair for analysis showed that there can be absolutely no use of reference in the ST but are present in the ST. This use of more references in the TT than ST can be explained from two perspectives: the translators and the language pair in the translation. On one hand, it cannot be ignored that translators, without considering other influencing factors, are responsible for a large percentage of the decisions made in translations and therefore the use of more references is due to their preference in an effort to make the texts reader friendly. For instance, in cases where the translator decides to add information that is not in the ST points to the usage of more references and this accounts for the Swahili healthcare texts possessing more references. In other words, one can argue that the use of explicitation in translations yields more references and this was noted by Blum-Kulka (1986 in Laviosa-Braithwaite 2001, 289) that shifts occur in the types of cohesion markers used in the target texts and records instances where the translator expands the target text by inserting additional words. The example below demonstrates how the decision by a translator to include more information most probably for precision and clarity leads to more references.

ST: Cholera is a dangerous disease caused by germs that make a patient to pass excessive watery diarrhoea, leading to death within 3 to 4 hours if not treated quickly.

TT: Kipindupindu ni ugonjwa hatari **u**naosababishwa na viini vinavyoenezwa kupitia kwa kinyesi. Viini **hivi** husababisha mgonjwa kuhara na wakati mwingine kutapika kwa

wingi. Hali hii husababisha mgonjwa kupoteza maji na madini mwilini na kuwa mnyonge. Kipindupindu husababisha kifo kati ya masaa matatu au manne mgonjwa akikosa kutibiwa kwa haraka.

On the other hand, the language pair in this study also accounts for the frequency of references in either of the texts. As noted, Swahili language uses more references than English and this is due to the nature of the Swahili verb being more complex by containing a number of derivational and inflectional morphemes that are attached to the verb root. The presence of more references in Swahili healthcare texts can be traced to the attribute of Swahili marking both the subject and object unlike English. This is in tandem with Mwamzandi (2014, 17) who observed that in Swahili agreement, markers corresponding to the noun class of the subject and object of the noun phrase are prefixed to the verb stem. The foregoing also explains why the prefixes -a, -u, -zi, -ku among others are most commonly used in the Swahili healthcare texts. The other dominant reference used is the demonstrative pronoun.

Overall, the Swahili healthcare texts are more cohesive than the English healthcare texts due to the high frequency of references in the texts. My conclusion is in line with Habwe (1999, 236) who noted that Swahili is overly cohesive than English.

This section has presented the coupled pairs from the source texts and target texts and shown how reference as a cohesive device is used in both texts. It has also been demonstrated that Swahili language makes use of more references than English and this is due to the overly marking of subject and object in Swahili language unlike English. The next section looks at substitution and ellipsis.

5.4.2.2 Substitution and Ellipsis

Baker (1992, 187) says that substitution and ellipsis are grammatical rather than semantic relationships. She goes further, on one hand, to define substitution as the replacement of an item(s) by another item(s). The most common cohesive devices used for substitution include so, do(es), did, one(s) and the same. Moving to ellipsis, on the other hand, Baker (1992, 187) defines ellipsis as one that involves the omission of an item and the item is replaced by nothing. It is commonly used to avoid repetition. Hereafter are instances of ellipsis and substitution from the healthcare texts that form part of the study.

ST: Cancer is usually not inherited. It is not passed from parent to child the same way that height and HIV are.

TT: Zipo baadhi ya saratani zinazofuata vizazi katika familia, lakini saratani kwa kawaida haiwezi kuambukizwa kutoka kwa mzazi hadi kwa mtoto jinsi ilivyo kwa kimo cha mtu. Kadhalika, saratani haiwezi kutoka kwa mama ikaambukiza mtoto kama ilivyo kwa ukimwi (HIV).

Whereas the ST has ellipted *passed from parent to child*, the TT has no ellipsis and instead has an extra sentence that explains how cancer cannot be passed from the mother to the child.

ST: Radiotherapy is also used to kill or slow the growth of cancer cells. It can be used alone or with surgery or chemo. Radiotherapy can be given in two ways – from a machine outside the body or from objects put inside the body. Some people get **both.**

TT: Tiba ya miale (radiotherapy) pia hutumika kuua au kupunguza ukuaji wa seli za saratani. Inaweza kutumiwa peke yake au pamoja na upasuaji ama kwa pamoja na kemo. Tiba ya miale (radiotherapy) inaweza kutolewa kwa njia mbili – kutoka kwenye mashine iliyo nje ya mwili wa mgonjwa au kutokana na vifaa vilivyotiwa ndani ya mwili wa mgonjwa. Baadhi ya watu hupokea **yote mawili.**

The ST has substituted *get radiotherapy from a machine outside the body and from objects inside the body* with *both* and the TT too has substituted *tiba ya miale (radiotherapy) mashine ikiwa nje ya mwili na vifaa kutiwa ndani ya mwili* with *yote mawili* (the two of them).

ST: Radiation therapy isn't painful, but some of the side effects can **be**. If you have any pain, talk to your doctor or nurse.

TT: Tiba ya miale haina maumivu makali, lakini baadhi ya madhara andamizi yanaweza kuleta maumivu. Unapohisi uchungu wowote zungumza na daktari au muuguzi wako.

The ST has ellipted *painful* whereas the TT has not and uses *maumivu* (pain) which in this instance is taken to be an equivalent of painful.

ST: Palliative care focuses on relieving suffering caused by cancer and helps people live as comfortably as possible for as long as long as they can. It is not intended to cure illness.

TT: Huduma ya kukabiliana na makali ya athari za saratani hulenga kupunguza maumivu yanayosababishwa na saratani. Mbinu hizo husaidia watu kuishi bila maumivu kwa muda mrefu. Lengo lake si kutibu ugonjwa.

The ST passes the message in two sentences whereas the TT does so in three sentences. The TT has added *mbinu hizo* (those procedures) to refer to palliative care that is ellipted in the ST.

ST: If a husband has (or might have AIDS), should a Christian leader encourage him and his wife to use condoms when they have sexual intercourse? We think so. The spouse needs to be protected from possible infection.

TT: Kama bwana anao (au anaweza kuupata), je kiongozi mkristo amtie moyo yeye na bibi yake kutumia mipira wanapofanya mapenzi ya kimwili? Tunafikiri hivyo. Yule mwenzi anahitajika kulindwa dhidi ya ambukizo.

The ST has used so to substitute a christian leader encouraging husband and wife to use a condom when having sexual intercourse and the same is replicated by the translator in the TT whereby hivyo (so) substitutes kiongozi mkristo kumtia moyo bwana na bibi yake kutumia mipira wanapofanya mapenzi ya kimwili (a Christian leader encouraging husband and wife to use a condom when making love).

ST: We feel we Christians are not sinning if we encourage these people to protect themselves and others through condoms. If that is all we **do**, however, we are failing to give the Christian message of hope and deliverance from sin.

TT: Tunaonelea sisi kama wakristo hatutendi dhambi tunapowahimiza watu kujilinda wao wenyewe na wengine kwa njia ya mipira. Kama hilo ndilo tunalofanya tu, basi tunashindwa kutoa ujumbe wa kikristo wa tumaini na ukombozi kutoka kwa dhambi.

In the ST, do in the second sentence substitutes encouraging these people to protect themselves and others through condoms and hilo ndilo tunalofanya (that is what we are doing) in the TT substitutes kuwahimiza watu kujilinda wao wenyewe na wengine kwa njia ya mipira (urging them to protect themselves and others through the use of condoms). The translator opted for an equivalent translation of this segment.

ST: You might be able to help them by asking if a woman knows, right after intercourse, if she has become pregnant. They cannot tell until she begins to grow or misses her menstruation. She does not even know.

TT: Unaweza kuwasaidia kuelewa vyema kwa kuuliza kama mama hujua mara moja baada ya kufanya mapenzi, kama ametungwa mimba. Hawezi kujua kama ametungwa mimba mpaka aanze kunenepa au kukosa vipindi vyake. Kamwe hawawezi kujua mara moja.

Whereas in the ST there is ellipsis of *if they have become pregnant* in *they cannot tell* ..., the translator does not use ellipsis but instead includes the left out part *hawezi kujua kama ametungwa mimba* (she cannot tell if she has become pregnant).

ST: Remember that a condom is not an absolute protection of HIV infection, and therefore the users must know they are still at risk.

TT: Kumbuka kwamba mpira sio kinga kamilifu dhidi ya kuambukizwa, na kwa hivyo wanaoutumia ni lazima wajue kwamba bado wapo hatarini.

Both the ST and TT have ellipted at the end of the sentence *of getting infected with HIV* and *kuambukizwa virusi* (to be infected with virus). Equally, the TT has ellipted *UKIMWI* and just uses *kuambukizwa* (to be infected) while the ST includes HIV.

ST: You'll be told what vaccine your child will get on each visit. Ask the nurse if you have any questions or are worried about anything – she'll help you understand.

TT: Muuguzi atakuelezea chanjo anayopaswa kupewa mwanao kila unapotembelea kliniki. Pia atakuelezea kwa nini baadhi ya chanjo hizo hutolewa wakati mmoja, na vile vile manufaa yake.

The ST has left out clinic after visit but the TT includes it by *kila unapotembelea kliniki* (every time you visit clinic).

ST: Do you use alcohol? If so, go for counselling on how to reduce drinking.

TT: Je, unatumia pombe? Kama ni hivyo, enda upate ushauri kuhusu jinsi ya kupunguza viwango vya unywaji.

So in the TT substitutes use of alcohol and the translator uses an equivalent hivyo (so) to replace utumiaji wa pombe (use of alcohol).

5.4.2.2.1 Summary

It has emerged that both the ST and TT make use of substitution albeit sparingly. It should be noted, however, that instances of substitution are so limited in the healthcare texts both in the ST and TT. The trend that emerged in the Swahili healthcare texts is that translators opt for equivalent pro-forms as used in the ST. Though instances of substitution were minimal, clausal and nominal substitutions were prevalent. Thence, substitution is not a preferred cohesive device in healthcare texts both in English and Swahili.

The use of ellipsis in Swahili healthcare texts is so minimal, in fact almost none, as opposed to its usage in the ST. The translators, going by the coupled pairs analysed, prefer to include any part that is left out or ellipted in the ST. This manifestation of the rare usage of ellipsis in Swahili healthcare texts, notwithstanding their presence in the ST, means that translators make explicit in the TT what is implicitly stated in the ST. The foregoing points to the use of explicitation in the Swahili healthcare texts and it is what I refer to in this study as *explicitation norm*. The translators do not want to burden the readers with the task of supplying meaning to what is not said in the texts. This is in agreement with Blum-Kulka (1986 in Laviosa-Braithwaite 2001, 289) who notes that shifts occur in the types of cohesion markers used in the target texts and records instances where the translator expands the target text by inserting additional words.

Generally, the use of both substitution and ellipsis in healthcare texts is not prevalent and therefore indicates that they are not preferred cohesive devices and this agrees with Ambi (n.d,) who observed that the reason for the least occurrence of substitution and ellipsis in texts is because they are features of spoken discourse. Equally, the crucial information contained in healthcare texts motivates translators to leave nothing unsaid and that partly explains the rare use of ellipsis.

The succeeding section focuses on conjunctions.

5.4.2.3 Conjunctions

Baker (1992, 190) defines a conjunction as one that involves the use of formal markers to relate sentences, clauses and paragraphs to each other. It signals the way the writer wants the reader – in this case it can be the translation critic – to relate what is about to be said to what has been said before. The main relations expressed by conjunctions are: additives, adversative, causal, temporal and continuatives.

The way in which a given language makes use of conjunctions definitely impacts on the translated text and it forms part of the description of any text. This is in line with Baker (1992, 197) who points out that the problem with conjunction is that it reflects the rhetoric of a text and controls its interpretation. Baker (1992) further says that the said reflection suggests that adjustments in translation will often affect both content and line of argumentation. This section gives recognition to all conjunctions be they intrasentential or intersentential.

ST: Cholera is a dangerous disease caused by germs that make a patient to pass excessive watery diarrhoea, leading to death within 3 to 4 hours if not treated quickly.

TT: Kipindupindu ni ugonjwa hatari unaosababishwa na viini vinavyoenezwa kupitia kwa kinyesi. Viini hivi husababisha mgonjwa kuhara **na** wakati mwingine kutapika kwa wingi. Hali hii husababisha mgonjwa kupoteza maji **na** madini mwilini **na** kuwa mnyonge. Kipindupindu husababisha kifo kati ya masaa matatu **au** manne mgonjwa akikosa kutibiwa kwa haraka.

The ST does not make use of conjunctions but the TT makes use of na (and) three times and au (or) once both of which are additive conjunctions.

ST: Are you a health worker struggling with the rising rates of Human Immuno–Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), Sexually Transmitted Diseases (STDs), unwanted pregnancy, or maternal mortality? Are you a teacher working daily with young people who face difficult decisions: determining a positive direction in life, potential unwanted pregnancy, or the issues of alcohol or drug use? Have you been providing health information for years and yet see no positive change in your community? Are you a parent, community volunteer, or concerned community leader fearful of the toll HIV/AIDS is taking on your area? Are you a young person ready to do something to help lead your friends into a brighter future? If you answered "yes" to any of the above questions, the Life Skills program might be for you.

TT: Je wewe ni mfanyakazi wa sekta ya afya **na** anayejitahidi kudhibiti viwango vya maongezeko ya Virusi Vya UKIMWI, **na** magonjwa ya ngono, mimba zisizohitajika, **au** vifo vya akina mama wazazi? Je, wewe ni mwalimu unayefanya kazi kila siku na vijana wanaoonekana kutokuwa na mwelekeo thabiti, wanaoacha shule kwa sababu ya kupata mimba, **au** wanaoingia katika matatizo kwa sababu ya ulevi wa pombe **ama** utumiaji wa madawa ya kulevya? Je, umekuwa ukitoa elimu ya afya kwa miaka mingi lakini bila

kuona mabadiliko mazuri (chanya) katika jumuiya yako? Je, wewe ni mzazi, mfanyakazi wa jumuiya wa kujitolea, **au** kiongozi wa jumuiya unayeogopeshwa na maafa yanayotokana na Virusi Vya UKIMWI/UKIMWI, yanayotokea katika eneo lako? Je, wewe ni kijana uliye tayari kusaidia kuwaongoza wenzako kufikia maisha mazuri zaidi siku za baadaye? Kama jibu lako ni 'ndiyo' kwa swali lolote miongoni mwa maswali ya hapo juu basi Programu ya Stadi za Maisha inaweza ikawa kwa ajili yako.

Both the ST and TT make use of six conjunctions. The ST uses *or* which is an additive conjunction five times and the adversative conjunction *yet* once. The TT on the other hand, uses only additive conjunctions whereby *na* (and) is used twice and *au* and *ama* both of which mean *or*.

ST: A person who is infected with HIV usually does not develop symptoms of infections **or** AIDS right away. **For example**, a person may not get sick from HIV for two to ten years after he **or** she is infected. We do know that once a person is infected with HIV, he **or** she is infected for life. A person infected with HIV can infect other people at any time during his **or** her lifetime. The person with HIV does not have to be sick with AIDS to transmit the virus.

TT: Mtu aliyeambukizwa na VVU kwa kawaida haonyeshi ishara za kuambukizwa na viini **au** UKIMWI mara moja. **Kwa mfano**, mtu anaweza kuwa mgonjwa kutokana na viini kwa miaka miwili **au** kumi tangu aambukizwe. Tunajua kwamba mtu anapoambukizwa na viini yeye ameambukizwa kwa maisha. Mtu aliyeambukizwa na viini anaweza kuwaambukiza watu wengine wakati wowote wa maisha yake. Mtu ambaye ana VVU si lazima awe mgonjwa wa UKIMWI ili kueneza viini hivyo.

The ST and TT make use of additive conjunctions whereby the former has five conjunctions and the latter three.

ST: People should never say that a person has AIDS because he has one of these symptoms. **In the first place,** AIDS is much like other illnesses. It is very difficult to diagnose **and** this can only be done by a well-qualified, experienced worker **and** laboratory tests. **Secondly**, the person concerned **and** his family will suffer from anxiety **and** possible isolation.

TT: Watu hawapaswi kusema kwamba mtu ana UKIMWI sababu ana mojawapo ya dalili hizi. Jambo la kwanza, UKIMWI ni kama magonjwa mengine. Ni vigumu sana

kuutambua **na** hili linaweza kufanywa tu na yule aliyehitimu vyema, mwenye ujuzi wa uchunguzi wa damu katika maabara. **Pili**, mtu aliyehusika **na** jamii yake watashikwa na wasiwasi **na** kutengwa.

The ST has two temporal conjunctions, *in the first place* and *secondly* and four-times use of the additive conjunction *and*. Similarly, the translator makes use of two temporal conjunctions in the TT, *jambo la kwanza* (the first point) and *pili* (second), and the additive conjunction *na* (and) is used three times.

ST: You may have already heard the statistics: an African child dies from malaria every 45 seconds. **But** even when the disease doesn't kill, it still wreaks havoc on overburdened economies in malaria-endemic countries. **For instance**, malaria can affect school attendance, decrease worker productivity, **and** drain household resources as families struggle to pay for repeated treatments.

TT: Yawezekana umeshasikia takwimu: mtoto mmoja wa Kiafrika hufa kwa malaria kila baada ya sekunde 60. **Mbali na** kuua, ugonjwa huu una athari kubwa kwa uchumi uliolemewa hasa kwenye nchi zenye maambukizi makubwa. **Kwa mfano**; malaria inaweza kuathiri mahudhurio ya wanafunzi shuleni, inaweza kupunguza kiwango cha nguvukazi kwenye uzalishaji **na** kudhoofisha rasilimali za familia wakati wakihangaikia gharama za matibabu ya mara kwa mara.

Both the ST and TT make use of three conjunctions whereby two are additive and one is appositive. The additive conjunctions in the ST are *but* and *and* while the appositive conjunction is *for instance*. The translator opted for the same conjunctions whereby *mbali na* (besides) and *na* (and) are used as additive conjunctions and *kwa mfano* (for example) an appositive conjunction. I also note that the ST indicates that an African child dies from Malaria every 45 seconds whereas the TT puts it at 60 seconds.

ST: Similar to pregnant women, those living with HIV/AIDS are considered high-risk. Co-infection with malaria can be lethal, and special consideration should be given to these individuals. For instance, people living with HIV/AIDS should be considered a priority for LLIN distributions, and pregnant women living with HIV/AIDS should receive an additional dose of SP during IPTp. Each country has guidelines for these situations, and country partnerships with ministers of health and malaria and HIV/AIDS programs can help clarify these procedures.

TT: Vilevile kwa wanawake wajawazito, wale wanaoishi na Virusi Vya Ukimwi (VVU) huzingatiwa kuwa katika hatari kubwa. Maambukizi ya malaria kwa wakina mama hawa wanaoishi na VVU inaweza kuwa hatari kubwa ya kupoteza maisha, kipaumbele kinabidi kitolewe kwa wakina mama hawa. Kwa mfano, watu wanaoishi na VVU wanatakiwa kupewa kipaumbele katika ugawaji wa vyandarua vyenye dawa ya muda mrefu, na wanawake wajawazito wanaoishi na VVU wanatakiwa kupewa dozi ya nyongeza ya SP kipindi cha IPTp. Kila nchi ina mwongozo wake katika hali hii, na nchi washirika na wizara ya afya na programu za malaria na VVU zinaweza kuelezea hili.

The translator made use of six conjunctions and the ST has seven conjunctions. The ST uses a comparative conjunction *similar to* and the translator uses the equivalent *vilevile* (equally) and the same applies to the use of an appositive conjunction *for instance* in ST and *kwa mfano* (for example) in TT. In addition, there is a five-time use of the additive conjunction *and* in the ST and four-time use of its equivalent *na* (and) in the TT by the translator.

ST: Some infections such as Human Papilloma Virus (HPV) can also increase your risk of cancer. Cervical cancer is linked to HPV, which can be spread through sex. HPV is a very common infection **and**, in most cases, it goes away without treatment. Having HPV does not mean you will get cancer, **but** it can increase your risk of developing it.

TT: Baadhi ya maambukizo kama virusi vya Human Papilloma Virus (HPV) huweza pia kuongeza athari yako ya kupata saratani. Saratani ya uzazi inahusishwa na HPV, ambayo huweza kusambazwa kupitia ngono. HPV, huwa ni maambukizo ya kawaida sana **na** wakati mwingi huisha hata bila ya kutibiwa. Kupata HPV hakumaanishi kwamba utapata saratani, **lakini** inaweza kuongeza athari za kuipata.

The ST and TT make use of two additive conjunctions *and*, *but* and *na* (and) and *lakini* (but) respectively.

ST: Women may find that their periods become irregular or stop while getting treatment. This doesn't mean that they can't get pregnant, **so** family planning is still needed. In men, the treatments may reduce **or** damage sperm cells. **Even so**, men often become fertile again after treatment is done.

TT: Wanawake wanaweza kushuhudia mvurugiko wa nyakati za hedhi yao hata kutoendelea wakati wa matibabu. Hali hii haimaanishi kuwa hawawezi kushika mimba. **Hivyo basi**, upangaji wa uzazi unahitajika wakati huo. Kwa wanaume, matibabu haya

yanaweza kupunguza **au** hata kuharibu mbegu za uzazi. **Hata hivyo**, wanaume hurejea katika hali yao ya kuweza kuzalisha baada ya kukamilika kwa matibabu.

There are three conjunctions in both the ST and TT. First, in the ST we have a causal conjunction *so* and its equivalent *hivyo basi* in the TT. Second, there is use of an adversative conjunction *even so* in the ST and its equivalent *hata hivyo* in the TT. Third, an additive conjunction *or* in the ST and its equivalent *au* in the TT.

ST: In many countries including Kenya, pneumonia is becoming harder to treat **and** cure. Some cases of pneumonia are resistant to usual medications **and therefore** the best way to protect **and** prevent your child against pneumonia is through vaccinations. There is still a very small chance that your child could get pneumonia **after** receiving the vaccine **but** this is lower than children who have not been vaccinated.

TT: Katika mataifa mengi, ikiwemo Kenya, imekuwa vigumu sana kuutibu ugonjwa wa nimonia. Baadhi ya visa vya nimonia huwa sugu na haviwezi kutibiwa kwa dawa za kawaida. Hivyo basi, njia zaidi ya kumkinga mtoto wako ni kupitia chanjo. Ni vyema kufahamu kwamba hata baada ya kupata chanjo dhidi ya nimonia, bado pana uwezekano mdogo wa mwanao kuambukizwa ugonjwa huu! Hata hivyo, uwezekano huo hupungua sana ikilinganishwa na wakati ambapo mtoto wako hajapewa chanjo.

Whereas the ST makes use of seven conjunctions in three sentences, the TT has only three conjunctions in five sentences. The ST uses the additive conjunction *and* three times and *but* once. It also uses causal conjunction *therefore* which is a temporal conjunction. On the other hand, the TT uses only once the additive conjunction *na* (and), the causal conjunction *hivyo basi* (therefore), and adversative conjunction *hata hivyo* (even so).

5.4.2.3.1 **Summary**

Conjunctions play a very important role in texts in that they help to show the logical order of information and one is able to connect what happens before to what happens after. They help to make a text a unit and therefore form part and parcel of cohesion in texts. Conjunctions are glues that hold different elements that form a text together. In the healthcare texts, conjunctions are used both in the ST and TT and generally both English and Swahili use them in the same way. The conjunction types evident in the texts are: additive, adversative, temporal, appositive, comparative and causal. However, the most prevalent of all is the additive conjunction which helps in building ideas in the texts. Additive conjunctions are so integral in healthcare

communication since they give more information and also corroborate ideas in the texts. Given the informative nature of healthcare texts, the translators use the additive conjunctions as they are used in the source texts in order to maintain the flow of information in the texts. Equally, causal conjunctions in the texts are used in the texts and their usage is mostly when presenting information that focuses on repercussions or failure to do something such as not vaccinating your child and not taking medication as advised. Overall, considering that the texts are nonfictional, logical and structured, the use of conjunctions in English healthcare texts and Swahili is largely similar. Notably, this agrees with Zhao et al (2009) who concluded that there was no statistical difference of occurrence frequencies of conjunctions between English medical texts and the Chinese ones.

The subsequent section focuses on lexical cohesion.

5.4.2.4 Lexical Cohesion

Baker (1992, 202) defines lexical cohesion as the role played by the selection of vocabulary in organising relations within a text. Hoey (1991 in Kruger 2000, 86) refers to lexical cohesion as the most important form of cohesive tie because it is the only type of cohesion that regularly forms multiple relations.

Halliday and Hassan model (1976) divides lexical cohesion into reiteration and collocation. Reiteration involves the repetition of lexical items that includes a repetition of an earlier item, a synonym or near-synonym, a superordinate, or a general word whereas collocation involves a pair of lexical items that are associated with each other in the language in some way.

Lexical cohesion is not a relation between pairs of words but it typically operates through lexical chains that run through a text and are linked to each other in various ways. Lexical networks provide cohesion and collectively determine the sense in which each individual item is used in a given context. Snell-Hornby (1988) says that in analysing a text, a translator is not concerned with isolating phenomena or items to study them in depth but with tracing a web of relationships, relevance and function in the text. This means that no matter how hard a translator may try; it is impossible to reproduce networks of lexical cohesion in a target text which are identical to those of the source text and this may compel the translator to settle for a word that is slightly different in meaning or has different associations. Every time this happens it introduces a subtle (or major) shift away from the lexical chains and associations of the source text (Baker 1992, 206). It is worth noting that significant shifts do occur even in non-literary texts like those under the current study. The shifts that occur say a lot about the strategies

employed by the translator and that is of interest to a translation critic, just as it is in the present study. Baker (1992) further notes that lack of ready equivalents will sometimes require the translator to resort to strategies such as the use of a superordinate, paraphrase or loan word which result in producing different lexical chains in the target text just as the grammatical structure of the target language may require the translator to add or delete information and reword parts of the source text in a variety of ways. Neubert and Shreve 1992 (in Mikhichi 2011, 51) note that the cohesive text is, as a result, the end product of a translation.

Hereunder, I identify lexical cohesion in the texts under study in order to see how they are woven together in both the ST and TT. I proceed by identifying the lexical chain.

In the IFAS text, there are a number of lexical cohesion devices.

ST: The purpose of iron and folic acid supplementation during pregnancy is to reduce maternal anaemia, low birth weight and neural tube defects in pregnancy and improve overall pregnancy outcomes.

TT: Madhumuni ya iron na folic acid kwa ujauzito ni kupunguza ukosefu wa damu mwilini kwa akina mama, uwezekano wa kuzaliwa kwa mtoto aliye na uzani wa chini, ulemavu kwenye uti wa mgongo, na kuimarisha matokeo ya ujauzito kwa jumla.

The lexical patterns that emerge from the ST are of collocation and reiteration. Given that the segment is discussing the importance of IFAS, the noun *purpose* collocates with the verb *reduce* and *improve*. Equally, iron and folic acid supplementation collocates with pregnancy, maternal anaemia, low birth weight, neural tube defects and pregnancy outcomes. There is reiteration whereby pregnancy is repeated. Looking at the TT, the translator uses lexical items that manifest just like in the ST. To begin with, *madhumuni* (purpose) collocates with *kupunguza* (to reduce) and *kuimarisha* (to improve). Second, iron and folic acid collocates with *ujauzito* (pregnancy), *ukosefu wa damu mwilini* (inadequate blood in the body), *akina mama* (mothers), *kuzaliwa* (birth), *mtoto* (child), *uzani wa chini* (low weight), *ulemavu kwenye uti wa mgongo* (neural tube defects) and *matokeo ya ujauzito* (pregnancy outcomes). The translator equally reiterates *ujauzito* (pregnancy) in the TT.

ST: During **pregnancy** you need to **eat more food**, a **balanced** and **varied diet. Eat** at least 3 main **meals a day** of or **healthy snacks** every **four hours** during **the day** to **provide energy** and **nutrition** for you and your growing **baby**. **Eat diversified diet**, to ensure **variety** in the **food** choices using the locally available **foods** and **take** plenty of

fluids and water. Increase your daily consumption of bright coloured fruits and dark green leafy vegetables to improve your intake of micronutrients. Increase your intake of animal products like meat, milk, eggs as they are excellent sources of proteins, fats and micronutrients. Consume iodized salt because you require sufficient iodine for brain development of the child in the womb. Encourage daily consumption of fruits, vegetables, legumes and whole grain cereals to promote healthy weight gain. A mother should gain at least one kilogram per month in the 2nd and 3rd trimesters of pregnancy. Reduce your workload and rest more during pregnancy to conserve energy.

TT: Lishe bora ni muhimu kwa ujauzito wenye afya na mtoto mwenye afya. Unahitaji kula chakula kingi na mchanganyiko wa vyakula. Kula lishe iliyo na vyakula aina tofauti kwa kutumia vyakula vinavyopatikana kwa urahisi (k.m. mbegu na nafaka kamili, mizizi na viazi, jamii ya kunde, mboga za kijani, kokwa na njugu, maziwa na bidhaa za maziwa, matunda, nyama, samaki, nyama ya kuku na mayai). Kula angalau mara tatu kwa siku chakula kilichokamilika na pia ule vitafunio kila baada ya saa 4 wakati wa mchana ili wewe na mtoto mpate nguvu. Zidisha kula matunda yenye rangi ya kung'aa na mboga za kijani kwa sababu kutaimarisha hali ya virutubishi vingi na vitamini mwilini mwako. Tumia bidhaa nyingi zinazotokana na wanyama kama nyama, maziwa, mayai kwa sababu ni asili nzuri ya protini, mafuta na virutubishi. Tumia chumvi iliyotiwa madini kwenye chakula chako kwa sababu madini ya ayodini husaidia kukua kwa ubongo ya mtoto aliye tumboni. Pima uzani wako na uhakikishe kuwa unaongeza angalau kilo moja kila mwezi haswa katika kipindi cha pili na cha tatu cha ujauzito. Punguza kiwango cha kazi zako na upumzike zaidi wakati wa ujauzito ili kuhifadhi nguvu.

The first lexical chain of collocation that manifests in the ST revolves on: pregnancy, baby, brain development, child, womb, and mother. The second lexical chain of collocation is on: eat, more food, balanced, varied diet, meals, healthy snacks, energy, nutrition, diversified diet, fluids, water, consumption, fruits, vegetables, intake, micronutrients, animal products, meat, milk, eggs, proteins, fats, iodized salt, iodine, legumes, and whole grain cereals. The third collocational lexical chain is on: a day, three, four hours, the day, daily, per month, and trimesters. The other lexical chain is on reiteration that include: eat, day, diet, food, micronutrients, fruits, vegetables, healthy, pregnancy, antonyms workload, and rest. On the part of the TT, the translator has achieved lexical cohesion by use of both collocation and

reiteration. Instances of collocation lexical chain are first on: *lishe* (diet), *afya* (health), *kula* (eat), *chakula* (food), *mchanganyiko* (mix), *mbegu na nafaka kamili* (whole grain cereals), *mizizi na viazi* (roots and potatoes), *jamii za kunde* (legumes), *mboga za kijani* (green vegetables), *kokwa na njugu* (groundnuts), *maziwa na bidhaa za maziwa* (milk and milk products), *matunda* (fruits), *nyama* (meat), *samaki* (fish), *nyama ya kuku na mayai* (chicken meat and eggs), *vitafunio* (chewables), *nguvu* (energy), *virutubishi* (micronutrients), *vitamini* (vitamins), *mayai* (eggs), *protini* (proteins), *mafuta* (fat), *chumvi* (salt), *madini* (minerals), *ayodini* (iodine), and *uzani* (weight). The second collocational lexical chain is on: *ujauzito* (pregnancy), *mtoto* (baby), *kukua kwa ubongo* (brain growth), and *tumboni* (stomach). The third collocational lexical chain is on: *mara tatu* (three times), *siku* (day), *saa nne* (four hours), *mchana* (day), *mwezi* (month), and *kipindi cha pili na tatu* (second and third trimesters). Reiteration equally is manifested in the TT whereby some lexical items are repeated and use of hyponyms and antonyms in others. They include: *lishe* (diet), *kula* (eat), *afya* (health), *chakula* (food), *vyakula* (foods), *nyama* (meat), *maziwa* (milk), *mayai* (eggs), *protini* (proteins), *ujauzito* (pregnancy), *nguvu* (energy).

ST: Anaemia can lead to increased maternal and neonatal deaths. The most common causes of anaemia include inadequate intake of iron-rich foods like red meat, liver etc. and infections such as malaria, hookworm infestation, HIV, diarrhoea and other infections.

TT: Upungufu wa damu mwilini unaweza kusababisha kuongezeka kwa vifo wakati wa kujifungua na vifo vya watoto kabla ya kuzaliwa. Sababu ya kawaida ya upungufu wa damu ni pamoja na kutokula vyakula vyenye iron kama nyama, ini, kuku na kuwa na maradhi kama malaria, kuwa na minyoo, virusi vya ukimwi, kuendesha na magonjwa mengine.

The lexical chain that makes the text cohesive due to collocation in the ST include: anaemia, maternal deaths, neonatal deaths, iron-rich foods, red meat, liver, infections, malaria, hookworm infestation, HIV and diarrhoea. There are instances of reiteration through repetition of lexical items such as anaemia and infections. On the other hand, the translator has equally used lexical devices that help in achieving cohesion. The collocational lexical chain includes: upungufu wa damu mwilini (anaemia), vifo wakati wa kujifungua (birth deaths), vifo vya watoto wakati wa kuzaliwa (baby deaths during birth), vyakula vyenye iron (iron foods), nyama (meat), ini (liver), kuku (chicken), maradhi (diseases), malaria, minyoo (hookworms), virusi vya

ukimwi (AIDS), and *kuendesha* (diarrhoea). There is also reiteration through repetition of anaemia and use of a *maradhi* (diseases) which is a synonym of *magonjwa* (diseases).

ST: Cholera is a dangerous disease caused by germs that make a patient to pass excessive watery diarrhoea, leading to death within 3 to 4 hours if not treated quickly. Always use a toilet to dispose all faeces, including children's faeces. Ensure the toilet is clean all the time. Always wash hands with a soap and running water after using a toilet, handling a child's faeces or before preparing and eating food.

TT: Kipindupindu ni ugonjwa hatari unaosababishwa na viini vinavyoenezwa kupitia kwa kinyesi. Viini hivi husababisha mgonjwa kuhara na wakati mwingine kutapika kwa wingi. Hali hii husababisha mgonjwa kupoteza maji na madini mwilini na kuwa mnyonge. Kipindupindu husababisha kifo kati ya masaa matatu au manne mgonjwa akikosa kutibiwa kwa haraka. Tumia choo wakati wote unapotaka kujisaidia. Hakikisha choo chako ni kisafi wakati wote. Nawa mikono kwa sabuni ama jivu na maji yanayotiririka baada ya kutumia choo, kumpangusa mtoto kinyesi, kabla ya kutayarisha na kula chakula, kabla ya kumlisha mtoto.

The ST has a collocational lexical chain of: cholera, disease, germs, patient, watery diarrhoea, faeces and toilet. The other collocational lexical chain is: clean, wash hands, soap, running water and food. Equally, there is use of reiteration through repetition of child, children, toilet and faeces. On the part of the TT, the translator achieved lexical cohesion by use of collocational lexical chain of: *kipindupindu* (cholera), *ugonjwa* (disease), *viini* (germs), *kinyesi* (stool), *mgonjwa* (patient), *kuhara* (diarrhoea), *kutapika* (vomiting), *madini* (minerals), *mnyonge* (weak), *kifo* (death), and *choo* (toilet). The second collocational lexical chain is on hygiene: *kisafi* (it is clean), *nawa mikono* (wash hands), *sabuni* (soap), *jivu* (ash), *maji yanayotiririka* (running water), and *chakula* (food). The translator also uses repetition of lexical items such as *kipindupindu* (cholera), *mgonjwa* (patient), *maji* (water), *kinyesi* (stool), and *choo* (toilet) to achieve cohesion. It is apparent that the translator used more lexical cohesive items than they are used in the ST.

ST: Cancer happens when the **cells** in our **body** start to grow and divide out of control. This makes it hard for the **body** to work the way it should. **Cells** are the **smallest unit** of the **human body**. They carry out all the functions necessary for **life**. **Cells** are usually **too small** to be seen with the **naked eye**.

TT: Saratani hutokea pale ambapo seli za miili yetu zinapoanza kukua na kujigawanya kwa kasi kwa njia isiyoweza kudhibitiwa kwa urahisi. Hali hii huipatia miili yetu ugumu wa kufanya kazi jinsi inavyohitajika. Seli ni chembechembe ndogo zaidi za mwili wa binadamu. Hutekeleza majukumu yote muhimu yanayohitajika kwa maisha ya mtu. Seli huwa ni chembechembe ndogo sana ambazo aghalabu hazionekani kwa macho ila kwa kutumia hadubini.

The ST has a collocational chain of cancer, cells, body, smallest unit, human body, naked eye and life. In addition, there is repetition of body and cells. On the part of the TT, the translator used the same lexical items as used in the ST to achieve cohesion. They include: *saratani* (cancer), *seli* (cells), *miili* (bodies), *maisha* (life), *chembechembe ndogo zaidi* (the smallest units), *mwili wa binadamu* (human body) and *macho* (eyes). There is also repetition of the lexical items *seli* (cells), *miili* (bodies), *chembechembe ndogo* (smallest units) in the TT.

ST: How will cancer affect my sex life? Some people have little or no change in their sexual desire and others find that they have less interest in sex. It can be caused by stress, feeling tired, and other treatment side effects. This is normal. Some types of cancer, like cancer of the cervix or bladder, may cause bleeding in the genital area or urinary tract. If this bleeding is worse after sex, talk with your doctor. If you have had surgery, how soon you can have sex will vary. Your health worker can give you more information. If you have sex within the first couple of days of having chemotherapy, use a condom. Sex cannot make your cancer worse or increase the risk of it coming back. Cervical cancer is not infectious. Your partner cannot catch it from you. Talk with your partner about their concerns and what you feel OK with – which can change from week to week.

TT: Saratani itaathiri vipi hali yangu ya mapenzi? Baadhi ya watu huwa na mabadiliko madogo sana au kukosa kabisa mabadiliko katika maisha yao ya kimapenzi na wengine hujikuta wakikosa kabisa hamu ya mapenzi. Hali hii inaweza kusababishwa na mzongo wa mawazo, kujihisi mchovu, na madhara mengine andamizi ya kimatibabu. Hii ni hali ya kawaida. Aina Fulani ya saratani, kama vile saratani ya uzazi au ile ya kibofu, huweza kusababisha kuvuja damu katika sehemu za siri au njia ya mkojo. Iwapo kuvuja huku kunazidi baada ya mahaba, zungumza na daktari wako. Iwapo umefanyiwa upasuaji, basi fahamu kwamba nyakati za kujamiiana au kushiriki mapenzi utatofautiana. Mhudumu wako wa kiafya anaweza kukueleza zaidi. Iwapo

ungependa kushiriki mapenzi siku chache baada ya kufanyiwa kemotherapi, tumia kondomu. Mapenzi hayawezi kufanya hali yako ya saratani izorote au kuzidisha uwezekano wa ugonjwa huo kurudi. Saratani ya uzazi haiwezi kuambukizwa. Mpenzi wako hawezi kuipata kutoka kwako. Zungumza na mpenzi wako kuhusu matakwa yao na yale unayoona yako SAWA – ambayo yanaweza kubadilika wiki baada ya wiki.

The lexical devices in this ST segment revolve around two lexical chains of cancer and sex. The collocational lexical chain on cancer entails: cancer of the cervix, cancer of the bladder, chemotherapy, cervical cancer, infectious, doctor, treatment, surgery, and health worker. Those on sex include: sexual desire, interest in sex, stress, sexual desire, feeling tired, bleeding, genital area, urinary tract, condom, and partner. On the other hand, there is repetition of lexical items such as cancer, sex, bleeding and partner. On the part of the TT, the translator equally makes use of lexical items that focus on saratani (cancer) and mapenzi (sex). The first collocational lexical chain on cancer is: saratani ya uzazi (cervical cancer), saratani ya kibofu (cancer of the bladder), kemotherapi (chemotherapy), ugonjwa (disease), kuambukizwa (to be infected), matibabu (treatment), upasuaji (surgery), and mhudumu wa kiafya (health worker). The second collocational chain on sex is: maisha ya kimapenzi (sex life), hamu ya mapenzi (desire for sex), mzongo wa mawazo (stress), kujihisi mchovu (feeling tired), sehemu za siri (private parts), kuvuja damu (bleeding), njia ya mkojo (urinary tract), mahaba (having sex), kujamiana (having sex), kushiriki mapenzi (making love), kondomu (condom), and mpenzi (lover). Instances of reiteration in the TT include repetition of saratani (cancer), mapenzi (love), kuvuja (bleeding) and mpenzi (lover). It is worth noting that the translator has used kujamiana, mahaba and kushiriki mapenzi to refer to sex whereas in the ST only one lexical item is used.

ST: Seven out of every 10 smokers start the habit when they are still teenagers. It is widely accepted smokers die at an average of 10 to 15 years earlier than non-smokers. This is because there are at least 250 harmful chemicals found in tobacco. The smoker is at risk of suffering many serious diseases throughout the body. Listed are some of the health problems caused by smoking.

TT: Imebainika kwamba wavutaji sigara 7 kati ya wavutaji 10 wa sigara, huanza uraibu huu wakiwa wangali vijana. Aidha, imekubalika kwingi kuwa wavutaji wa sigara hufa mapema kwa kipindi cha wastani cha kati ya miaka 10 na 15 ikilinganishwa na wenzao wasiovuta sigara. Hii ni kwa sababu kuna zaidi ya kemikali hatari takribani

250 zinazopatikana katika **tumbaku** na zinazoweza kuathiri pakubwa **afya ya binadamu**. **Mvutaji** yuko katika **hatari** ya kupata **magonjwa** mengi mabaya kote **mwilini** mwake. Yafuatayo ni baadhi ya **madhara ya kiafya** yanayosababishwa na **uvutaji wa sigara**.

The lexical chain that manifests in the ST is both of collocational and reiteration in nature. The collocation lexical chain which links smoking to smokers, habit, chemicals, tobacco, risk, suffering, diseases, body, and health problems. Equally, the instances of reiteration are through repetition of smokers and use of its antonym non-smokers. The lexical chain used by the translator is similar to that used in the ST whereby *uvutaji* (smoking) is linked to *wavutaji* sigara (cigarette smokers), *uraibu* (habit), *kemikali* (chemicals), *tumbaku* (tobacco), *afya ya binadamu* (human being's health), *mvutaji* (smoker), *hatari* (risk), *magonjwa* (diseases), *mwilini* (in the body), and *madhara ya kiafya* (health effects). There is also reiteration of *wavutaji sigara* (cigarrete smokers) and *wasiovuta sigara* (non-smokers). It is also worth of mention that the translator has added the lexical item *sigara* (cigarette) which does not appear anywhere in the ST.

ST: Smoking is the leading cause of lung cancer. It also leads to the bursting of the air sacs inside the lungs (emphysema) which then reduces the ability to take oxygen and expel carbon dioxide. The windpipe that leads from the throat to the lungs can get blocked by cancers caused by smoking. An opening is then cut into the windpipe to allow the smoker to breath (trancheostomy).

TT: Uvutaji wa sigara ndio chanzo kikuu cha saratani ya mapafu. Hali kadhalika husababisha kupasuka kwa vifuko vya hewa ndani ya mapafu, hali ambayo hupunguza uwezo wa kupumua ndani hewa safi (oksijeni) na kuondoa kabonioksidi. Chemba-pua ambayo huanzia kwenye koo (zoloto) hadi kwenye mapafu huweza kuzibwa na kansa zinazosababishwa na uvutaji wa sigara. Halafu uwazi huundwa kwenye chembe-pua ili kumwezesha mvutaji huyo kupumua.

The lexical chain that comes out in the ST links smoking to: lung cancer, air sacs, lungs, oxygen, carbon dioxide, wind pipe, throat, lungs, cancers, smoker, opening, and breath. There is also repetition of lungs, wind pipe and smoking in the ST. Focusing on the TT, the translator comes up with a lexical chain that is equivalent to the ST. There is linking of *uvutaji wa sigara* (smoking) to: *saratani ya mapafu* (lung cancer), *vifuko vya hewa* (air sacs), *mapafu* (lungs), *oksijeni* (oxygen), *kabonioksidi* (carbondioxide), *chemba-pua* (windpipe), *koo* (throat), *kansa*

(cancer), *mvutaji* (smoker), and *kupumua* (breathing). On the other hand, *uvutaji wa sigara* (cigarette smoking), *mapafu* (lungs) and *chemba-pua* (windpipe) are repeated.

ST: Smoking increases the risk of getting cancer of the cervix and uterus. It is more difficult for a smoking woman to conceive and up to three times more likely for her to have a miscarriage. She is more likely to have still births and low birth weight babies because of the carbon monoxide and nicotine that affects the developing of the baby. Sudden Infant Death Syndrome (SIDS) is also associated with tobacco smoking. In addition, smoking can cause premature menopause.

TT: Uvutaji wa sigara huzidisha hatari ya kushikwa na kansa ya kinena au ile ya njia ya uzazi pamoja na chupa ya mtoto. Ni vigumu zaidi kwa mwanamke anayevuta sigara kushika mimba mbali na kuwa kwenye hatari mara tatu zaidi ya mimba kutunguka. Mwanamke kama huyu yuko katika hatari ya mtoto kufia tumboni, mbali na kujifungua mtoto mwenye uzani mdogo kutokana na hewa ya carbon monoxide na kemikali ya nikotini ambayo huathiri ukuaji wa mtoto. Visa vya Mtoto Kufa Ghafla (SIDS) pia huhusishwa na uvutaji wa sigara. Isitoshe uvutaji wa sigara husababisha mwanamke kufika kikomo cha umri pamoja na kiwango cha kuweza kupata mtoto.

The lexical chain in the ST segment links smoking to: cancer of the cervix, cancer of the uterus, risk, smoking woman, conceive, miscarriage, still births, low birth weight babies, carbon monoxide, nicotine, development of the baby, Infant Death Syndrome (SIDS), tobacco smoking and premature menopause. There is reiteration of smoking in the segment too. The translator in the TT just like in the ST links *uvutaji wa sigara* (cigarette smoking) to: *hatari* (risk), *kansa ya kinena* (groin cancer), *kansa ya njia ya uzazi* (cervical cancer), *chupa ya mtoto* (uterus), *mwanamke anayevuta sigara* (woman who smokes cigarette), *kushika mimba* (to conceive), *mimba kutunguka* (miscarriage), *mtoto kufia tumboni* (still birth), *kujifungua mtoto mwenye uzani ndogo* (low birth weight), carbon monoxide, *kemikali ya nikotini* (nicotine chemicals), *ukuaji wa mtoto* (child development), *Mtoto kufa Ghafla* (SIDS) (abrupt death of a child). Instances of reiteration through repetition of *hatari* (risk), *mwanamke* (woman) and *uvutaji wa sigara* (cigarette smoking) are also evident in the TT.

ST: AIDS is a sickness which comes because the person's body no longer has the strength to fight disease. The immune system is weak. The immune system is a system in our body that defends us against infections and diseases. This immune deficiency is caused by infection with a virus, or a very small germ. AIDS is caused

by infection with a type of virus called HIV. The AIDS virus weakens the immune system by killing the white blood cells which fight off and destroy any germs entering the body. As more and more white blood cells are killed, the body becomes less and less able to fight off many different germs which live around and in our bodies all the time. Finally, people with AIDS die from diseases which their bodies cannot resist. HIV can also attack the brain cells and nervous system directly causing mental and coordination problems. A person who is infected with HIV usually does not develop symptoms of infections or AIDS right away. For example, a person may not get sick from HIV for two to ten years after he or she is infected. We do know that once a person is infected with HIV, he or she is infected for life. A person infected with HIV can infect other people at any time during his or her lifetime. The person with HIV does not have to be sick with AIDS to transmit the virus.

TT: UKIMWI ni ugonjwa unaozuka kwa sababu mwili wa mtu hauwezi kupigana na ugonjwa kwa kutokuwa na nguvu. **Kinga ya mwili** ya kupigana na **magonjwa** ni **dhaifu**. Kinga ya mwili ni utaratibu wa mwili unaotulinda dhidi ya maambukizo na magonjwa. Upungufu wa kinga hii unasababishwa na maambukizo na kutokana na viini au baktaria wadogo sana. Ukimwi unasababishwa na aina ya viini vinavyoitwa VVU. Viini vya UKIMWI vinadhoofisha kinga ya mwili kwa kuua askari wa mwili wanaopigana na kuangamiza viini vinavyoingiana mwilini. Wakati askari wengi wanauawa, mwili unapungukiwa nguvu zaidi na zaidi za kupigana na viini tofauti vinavyoishi ndani na nje ya miili yetu kila wakati. HIV vinaweza kushambulia pia askari wa ubongo na utaratibu wa mishipa huku ikisababisha shida ya ubongo na viungo vya **mwili**. Mwisho watu wenye **UKIMW**I hufa kwa sababu **miili** yao haiwezi kupigana na viini vya magonjwa. Mtu aliyeambukizwa na VVU kwa kawaida haonyeshi ishara za kuambukizwa na viini au UKIMWI mara moja. Kwa mfano, mtu anaweza kuwa **mgonjwa** kutokana na **viini** kwa miaka miwili au kumi tangu aambukizwe. Tunajua kwamba **mtu** anapoambukizwa na **viini** yeye ameambukizwa kwa maisha. Mtu aliyeambukizwa na viini anaweza kuwaambukiza watu wengine wakati wowote wa maisha yake. Mtu ambaye ana VVU si lazima awe mgonjwa wa UKIMWI ili kueneza viini hivyo.

The ST exhibits a collocational lexical chain that links AIDS and the immune system to: sickness, body, strength, disease, germs, symptoms, weak, white blood cells, nervous system, mental, coordination, and virus. There is reiteration of sickness, disease, system, AIDS, HIV,

person, and body. The translator has equally used a collocational lexical chain that links *UKIMWI* (AIDS) and *kinga mwilini* (immune system) to *ugonjwa* (sickness), *mwili* (body), *mtu* (person), *magonjwa* (diseases), *dhaifu* (weak), *nguvu* (strength), *maambukizo* (infections), *upungufu wa kinga* (weakened immune system), *baktaria* (bacteria) and *VVU* (HIV). Reiteration is on *kinga ya mwili* (immune system), *mwili* (body), *maambukizo* (infections), *mgonjwa* (patient), *magonjwa* (diseases), *UKIMWI* (AIDS), *viini* (germs) and *mtu* (person).

5.4.2.4.1 Summary

Lexical cohesion is one of the most widely used cohesive device in healthcare texts based on the coupled pairs analysed above. Ties that exist between various lexical items exhibit unity that ensures information is passed using lexical items that reinforce each other. It emerged that healthcare texts are rich in lexical cohesion and translators too maintained the cohesiveness of the texts by using equivalents or close lexical items as used in the ST. There is no significant difference exhibited in the TT from the ST and this is in line with Baker (1992, 207) who observed that in non-literary translation, new networks of lexical relations created in the target text during the course of translation will often be very close, overall, to those of the source text. The foregoing can also be reinforced by the way in which reiteration is used in the ST and TT whereby the lexical items are repeated in the same way in both texts.

However, the Swahili healthcare texts were found to be slightly more cohesive than the English healthcare texts going by the density of lexical items used. In other words, translators tended to use more than one lexical item to refer to the same thing where in the ST only one lexical item is used. A case in point is *sex* which is the only lexical item used in the ST, though repeated, but in the TT in spite of repetition, more words such as *kujamiana*, *mahaba* and *kushiriki mapenzi* are used to refer to *sex*. In addition, translators in an effort to avoid ambiguity add information that they deem will help readers understand what is exactly meant in the texts. For instance, the ST just uses *smoking* but the TT uses *uvutaji sigara* (cigarette smoking) and this makes it explicit to what kind of smoking is being referred to.

The foregoing has presented the use of cohesive devices in healthcare texts and how they impact on the general translation. The next section discusses the translation of taboos.

5.5 Taboos

Taboos form part of the *Tertium Comparationis* as noted in chapter three. It was noted that taboos pose challenges to translators because it makes no sense to translate a text that the target

audience will find offensive and violent to their beliefs. Accordingly, this section describes instances in the source text that can be considered taboo from the target audience's perspective.

Table 5.8: Translating semen, vaginal fluids, vagina and rectum

Source text	Target text	Back translation
The AIDS virus is found	Virusi vya UKIMWI	The AIDS virus is mostly found
mostly in blood, semen,	hupatikana sana sana katika	in blood, men's seed and water
and vaginal fluids	damu, mbegu za uume na	that comes out of womanhood
however, the vagina	maji ya kutoka uke	however, womanhood,
penis, and rectum are	walakini, uke , uume na	manhood and anus are covered
covered with a much	mkundu vimefunikwa kwa	by the thinnest skin that is called
thinner skin called the	ngozi iliyo nyembamba zaidi	mucous membrane which covers
mucous membrane which	inayoitwa 'mucous	blood vessels.
covers blood vessels.	membrane' ifunikayo mishipa	
	ya damu.	

The translator uses *mbegu za uume* (men's seed) to refer to semen. The use of *mbegu za uume* (men's seed) by the translator can be because the direct equivalent of semen in Swahili does not sound polite. The translator has equally used *maji yanayotoka kwa uke* (water that comes out of womanhood) in reference to vaginal fluid. That was used in order to avoid vaginal which is considered taboo just as it is for *uke* (vagina). The foregoing also applies to *uume* (manhood) instead of penis and *uke* (vagina).

Table 5.9: Translating vaginal intercourse, anal intercourse and oral intercourse

Source text	Target text	Back translation	
This includes vaginal	Hii pia inahusu kufanya	This also involves making love	
intercourse and, in societies	mapenzi kwa uke, na kwa	in the womanhood and in	
where it is practised, anal	jamii zilizo na tabia za	societies that make love in the	
and oral intercourse .	kufanya mapenzi kwa	anus and mouth.	
	mkundu na kwa mdomo.		

The translator uses *mapenzi kwa uke* (love in the womanhood) instead of vaginal intercourse as used in the ST since that could be offensive in the target culture. The equivalent of vagina is *kuma* and it considered taboo. That notwithstanding, the translator translates anal and oral intercourse as *mapenzi kwa mkundu na kwa mdomo* (love in the anus and mouth) and inasmuch as *mkundu* (anus) is considered taboo, the translator did not use euphemism in its translation. Regarding oral sex, it has been presented in the TT as *mapenzi kwa mdomo* (love in the mouth) but this is a concept that is relatively new in the target culture and has not been characterised as taboo.

Table 5.10: Translating foreplay

Source text	Target text	Back translation		
AIDS can also be	Ukimwi unaweza pia kusambazwa	AIDS can also be spread by		
spread by the fluid that	na maji yanayotoka kwa uume au	water that comes out of		
comes out of the penis	uke wakati wa kujamiana. Haya	manhood or womanhood		
or vagina during sex.	maji pia yanayosambaza UKIMWI	during sex. These water also		
The fluid that spreads	yanaweza kutoka wakati wa	that spreads AIDS can come		
AIDS can also come	kugusanagusana.	out when repeatedly		
out during foreplay.		touching each other.		

The translator uses euphemism in referring to penis, vagina and foreplay. In fact, foreplay is translated as *kugusanagusana* which means touching each other repeatedly.

Table 5.11: Translating condom

Source text	Target text	Back translation
Remember that a condom is	Kumbuka kwamba mpira sio	Remember that a rubber is
not an absolute protection	kinga kamilifu dhidi ya	not an absolute protection
from HIV infection.	kuambukizwa.	against infection.

The condom is translated as *mpira* which is an equivalent of rubber. The term condom is considered taboo in the target culture. Most people in the target audience view a condom as a tool for people who are promiscuous and as such, have resistance towards it. By calling it a rubber, the translator is trying to avoid using *kondomu* because of what it is mistakenly associated with.

Table 5.12: Translating menstruation

Source text	Target text	Back translation	
They cannot tell until she begins	Hawezi kujua mpaka	One cannot tell until she	
to grow or misses her	aanze kunenepa au kukosa	starts to grow fat or misses	
menstruation.	vipindi vyake.	her periods .	

Menstruation is not openly discussed in some cultures and the same applies to the target audience in the translation. The translator has euphemistically translated it into *vipindi* which mean *periods*. The equivalent of menstruation is *hedhi* but the translator used *vipindi* (periods). It is considered taboo to say that a woman is menstruating but instead phrases such as visitor of the month and my flower are used.

Table 5.13: Translating faeces

Target Text	Back translation	
Tumia choo wakati wote	Use a toilet all the time you	
unapotaka kujisaidia.	want to help yourself	
	Tumia choo wakati wote	

The translator has not mentioned faeces in the translation and instead chooses to use 'help yourself'. The translator opted for the use of 'kujisaidia' because the target culture abhors the use of 'mavi' which is the equivalent of faeces.

Table 5.14: Translating penis and sperms

Source text	Target text	Back translation	
Smoking reduces blood	Uvutaji wa sigara hupunguza	Cigarette smoking reduces	
flow to the penis resulting	usambaaji wa damu kwenye	the flow of blood to the penis	
in impotence. The	mboo na hivyo kusababisha	and therefore causes	
chemicals may also	ugumba (uhanithi). Kemikali	impotency. Those chemicals	
damage sperms leading to	hizo pia zinaweza kuharibu	can also damage semen	
the babies born with birth	shahawa na hivyo kusababisha	causing a child being born	
defects and even	watoto kuzaliwa na madhara ya	with defects during birth and	
miscarriages. These	nyakati za kuzaliwa na hata	even sometimes cause a	
interferences can lead to	wakati mwingine mimba	miscarriage. These	
infertility.	kutunguka. Mvurugo huu	interruptions can cause	
	unaweza kusababisha ugumba.	infertility.	

Unlike other translators who opt to use euphemism in translating penis into *uume* (manhood), this translator has used *mboo* which is an equivalent of penis and also translated sperm that can be considered taboo into *shahawa*. The translator did not use terms that conform to the target culture since some body parts especially those that touch on genitalia are usually glossed over.

Table 5.15: Translating vaginal sex

Source text	Target text		Back translation
Vaginal sex	Ngono kwa njia ya kawaida (mwanamume na mwanamke		Sex through the normal way (man and woman)

The translator translates vaginal sex into sex through the normal way without using the term vaginal as used in the ST. The translator goes further to provide a parenthesis that the normal way is that of a man and woman. The target audience does not conform to same sex and maybe that explains why the translator opted to use normal way as a translation of vaginal sex.

5.5.1 Summary

The language pair and cultures in this study present information differently and as I discussed in chapter four, unlike the source language that tends not to use veiled language, the target language abhors explicitness in areas considered taboo. The source language plainly uses uncensored language in presentation of information and this brings forth explicitness norm in the English healthcare texts. Conversely, the target culture prefers the use of euphemism, which is largely applied by translators in the present study, in its presentation which I hereby refer to as the euphemism norm. For instance, the translation of vaginal intercourse, menstruation, faeces, sex have euphemistically been translated. Howbeit, some translators sparingly use explicit terms as used in the source texts. A case in point is *mboo* (penis), *kuma* (vagina) mkundu (anus) among others. It is, however, worth noting that some translators use euphemisms in the translation of the same terms whereby penis is translated as *uume*, vagina (uke), condom (mpira) among others. This discrepancy in the translation of taboo words can be attributed to the kind of text in the translation and in this case, the text on smoking seems to go against the established norms of the target culture where taboo words are veiled to avoid antagonising the recipient audience. The language used in the smoking texts is bare-knuckled maybe because smoking is a habit that one willingly gets into unlike other health problems. Even so, Ndhlovu (2012, 232) observed that a few translators are bold enough to present taboo issues in direct and clear terms in line with the source norm of explicitness. In line with her observation, the present study notes that this boldness is rife in translations that touch on health problems that can be said to be self-inflicting. There is no use of explicitness in the translation of texts touching on health problems such as cancer and HIV. In any case, the translators strive to use paraphrases, cultural substitution among other translation strategies, as will be discussed hereunder, in order to be culturally correct in their translations. Notably, the text on smoking is one that the translator does not adhere to the use of euphemism as it seems to be the standard in other texts in the study.

After discussing the translation of taboos and seen that euphemism norm reigns in healthcare texts save for the smoking text that does not adhere to the norm, the next section discusses the translation strategies used by translators to overcome constraints be they cultural or linguistic.

5.6 Strategies used in translating linguistic aspects

Translators more often than not are confronted with linguistic constraints and have to make decisions that will render the target text aligned with the target audience expectations. The problems range from non-lexicalisation in the target language to making explicit that which is implicit in the source text. I present, hereunder, examples from the texts and strategies used.

Table 5.16: Strategies for translating non-lexicalised and specialised terms

No.	Example	Source	Strategy
1.	ST: Pneumococcus is a germ that causes illness like pneumonia, which is passed by coughing and sneezing. TT: Pneumococcus ni vidudu vinavyosababisha maradhi kama vile mkamba ama nimonia; na mara nyingi husambaa mgonjwa anapokohoa ama kupiga chafya.	Protect Your Child from Pneumonia / Kinga Mtoto Wako Dhidi ya Ugonjwa wa Nimonia	Use of pure loan word
2.	ST: Pneumonia can be prevented by the new pneumonia vaccine. TT: Kupitia chanjo mpya ya PCV10, unaweza kumkinga mtoto wako kikamilifu dhidi ya nimonia!	Protect Your Child from Pneumonia / Kinga Mtoto Wako Dhidi ya Ugonjwa wa Nimonia	Use of pure loan word

No.	Example	Source	Strategy
3.	ST: Ear infections (Otitis-media) with sometimes presence of pus from the ears. TT: Maambukizo ya masikio (Otitis-media) wakati mwingine yanayohusisha kutoka usaha	Vaccination Campaign Fact Sheet / Kampeini Dhidi ya Magonjwa ya Ukambi na Rubella	Use of pure loan word
4.	ST: Infection can spread to the brain leading to meningitis. TT: Maambukizi hayo yanaweza kusambaa haraka hadi katika ubongo na hivyo kusababisha homa ya ubongo (menengitis)	The Smoker's Body / Mwili wa Mvutaji Sigara	Use of pure loan word preceded by explanation
5.	ST: She is more likely to have still births and low birth weight babies because of the carbon monoxide and nicotine that affect the developing of the baby. TT: Mwanamke kama huyu yuko katika hatari ya mtoto kufia tumboni, mbali na kujifungua mtoto mwenye uzani mdogo kutokana na hewa ya carbon monoxide na kemikali ya nikotini ambayo huathiri ukuaji wa mtoto.	The Smoker's Body / Mwili wa Mvutaji Sigara	Use of pure loan word
6.	ST: Smokers have twice the risk of developing cataracts. TT: Wavutaji wa sigara wamo katika hatari maradufu ya kushikwa na ugonjwa wa macho (cataracts)	The Smoker's Body / Mwili wa Mvutaji Sigara	Use of pure loan word preceded by explanation

No.	Example	Source	Strategy
7.	ST: Some infections such as Human Papilloma Virus (HPV) can increase your risk of cancer. Cervical cancer is linked to HPV, which can be spread through sex. TT: Baadhi ya maambukizo kama virusi vya Human Papilloma Virus (HPV) huweza kuongeza athari yako ya kupata saratani. Saratani ya uzazi inahusishwa na HPV, ambayo huweza kusambazwa kupitia ngono.	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	Use of pure loan word
8.	ST: The most common treatments for cancer are surgery, chemotherapy, and radiotherapy. TT: Matibabu maarufu ya saratani ni upasuaji, tiba ya kidini (chemotherapy), na tiba ya miale (radiotherapy)	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	1
9.	ST: CHEMO (short for chemotherapy) is the drug(s) used to kill cancer cells or slow their growth. TT: KEMO (ufupi wa chemotherapy) ni matumizi ya dawa kuangamiza seli za saratani au kupunguza ukuaji wake.	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	Use of shortened indigenised loan word plus pure loan word
10.	ST: Radiation that comes from outside your body is like getting an x-ray (a photograph of your organs or bones). Sometimes the doctor will need to put a radiation source inside you. When that happens, it's called an implant .	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	1

No.	Example	Source	Strategy
	TT: Miale inayotoka nje ya mwili wako ni kama kupigwa uyoka (x-ray). Wakati mwingine, daktari atahitajika kuweka kifaa cha kutoa miale ndani ya mwili wako. Hilo linapofanyika, huitwa 'implant'		
11.	ST: Anaemia (low red blood cell counts) which can cause tiredness, shortness of breath, pale skin, and other symptoms. TT: Anemia (seli chache nyekundu za damu) zinazoweza kusababisha uchovu, matatizo ya kupumua, ngozi kupauka, na ishara nyinginezo.	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	Use of indigenised loan words
12.	ST: After treatment, extra protein is usually needed to heal tissues and help fight infection. TT: Baada ya matibabu, protini zaidi huitajika ili kuponya viungo na kusaidia kukabiliana na maambukizi.	What You Need to Know About Cancer / Unachofaa Kujua Kuhusu Saratani	Use of indigenised loan words
13.	ST: Smoking is the leading cause of lung cancer. It also leads to bursting of the air sacs (emphysema) which then reduces the ability to take oxygen and expel carbon dioxide. TT: Uvutaji wa sigara ndio chanzo kikuu cha saratani ya mapafu. Hali kadhalika, husababisha kupasuka kwa vifuko vya hewa ndani ya mapafu, hali ambayo hupunguza	The smoker's body / Mwili wa Mvutaji Sigara	Use of indigenised word preceded by explanation and omission

No.	Example	Source	Strategy
	uwezo wa kupumua ndani hewa safi (oksijeni) na kuondoa kabonioksidi.		
14.	ST: Relapse is expected in any behaviour change, so we must build in 'life-preservers' or ways to bring people back onto the bridge should they suffer the consequences of a negative behaviour. TT: Katika mabadiliko ya tabia kurudi nyuma kunatarajiwa hivyo tunahitaji kuwa na vifaa vya kujiokolea (life-preservers) au	Life Skills Manual / Mwongozo wa Stadi za Maisha	Pure loan word preceded by an explanation
	njia za kuwarudisha watu katika daraja hata kama watakuwa wameathirika kutokana na matokeo ya tabia mbaya.		
15.	ST: New drugs like anti-retroviral therapy and protease inhibitors are not available to many people due to high cost and lack of infrastructure for monitoring the immune system. TT: Dawa mpya kama 'anti-retroviral therapy' na 'protease inhibitors' huwa hazipatikani kwa Waafrika kutokana na kuwa za gharama kubwa na ukosefu wa muundo msingi kwa ajili ya kusimamia mfumo wa kinga ya mwili.	Life Skills Manual / Mwongozo wa Stadi za Maisha	Use of pure loan word
16.	ST: White blood cells, called leuckocytes , are our immune cells. Some of the main cells in your immune system are: a. The macrophage: macro = big, phage = eater. The Big Eater.	Life Skills Manual / Mwongozo wa Stadi za Maisha	Pure loan word preceded by an explanation

No.	Example	Source	Strategy
	This cell eats the invaders or		
	germs (called antigens) and		
	sends signal to the captain of	,	
	your immune system.		
	b. The T4 Helper Cell (CD4):		
	Captain of your immune system.		
	It receives the message from the		
	macrophage when an invader		
	(antigen) is present and orders		
	two or more cells (the B cell and		
	the T8 killer cell) to search for		
	and destroy the invader. The T4		
	Helper cell is also the cell that		
	HIV attacks and destroys. T cells		
	are called 'T' because they		
	mature in the thymus gland.		
	c. The B Cell: Like a factory. It		
	identifies the shape of the		
	invader (antigen) and make		
	'antibodies' (like eyes), which fit		
	the antigen.		
	d. The T8 (CD8) or cytotoxic or		
	Killer Cell: Also called by the		
	T4 Helper cell to attack the		
	invader and kill it directly.		
	TT: Chembechembe nyeupe za damu,		
	zinazoitwa 'leukocytes', ni chembechembe		
	zetu za kutukinga na magonjwa. Baadhi ya		

No.	Example	Source	Strategy
	chembechembe nyeupe kuu kwenye mfumo		
	wako wa kinga ni hizi zifuatazo:		
	a. 'Macrophage': macro =		
	kubwa, phage = mlaji. Mlaji		
	mkubwa. Hii chembechembe		
	hula wavamizi au viini vya		
	maradhi (vinavyoitwa		
	antijeni) na kutoa ishara		
	kwa nahodha wa mfumo wa		
	kinga.		
	b. Chembechembe Saidizi T4		
	(CD4): Nahodha wa mfumo		
	na kinga. Inapokea taarifa		
	kutoka kwa 'macrophage'		
	wakati mvamizi (antijeni)		
	anakuwepo na kuamrisha		
	chembechembe mbili zaidi		
	(chembechembe B na		
	chembechembe uaji T8)		
	kumtafuta na		
	kumwangamiza mvamizi.		
	Chembechembe Saidizi T4		
	ni chembechembe ambayo		
	virusi vya UKIMWI		
	huivamia na kuingamiza.		
	Chembechembe T huitwa 'T'		
	kwa sababu hukomaa katika		
	tezi ya 'thymus.'		
	c. Chembechembe B : Kama		
	kiwanda. Hutambua umbo la		

No.	Example	Source	Strategy
	mvamizi (antijeni) na kutengeneza 'kingamwili' (kama funguo), ambazo zinaenea kwenye antijeni. d. Chembechembe T8 (CD8) au cytotoxic au chembechembe zinazoua: pia huitwa chembechembe saidizi T4 kwa ajili ya kushambulia mvamizi na kumuua moja kwa moja.		
17.	ST: No cure, treatment is called Acyclovir TT: <i>Hauponi, matibabu ni</i> ' Acyclovir '	Life Skills Manual / Mwongozo wa Stadi za Maisha	Use of pure loan word
18.	ST: One dose of Tdap is routinely given at age 11 or 12. TT: Dozi moja ya Tdap hupewa mtu mara mara akiwa na umri wa miaka 11 au 12.	Tdap Vaccine / Chanjo ya Tdap	Use of indigenised loan words
19.	ST: During this 'window period' the test for HIV may be negative even though the person is infected with HIV. TT: Katika kipindi hiki cha 'mpito' (transition period), ukaguzi wa VVU unaweza kuonyesha kwamba mtu hana viini hata ingawa mtu ameambukizwa kwa damu.	Facts and Feelings About AIDS / Ukweli na Hisia Kuhusu UKIMWI	Use of loan word preceded by explanation
20.	ST: HIV can also be spread by instruments such as speculum , a tenaculum , or other	Facts and Feelings About	Use of pure loan word

No.	Example	Source	Strategy
	instruments that touch blood, vaginal fluids, or semen. TT: VVU pia vinaweza kuenezwa na vifaa kama speculum, tenaculum, au vifaa vingine vinavyogusa damu au maji ya uke au uume.	AIDS / Ukweli na Hisia Kuhusu UKIMWI	
21.	ST: Vaccines help your child's body to make 'antibodies' that fight disease. TT: Chanjo hufanya hivyo kwa kuupa mwili nguvu spesheli almaarufu 'antibodies' zinazokabiliana na maradhi kila yanapotokea.	Protect Your Child from Pneumonia / Kinga Mtoto Wako Dhidi ya Ugonjwa wa Nimonia	Pure loan word preceded by an explanation
22.	ST: An infected person can get HIV from blood to blood contact through unsterile needles or surgical equipment. TT: Mtu aliyeambukizwa anaweza kupata VVU kupitia damu kugusana na damu kwa njia ya sindano.	Facts and Feelings About AIDS / Ukweli na Hisia Kuhusu UKIMWI	Translation by omission
23.	ST: A person can become infected with HIV when unsterile instruments such as knives and needles are used to cut the skin if the cutting instrument is not sterilized after each use. TT: Mtu anaweza kuambukizwa na viini wakati vifaa visivyochemshwa, kama vile visu na sindano ambavyo vinatumika kwa	Facts and Feelings About AIDS / Ukweli na Hisia Kuhusu UKIMWI	Translation by a more general word (superordinate)

No.	Example	Source	Strategy
	kukata ngozi, kama kifaa hicho cha kukata		
	hakijakaguliwa kila baada ya matumizi.		
24.	ST: Eat a least 3 main meals a day that	Iron and Folic	Translation by
	consist of a balanced diet and include small	Acid	a more general
	meals or healthy snacks every 4 hours	Supplementation	word
	during the day to provide energy and	/ Nyongeza ya	(superordinate)
	nutrition for you and your growing baby.	Iron na Folic	
	TT: Kula angalau mara tatu kwa siku	Acid	
	chakula kilichokamilika na pia ule vitafunio		
	kila baada ya saa 4 wakati wa mchana ili		
	wewe na mtoto mpate nguvu		

> Use of pure loan word: examples 1, 2, 3, 5, 7, 10, 15, 17, 20

The strategy of using pure loan words, as demonstrated by the examples above, indicate that it is a go-to solution for technical and non-lexicalised items in the healthcare texts. Swahili, being a developing language, lacks the lexical terms that the English language has and therefore a translator is left with the only option of using the words just as they are used in the source text. For instance, *pneumococcus* is a highly technical term that the target audience will find difficult to understand but it is transferred directly to the target text without even attempting to provide an explanation. The other words such as *pneumonia vaccine* have been presented in the target text as *PCV10* which is a dose of the vaccine. Other words that have been purely transferred the way they are in the source text into the target text without any modification are: *otis-media*, *carbon monoxide*; *Human Papilloma Virus* (*HPV*), *x-ray*, *implant*, *anti-retroviral therapy*, *protease inhibitors*, *speculum and tenaculum*. These terms are a clear manifestation on how translators overcome constraints of non-lexicalisation in the target culture. It can also be argued that translation by use of pure loan word is an easy escape route for translators when all other possible routes seem blocked. In other words, it is a strategy of last resort because the

endeavour of any translator is to render what is in the source language into a form that can be easily understood by the target audience. Inasmuch as use of pure loan word is inevitable in some circumstances, it makes the target text challenging for the targeted audience. This strategy furthers Venuti (1995)'s view on foreignisation of texts.

➤ Use of pure loan word preceded by explanation: examples 4, 6, 8, 14, 16, 19, 21

Translators use it whenever they deem that the explanation given to capture a non-lexicalised word is not enough and therefore back it up with the loan word. It is a common strategy that is prevalent in the translation of Swahili healthcare texts. Using example 16, the translator made an effort to provide an explanation for highly technical terms that are not lexicalised in Swahili. Macrophage is translated as *mlaji kubwa* (big eater) whereby macro = *kubwa* and phage = *mlaji* and this presents a classic example on how explanation of words together with the original can help the reader understand technical terms. The translator has given an explanation of T4 Helper cell (CD4) in the TT as *chembechembe saidizi* T4 (CD4) (Helper cell T4). In this case, even though T4 and CD4 are maintained, the reader can be able to decipher what kind of cell the translator is referring to and this could be difficult for the readers if only pure loan words were used in the translation.

Example 21 equally demonstrates how explanations that precede pure loan words make it relatively easy lexical items that are not lexicalised in a given language. The word *antibodies* has been explained as *nguvu spesheli* (special energy) and then the pure loan word given. The reference of *antibodies* as some special energy helps the reader to conceptualise what antibodies are and the fact that they give some special energy then any reader can figure out their importance.

➤ Use of indigenised loan words: examples 11, 12, 18

Looking at it from the lens of Venuti (1995), unlike the use of pure loan words that further foreignisation, use of indigenised loan words borders on both foreignisation and domestication. The translators, in an effort to make translations lean towards the target culture, resort to indigenising words whereby the structure is slightly altered but the meaning and even sound remain intact. This slight change to a word is done in tandem with the target language morphology. In the current study, I prefer to call it *Swahilinisation* of words. For instance, *anaemia* is translated as *anemia* which sounds just like the original word. In fact, when

pronounced, one may not be in a position to point out if it is Swahili or English. In example 11 also we have the word cell translated using an indigenised loan word *seli*. This word is defined in *A Standard English – Swahili Dictionary* (1939) as 'chembechembe zilizo asili ya kila kitu chenye uhai' (the smallest unit that is the beginning of everything that has life). The decision by the translator to use the word indicates that *cell* is not lexicalised in Swahili.

In example 18, the translator used *dozi* as a translation for dose and this can be explained that besides non-lexicalisation, the word is considered familiar in the target culture because of its frequency of use.

➤ Use of indigenised loan word preceded by explanation: example 13

While we are familiar with the use of pure loan word preceded by explanation as illustrated above, the use of indigenised loan word preceded by explanation is not common but it manifests itself in example 13. The translators opt to domesticate the translation in the target text by using the indigenised word which is backed up with an explanation to ease its comprehension by the readers. As seen in the example, *oxygen* is translated as *oksijeni*, an indigenised word, with *hewa safi* (clean air) as explanation. The Standard English-Swahili Dictionary defines *oxygen* as *kitu kama hewa kilichomo kwa wingi* (something like air that is there in plenty). This shows that the Swahili language does not have an equivalent word but instead offers an explanation, and therefore the translator too found indigenisation and explanation as the solution to the constraint of its non-lexicalisation. This strategy, in my opinion, is ideal for dealing with non-lexicalisation as the readers can get the message either from the explanation or the indigenised word.

> Translation by omission: example 22

This strategy is used by translators when they deem that leaving out a given word will not affect the overall meaning being communicated. In example 22, *unsterile* and *surgical equipment* have been left out in the TT but whereas omitting surgical equipment does not affect the message being passed, the omission of unsterile, in this case, makes the message ambiguous in the TT. It comes out that one can get HIV by blood coming into contact with blood through any needles but this could have been different had the translator modified needles with unsterile. Accordingly, translators ought to use this strategy with a lot of care because it can lead to misinformation in the target text.

In example 13, the translator has omitted *emphysema* which is not lexicalised in the target language though in this case the meaning is not lost since the explanation given aptly captures the message as put forward in the source text. This strategy inasmuch as it appears easy to resort to whenever a translator is faced with the constraint of non-lexicalisation, should be based on the weight the word carries in the message being conveyed. A strategy is a solution to a problem but it should not become a problem in itself by defeating the course of translation as was noted by Ndhlovu (2012, 270) that omission can sometimes lead to instances of misrepresentation and/or mistranslation of information.

> Translation by a more general word or superordinate: examples 23, 24

This strategy is preferred by translators whenever they are confronted with lack of a specific word in the target language that can equivalently replace one in the source text. In example 23, the translator has used *visivyochemshwa* (those that are not boiled) and *hakijakaguliwa* (has not been inspected) as a translation of not sterilised. Sterile is defined in the *Advanced English Dictionary* as free of or using methods to keep free of pathological microorganisms whereas the *Standard English-Swahili Dictionary* defines sterile as *sio na vijidudu vyo vyote, safi kabisa* (without any germs, very clean). The translator uses *visivyochemshwa* (those that are not boiled) which is got from the verb *chemsha* (boil) defined in the *Standard Swahili-English Dictionary* as cause to boil. It is a common practice in the African culture generally to boil water in order to kill germs and therefore the translator's use of *visivyochemshwa* (those that are not boiled) is due to lack of a specific word that can replace sterile. This strategy can also pass for cultural substitution since the translator used a word that the target culture can identify with.

The translator, as indicated above, has used *hakijakaguliwa* (not inspected) as a translation for not sterilised. The word *hakijakaguliwa* is got from the verb *kagua* (inspect) which the *Standard Swahili-English Dictionary* defines as *to inspect*. The foregoing definition shows that the translator opted for the word in the sense that if something is inspected then its cleanliness or purity is therefore guaranteed. Lack of specificity in the Swahili language necessitated the use of *hakijakaguliwa* (not inspected) as familiar term in place of not sterilised. The use of this strategy takes us back to the notion of translators being cultural insiders for they have to know what is familiar to use in a similar or close sense as used in the source culture with a word whose specific equivalent cannot be found in the target culture.

In example 24, the translator has used the superordinate term *vitafunio* (that can be chewed) to refer to snacks. The *Standard English-Swahili Dictionary* defines snack as *chakula kidogo cha kuliwa kwa haraka* (a small meal that is eaten quickly). The translator's use of *vitafunio* (that can be chewed), is due to the familiarity of people with small meals that can be chewed.

5.6.1 Translation Strategies used at sentence level

This section deals with strategies used by translators to overcome constraints encountered at the sentence level.

> Translation by addition

This involves adding information in the TT that is not present in the ST. Translators use this strategy whenever they feel that the information as presented in the ST is not sufficient to pass the intended message. This underlines the importance of translators being very conversant with the target audience so as to make decisions that enhance understandability of a text.

Table 5.17: Translation by addition

Source Text	Target Text	Back Translation
During pregnancy you need to eat more food, a balanced and varied diet. (Iron and Folic Acid Supplementation)	Lishe bora ni muhimu kwa ujauzito wenye afya na mtoto mwenye afya. Unahitaji kula chakula kingi na mchanganyiko wa vyakula.	for a healthy pregnancy and a healthy baby. You need to eat more food and
2. Always wash hands with soap and running water after using a toilet, handling a child's faeces or before preparing and eating food (Cholera text)	Nawa mikono kwa sabuni ama jivu na maji yanayotiririka baada ya kutumia choo, kumpangusa mtoto kinyesi, kabla ya kutayarisha na kula chakula, na kabla ya kumlisha mtoto.	with soap or ash with running water after using the toilet, handling a child's faeces, before preparing and eating food,

Source Text	Target Text	Back Translation
3. Cholera is a dangerous disease caused by germs that make a patient pass excessive watery diarrhoea, leading to death within 3 to 4 hours if not treated quickly.'	Kipindupindu ni ugonjwa hatari unaosababishwa na viini vinanyoenezwa kupitia kwa kinyesi. Viini hivi husababisha mgonjwa kuhara na wakati mwingine kutapika kwa wingi. Hali hii husababisha mgonjwa kupoteza maji na madini mwilini na kuwa mnyonge. Kipindupindu husababisha kifo kati ya masaa matatu au manne mgonjwa akikosa kutibiwa kwa haraka.	Cholera is a dangerous disease caused by germs that can be spread through faeces. These germs make a patient to diarrhoea and sometimes to vomit a lot. This condition makes the patient's body lose water and iron and become weak. Cholera causes death within three to four hours if a patient is not treated quickly.
4. Children can also be protected from pneumonia by giving them breast milk during the first six months (pneumonia text) 5. Cells are usually too small to be seen with the naked eye	Unaweza kumkinga mwanao dhidi ya nimonia kwa kumnyonyesha bila kumpa chakula kingine chochote hadi atakopotimu umri wa miezi sita. Seli huwa chembechembe ndogo sana ambazo aghalabu hazionekani kwa macho ila kwa kutumia hadubini	You can protect your child from pneumonia by breastfeeding without giving any other food until he/she is six months. Cells are the smallest units that are usually not seen with naked eye but by using a microscope.
6. There are many types of cancer. Some cancers grow and spread fast. Others grow more	Saratani si ugonjwa mmoja tu, hata hivyo, kuna aina mbalimbali za saratani. Baadhi ya saratani hukua	Cancer is not just one disease, however, there are many types of cancer. Some cancers grow and

Source Text	Target Text	Back Translation
slowly. They also respond to treatment in different ways.	na kuenea haraka mwilini. Nyingine hukua polepole. Hata hivyo, saratani hizo hupokea matibabu kwa njia tofauti. Saratani inaweza kuanzia katika sehemu yoyote mwilini.	spread fast. Others grow slowly. Even so, those cancers respond to treatment in different ways. Cancer can start from any part of the body.
7. Cook food thoroughly and eat it while it is still hot. Ensure all food is stored safely.	Pika chakula hadi kiive vizuri na ukile kingali moto. Hakikisha chakula chote kimefunikwa na kuwekwa vizuri.	Cook food thoroughly and eat it while it is still hot. Ensure all food is covered and stored safely.
8. A person who has ever had a life-threatening allergic reaction after previous dose of any diphtheria, tetanus or pertussis containing vaccine, OR has a severe allergy to any part of this vaccine, should not get Tdap vaccine. (Tdap text)	Mtu yeyote ambaye ashawahi kuwa na mzio wa kuhatarisha maisha baada ya kupokea dozi yoyote ya chanjo yenye dondakoo, pepopunda au kifaduro, AU ana mzio mkali dhidi ya sehemu ya chanjo hii, hafai kupokea chanjo ya Tdap. Mwambie mtu anayetoa chanjo kuhusu mizio yoyote hatari.	Any person who has ever had a life-threatening allergic reaction after receiving any vaccine dose of diphtheria, tetanus or pertussis, OR has a severe allergy to any part of this vaccine, should not get Tdap vaccine. Tell the person administering the vaccine about any severe allergies.
9. Cancer is usually not inherited. It is not passed from parent to child the same way that height and HIV are. (cancer text)	Zipo baadhi ya saratani zinazofuata vizazi katika familia, lakini saratani kwa kawaida haiwezi kuambukizwa kutoka kwa mzazi jinsi iivyo kimo cha	There are types of cancer that follow the family lineage, but cancer is usually not passed from parent to child the way it is with

Source Text	Target Text	Back Translation
	77 11 121	1 1 1 6
	mtu. Kadhalika, saratani	height of a person.
	haiwezi kutoka kwa mama	Similarly, cancer cannot
	ikaambukiza mtoto kama	be spread from mother to
	ilvyo Ukimwi.	child the way it is with
		HIV

The examples above demonstrate how addition as a strategy is employed by translators so as to make the translations acceptable in the target culture. Addition is also a strategy that strives to domesticate a translation since whatever is added to a text is what a translator deems the target audience can identify with. In other words, addition de-foreignizes a text as seen in example 2 whereby the translator adds *jivu* (ash) as an alternative of soap for washing hands. Ash is used in some communities to wash hands and therefore its addition by the translator is in recognition of the fact that not all families have soap to wash their hands with. Such an addition could not have been possible if the translator was just proficient in the language pair thus underscoring the need for translators to be cultural insiders.

Equally, the addition strategy affords the translator an opportunity to make explicit what is implicitly stated in the ST. As an illustration, example 7 shows how the translator adds *kimefunikwa* (is covered) to the stored food because if there is no covering then the storage will not serve its purpose. It follows, therefore, that addition as a strategy fills what is left blank in the ST: because the source text's target audience can get what is stated clearly; because they can relate with the information; and due to an inadvertent omission.

> Omission of sentences and/or paragraphs

There are instances in which translators omitted sentences in whole and even paragraphs. Translators are decision makers and whenever they use a given strategy then it is presumed to be the best in the circumstances especially when studying texts from the descriptive translation studies point of view. However, the use of complete omission of sentences and/or paragraphs is likely to leave out some important message contained in the ST.

Table 5.18: Translation by Omission

Source Text		Target text
If taken before cond of neural tube defections	ception, it helps to reduce the incidence ets (IFAS)	Omitted
	depending on which viruses, bacteria, zoal infections are around (Facts and S)	Omitted
and whole grain cer mother should gain	reals to promote healthy weight gain. A at least one kilogram per month in the ers of pregnancy (IFAS)	Omitted
4.		Omitted
Supplementation: composition:	60mg Iron (ferrous fumarate), this is equivalent to 200mg ferrous Sulphate 400 (0.4 mg) Folic Acid	
Frequency:	Only one combined IFAS tablet daily	
Duration:	From Conception to delivery	
Target group:	All pregnant women	
Administration:	It should be taken with meals (IFAS)	

Based on the examples above, it emerges that the information omitted carries crucial information especially example 4 which gives directions on the dosage. The motivation behind omission of some information in translations can be due to the technicality of the words used in the ST and therefore translators find it hard to find equivalents. Consequently, translators opt for an easy escape route of leaving it out altogether, but this is contrary to how Baker (1992, 40) envisaged the use of the strategy in instances where the meaning conveyed by a particular

item or expression is not vital enough to the development of the text and therefore does not warrant distracting the reader with lengthy explanations. The justification given by Baker (1992) on the use omission may not, to a large extent, apply in healthcare translation because of the nature of information contained in the texts. Overall, omission should be used sparingly and with abundant caution in healthcare translation.

5.6.2 Translation of Abbreviations and Acronyms

Acronyms and abbreviations pose a challenge to translators on how they should be captured in the target text. According to Longman Dictionary of Contemporary English (2008), an acronym is a word made up from the first letters of the name of something whereas an abbreviation is a short form of a word or expression. It is significant to note that acronyms are syllabically pronounced the same way it is done with words. The dilemma that faces translators is whether to retain them in their original form or paraphrase them. It, however, emerged that translators use more than retention and paraphrasing of the acronyms and abbreviations by actually coining them in the Swahili language. That notwithstanding, it cannot go unnoticed that some acronyms and abbreviations in the English language have been used in the Swahili language to the extent that they are not considered foreign. The table below presents abbreviations that have been used in the TTs in their original forms.

Table 5.19: Acronyms and abbreviations used in their original forms

Source text	Target text	Back translation
Cervical cancer is linked to HPV , which can spread through sex. HPV is a very common infection and, in most cases, it goes away	Saratani ya uzazi inahusishwa na HPV , ambayo huweza kusambaza kupitia ngono. HPV huwa ni maambukizo ya	·
without treatment.	kawaida sana na wakati mwingi huisha hata bila ya kutibiwa.	a very common infection and most of the time it goes away without treatment.
Ever had a condition called Guillain-Barré Syndrome (GBS)	ushawahi kuwa na ugonjwa unaoitwa Guillain-Barré Syndrome (GBS)	Have you had a disease called Guillain-Barré Syndrome (GBS)

Source text	Target text	Back translation
Another vaccine, called Td , protects against tetanus and diphtheria, but not pertussis. A Td booster should be given every 10 years. Tdap may be given as one of these boosters if you have never gotten Tdap before. Tdap may also be given after a severe cut or burn to prevent tetanus infection.	Chanjo nyingine, inayoitwa Td, hulinda watu kutokana na pepopunda na dondakoo, lakini sio kifaduro. Nyongeza ya Td inafaa kupeanwa kila miaka 10. Tdap inaweza kupeanwa kama moja ya nyongeza hizi ikiwa hujawahi kupokea Tdap hapo awali. Tdap pia inaweza kupeanwa baada ya mkato au kichomo kikali ili kuzuia maambukizo ya pepopunda	Another vaccine, called Td, protects against tetanus and diphtheria, but not pertussis. A Td booster should be given every 10 years. Tdap may be given as one of these boosters if you have never gotten Tdap before. Tdap may also be given after a severe cut or burn to prevent tetanus infection.
As a basic guideline against malaria, UAM recommends the distribution of two long-lasting insecticide-treated nets (LLINs) per employee.	Katika njia thabiti za kupambana na malaria, UAM inapendekeza mgawanyo wa vyandarua viwili vilivyotiwa viatilifu vya muda mrefu (LLINs) kwa kila muajiriwa.	In elaborate ways to fight against malaria, UAM proposes a distribution of two long-lasting treated nets (LLNs) for every employee.
As part of their social corporate responsibility or goodwill efforts towards the community, some companies offer indoor residual spraying (IRS) as a supplement to net distribution.	Kama sehemu ya kampuni katika kuwajibika katika jamii, au kujitolea kwa jamii, baadhi ya kampuni zinafanya upulizaji wa dawa za ukoko (IRS) kama juhudi ya ziada	As part of companies' social corporate responsibility or their goodwill efforts to the community, some companies spray insecticides (IRS) as

Source text	Target text	Back translation
	baada ya kusambaza	part of
	vyandarua.	supplementary effort
		after distributing
		nets.
Clarify that it is important to go for	Mfafanulie wazi umuhimu wa	Clarify the
ANC every month for regular	kwenda kwenye kliniki ya	importance of going
check-up, including haemoglobin	kinamama wajawazito (ANC)	to pregnant mothers'
testing	kila mwezi kwa ukaguzi wa kila	clinic (ANC) every
	mara pamoja na ukaguzi wa	month for regular
	hali ya damu	check-up and
		examination on the
		condition of blood.
Explain that pregnant women	Eleza kuwa akina mama	Explain that pregnant
especially in malaria endemic	wajawazito katika maeneo	women in areas that
areas must receive IPT doses	yaliyo na malaria ni lazima	are malaria-infested
during pregnancy even if they have	watumie dawa kuwakinga na	must use IPT
no physical signs and hb is normal	malaria za IPT wakati huo wa	medicine that
	ujauzito hata iwapo	protects them from
	hawataonyesha dalili za kuwa	malaria during
	na malaria na hata kama	pregnancy even
	kiwango cha damu yao ni nzuri	though they have not
		shown signs of
		malaria and even if
		their blood level is
		okay.

The table above has indicated that translators sometimes opt to retain abbreviations and acronyms as used in the ST. This can be due to the untranslatability of the acronyms and abbreviations and assimilation of some of the abbreviations and acronyms into Swahili to the extent they have come to be considered part and parcel of the language. This is in line with

Moropa's (2005 in Ndhlovu 2014, 334) finding that acronyms take up the form of a word in the target language and are more likely to be assimilated into the language.

> Coined Acronyms and Abbreviations in Swahili

In this category, the trend that emerges is one of acronym for acronym or abbreviation for abbreviation. In other words, if it can be done in English then it is also possible in Swahili.

Table 5.20: Coined Acronyms

Source Text	Target Text	Back Translation	
AIDS is a new disease in	UKIMWI ni ugonjwa	Deficiency of	
the community. This	mpya katika jamii. Viini	Immunity in the body	
disease, which is spread	vinavyosababisha	is a new disease in the	
by a virus, is found in	ugonjwa vinaitwa Virusi	community. The virus	
many countries in the	Vya UKIMWI (VVU)	that causes this	
world. The virus which		disease is called	
causes AIDS is called the		Human Immune	
Human Immune		Deficiency Virus	
Deficiency Virus (HIV).		(HIV)	

In the example above, the acronyms AIDS (Acquired Immuno-deficiency Syndrome) is translated as UKIMWI (*Upungufu wa Kinga Mwilini*) (deficiency of immunity in the body) and HIV (Human Immune Deficiency Virus) is translated as VVU (*Virusi Vya UKIMWI*). This shows that the translators coin acronyms in order to conform with the ones in the source text, a practice which goes in line with normalisation as a universal of translation as put forth by Laviosa-Braithwaite (2001, 288-291) and Toury (1995)'s law of standardisation.

5.7 Strategies for Translation of Cultural Taboos

I discussed in chapter 4 the import of taboos in translation and how they are dictated by culture. They actually limit what can be said, how it can be said, when it can be said and to whom it can be said. It was also observed in the previous chapter that there are cultural taboos that pose constraints to translators in the translation process. This section discusses the strategies resorted to in the Swahili healthcare texts translation.

Table 5.21: Translation Strategies for Taboos

Source Text	Target Text	Back Translation	Translation
			Strategy
1. The AIDS virus	is <i>Virusi vya UKIMWI</i>	The AIDS virus is	Use of
found mostly	, and the second	mostly found in	general word
blood, semen , as	•	blood, men's seed	
	uume na maji ya kutoka	and water that	
	ne uke walakini, uke ,	comes out of	
vagina, penis, a	nd uume na mkundu	womanhood	
rectum a	re vimefunikwa kwa ngozi	however,	
covered with	a iliyo nyembamba zaidi	womanhood,	
much thinner sk	in inayoitwa 'mucous	manhood and anus	
called the muco	as membrane' ifunikayo	are covered by the	
membrane whi	ch mishipa ya damu	thinnest skin that is	
covers bloo	od	called mucous	
vessels.		membrane which	
		covers blood	
		vessels.	
2. This includ	es <i>Hii pia inahusu kufanya</i>	This also involves	Use of
vaginal	mapenzi kwa uke, na kwa	making love in the	general word
intercourse and,	in jamii zilizo na tabia za	womanhood and in	
societies where it	is kufanya mapenzi kwa	societies that make	
practised, anal an	nd mkundu na kwa mdomo.	love in the anus	
oral intercourse		and mouth	
3. AIDS can also	*	AIDS can be	Use of
spread by the flu	· ·	spread by water	general word
that comes out		that comes out of	
the penis or vagi	, and the second	manhood or	
during sex. T		womanhood when	
fluid that sprea	ds yanayosambaza	making love. This	

Source Text	Target Text	Back Translation	Translation
			Strategy
AIDS can also	UKIMWI yanaweza	water that also	
come out during	kutoka wakati wa	spreads AIDS can	
foreplay.	kugusanagusana.	also come out	
		when touching	
		each other	
		repeatedly.	
4. Remember that a	Kumbuka kwamba mpira	Remember that a	Use of
condom is not an	sio kinga kamilifu dhidi	rubber is not an	neutral or
absolute protection	ya kuambukizwa.	absolute protection	less .
from HIV		against infection.	expressive
infection.			word
5. They cannot tell	Hawezi kujua mpaka	One cannot tell	Cultural
until she begins to	aanze kunenepa au	until she starts to	substitution
grow or misses her	kukosa vipindi vyake.	grow fat or misses	substitution
menstruation	rukosa vipinai vyake.	her periods.	
mensu dation		ner perious.	
6. Always use a toilet	Tumia choo wakati wote	Use a toilet all the	Cultural
to dispose all	unapotaka kujisaidia	time you want to	substitution
faeces, including		help yourself.	
children's faeces			
7 Carolino - L	Ilmaa:	Cigamette and 1-1-	Cubatituti
7. Smoking reduces	Uvutaji wa sigara	Cigarette smoking reduces the flow of	Substitution
blood flow to the	hupunguza usambaaji wa damu kwenye mboo na	blood to the penis	
penis resulting in impotence. The	hivyo kusababisha	and therefore	
chemicals may also	ugumba (uhanithi).	causes impotency.	
damage sperms	Kemikali hizo pia	Those chemicals	
leading to the	zinaweza kuharibu	can also damage	
babies born with	shahawa na hivyo	semen causing a	
Cacres Som with		causing a	

Source	e Text	Target Text	Back Translation	Translation
				Strategy
	birth defects and	kusababisha watoto	child being born	
	even miscarriages.	kuzaliwa na madhara ya	with defects during	
	These	nyakati za kuzaliwa na	birth and even	
	interferences can	hata wakati mwingine	sometimes cause a	
	lead to infertility.	mimba kutunguka.	miscarriage. These	
		Mvurugo huu unaweza	interruptions can	
		kusababisha ugumba	cause infertility.	
8.	Vaginal sex	Ngono kwa njia ya	Sex through the	Translation
		kawaida (mwanamume	normal way (man	by
		na mwanamke	and woman)	paraphrase
9.	Some types of	Aina fulani ya saratani,	Some types of	Cultural
	cancer, like cancer	kama vile saratani ya	cancer such as	substitution
	of the cervix or	uzazi au ile ya kibofu,	cancer of the	
	bladder, may cause	huweza kusababisha	cervix or that of the	
	bleeding in the	kuvuja damu katika	bladder, may cause	
	genital area or	sehemu za siri au njia ya	bleeding in the	
	urinary tract. If this	mkojo. Iwapo kuvuja	private parts or	
	bleeding is worse	huku kunazidi baada ya	the urinary tract. If	
	after sex, talk with	mahaba, zungumza na	this bleeding	
	your doctor.	daktari wako.	persists after	
			making love, talk	
			with your doctor.	
	after sex, talk with	mahaba, zungumza na	this bleeding persists after making love, talk	

The dominant strategy prevalent in Swahili healthcare texts is the use of general word. This strategy is used to address lack of specificity in the target language but when it applies to translation of taboos, Ndhlovu (2012, 212) points out that it is used to avoid mentioning what is considered taboo explicitly. This strategy seems to be the most preferred by Swahili translators as seen in examples 1, 2 and 3.

The others are cultural substitution whereby in example 5, 6 and 9 whereby the translator uses a term that has a similar or close reference to the source text term. The translator, due to taboo issues, deliberately avoids using *mavi* which is the equivalent for *faeces* but instead uses *kujisaidia* (to help oneself). *Kujisaidia* (to help oneself), in this context, is taken to mean that once you visit the toilet then you release yourself off the faeces but this can be misleading to readers since the term also refers to when one visits the toilet to urinate. That notwithstanding, use of cultural substitution makes a text to be acceptable by the target culture and fits in Toury (1995) law of standardisation.

Use of less expressive or neutral term as seen in example 4 is meant to avoid explicitness of some terms. In the example, the translator uses *mpira* (rubber) as an equivalent of condom. Even though other translators use the indigenised term *kondomu*, in this instance, the translator opted for a less expressive term. This strategy is ideal for domestication of a translation as advanced by Venuti (1995).

Translators equally make use of translation by paraphrase as seen in example 8 whereby *ngono kwa njia ya kawaida* is paraphrased as man and woman. This is because there are many ways of having of sex such as man and man and also woman and woman. This strategy is ideal when the concept being communicated is not lexicalised at all or whereby the translator wants to avoid misinterpretation.

5.8 Conclusion

This chapter set out to provide a comparative macrotextual and microtextual analysis of healthcare texts under study. The chapter opens by discussing Baker (1992) translation strategies. This was followed by a practical macrotextual analysis premised on the text titles, illustrations and division of texts. Thereafter, a microtextual analysis of cohesive devices and descriptive terms on ad hoc coupled pairs mapped onto each other was done.

The study found out that illustrations are used in most healthcare texts and their usage does not differ significantly in the ST and TT save for some customisation done by translators to make them acceptable to the target audience. The study, therefore, concluded that there is an illustration norm in healthcare texts.

To provide a glimpse on the linguistic aspects part of the study, I used the cohesive devices as identified by Halliday and Hasan (1976) and descriptive terms as *Tertium Comparationis*. The cohesive devices of references, conjunctions, ellipsis and substitution and lexical cohesion

were given attention. On the part of references, it was found that Swahili healthcare texts have a higher frequency use of references than ST due to the nature of the Swahili language that is so complex in that it contains a number of derivational and inflectional morphemes that are attached to the verb root. Unlike English, Swahili marks both the subject and object cases.

Substitution was used sparingly and is generally not a preferred cohesive device in healthcare texts. Ellipsis is also minimally used and there was a tendency by translators to make explicit whatever that is implicit in the ST. This informed the conclusion by the present study to come up with explicitation as a norm in Swahili healthcare texts.

Conjunctions are largely used in the same way both in the ST and TT whereby the additive conjunction was the most prevalent followed by the causative conjunction. The prevalence of the two conjunctions was due to the informative nature of healthcare texts and the enumeration of consequences in case the information given is flouted.

Just like conjunctions, the study also found out that there is no significant difference in the use of lexical cohesion in both the ST and TT even though Swahili healthcare texts emerged to be more cohesive due to the slightly higher number of lexical items used.

Equally, in order to shed light on the cultural aspect of the study, the translation of words considered taboos was done. It was found that most translators used euphemism in presentation of taboo words and this informed my conclusion that euphemism norm guided the translation of the Swahili healthcare texts.

Finally, translation strategies used both at word level and sentence level including those used for taboo words were discussed. Strategies that were used to overcome the constraint of non-lexicalisation are use of pure loan word, use of pure loan word preceded by explanation, use of indigenised loan words, use of omission and translation by a more general word or superordinate. On the part of translation at the sentence or paragraph level, translators mostly used addition and omission. In addition, the strategies that translators used to overcome taboo constraints include use of general word, substitution, paraphrasing and cultural substitution. The next chapter presents the conclusion of the study with a summary of each of the chapters.

CHAPTER 6

CONCLUSION

This chapter brings to a close the current study by: revisiting the aim and objectives of the study; presenting an overview of the chapters; enumerating the contributions of the study; making recommendations; outlining the limitations of the study; and giving suggestions for future research.

6.1 Aim and Objectives of the Study

This study set out to explore the translation of linguistic and cultural aspects in English-Swahili healthcare texts through a descriptive translation studies approach. It determined: linguistic and cultural aspects in English-Swahili healthcare texts; translation strategies used in English-Swahili healthcare; and the use of illustrations in English-Swahili healthcare texts. The study was anchored on Descriptive Translation Studies. On the part of the linguistic aspects, the researcher focused on the cohesive devices of references, substitution and ellipsis, conjunctions and lexical cohesion as put forth by Halliday and Hasan (1976) and descriptive terms as used in the healthcare texts. Regarding cultural aspects, focus was given to translation of taboos in the healthcare texts. In unravelling the translation strategies, the study discussed strategies that are used to overcome constraints of non-lexicalisation, specialised terms and taboo words. Finally, the use of illustrations is discussed with an aim to understand if translators maintain the same illustrations in the TT or if they are changed to meet the target culture's expectations. In order to achieve the foregoing aims, the researcher collected English-Swahili healthcare texts and did a comparative analysis.

6.2 Overview of the Chapters

Chapter 2 reviewed literature that contextualised the study, highlighted major findings in the area and identified the gap to be filled in the literature. The chapter particularly looked at the concept of equivalence, which dominated translation studies for a long time, and its contribution to the now descriptive translation studies. Studies that formed part of the literature on equivalence focused on cultural, linguistic and dynamic equivalence. Besides equivalence, the researcher equally delved into healthcare translation literature on: an analysis on translation of health information by journalists; cultural taboos as a factor in interpretation in the medical field; strategies used by Ndebele translators in Zimbabwe in translating HIV/AIDS texts; and accessibility of Zulu translated health texts. This review of studies on healthcare translation helped to identify the fact that no study has used DTS to study the English-Swahili healthcare translation and hence the lacuna the present study fills. In addition, this chapter in appreciation

of the nexus between language and culture, reviews work done on language and culture in East Africa and Africa as a whole. It emerged that studies on translation in the region are minimal but that notwithstanding, the English-Swahili language pair forms the bulk of studies done in the area.

Chapter 3 aimed at presenting the theoretical framework, analytical framework and research procedures adopted in the study. On the theoretical framework, a brief discussion on polysystem theory, as a major advancement from the prescriptive theories, that gave prominence to culture and other factors in the system was discussed. Descriptive Translation Studies (DTS), which is the underpinning theoretical framework for the present study, developed by Toury (1995) as a functional and target oriented model that accepts any translation so long as it functions as such in the receiving culture is given prominence. It is considered an empirical science since it can describe, explain and predict translation phenomena. In addition, the central role played by norms as subjects of study in DTS was also delved into. Translation is an activity that is norm governed. Focus was given to Toury's (1995) preliminary and operational norms whereby the former influence before the actual translation and the latter direct decisions made during the act of translation. Moreover, Chesterman's (1997) professional and expectancy norms are also discussed. Equally, simplification, avoidance of repetitions present in the source text, explicitation and normalisation are discussed as translation universals.

The chapter also discusses the nexus between text linguistics and healthcare translation. The seven standards of textuality that apply to all texts that have communicative value as proposed by De Beaugrande and Dressler (1981). They include cohesion, coherence, informativity, intentionality, acceptability, situationality and intertextuality. Emphasis was given to cohesion as put forth by Hassan and Halliday (1976) since it formed part of the *Tertium Comparationis*. The cohesive devices of references, conjunctions, substitution and ellipsis and lexical cohesion were given prominence.

On the analytical framework, the study adopted the Kruger and Wallmach (1997) approach which advocates for the use of *Tertium Comparationis* as a basis for carrying out a comparative analysis for the description of the source and target texts. The approach is both theoretical and practical. The TC for the study includes: cohesive devices, descriptive terms, taboos, translation strategies, division of health texts, text titles and illustrations.

This chapter finally focused on the research procedures applied in the study. The study was based on descriptive research design. Data was collected using total population sampling technique from healthcare centres within Nairobi County, Kenya. Twelve texts touching on cancer, smoking, HIV/AIDS, malaria, Iron and Folic Acid supplements, Measles and Rubella, Polio, cholera, Tetanus, diphtheria and Pertussis, and handwashing were collected. In addition, preliminary data from the texts was also provided. Last but not least, ethical considerations were also given attention in the chapter.

In chapter 4, the aim was to provide background information on source and target systems. The chapter opened by giving the connection between language and culture whereby it was noted that language is the common denominator of any culture. It is actually noted that there is no complete culture without language. In furtherance of the foregoing, the place of English and Swahili languages was also discussed in that the former besides being an official language for transacting majority of government business, also enjoys a privileged position of being seen as the language that guarantees success. The latter is both an official and national language that plays a more nationalistic role than the official ones since it is greatly overshadowed by English in that respect. Swahili breaks ethnic boundaries and enhances cohesion in the country. In addition, the Swahili orthography is discussed and it is noted that Swahili is an agglutinative language that makes use of prefixing and suffixing. On the part of culture, it was noted that culture is part of translation and it largely informs the translation decisions made by translators. On the same note, the role of translators as cultural mediators is equally highlighted. In particular, taboos as constraints that have to be overcome are covered in the chapter.

The chapter also delved into healthcare in Kenya by pointing out that healthcare in the country is a function of both the national and county governments. Besides funding by the two levels of government, it was noted that the private sector, non-governmental organisations and the religious sector play a crucial role in funding the sector. Equally, health communication as an art is also discussed in the chapter whereby accuracy, availability, balance, cultural competence, timeliness and understandability as attributes to consider in health program communication are emphasised. Finally, the topical areas in the sample texts are also discussed.

Chapter 5 presented the findings of the study. First, macro-textually, it was established that translators adjust text titles informed by culture, informativity and issues emerging during the translation process. Second, it emerged that illustrations play an important role in healthcare texts. The use of illustrations in healthcare text was referred to in this study as illustration norm.

In addition, it was concluded that translators in some instances customise illustrations in order to fit in the target audience's expectations. Third, it was found out that the division of health texts is relatively the same in both the ST and TT since translators maintain source text formats with minimal adjustments, if any.

Micro-textually, the use of descriptive terms was done. It was concluded that English healthcare texts used more descriptive terms than Swahili healthcare texts. On cohesive devices, first, it was found that Swahili healthcare texts make use of more references for cohesion than English texts. Anaphoric reference was the most used. Second, it was established that both the ST and TT sparingly use substitution and ellipsis and a conclusion made thereof that they are not preferred cohesive devices in Swahili healthcare texts. Whereas there were some instances of ellipsis in the ST, its absence in the TT pointed out that translators make explicit what is implicit in the ST and this led to the conclusion that there is explicitation norm in Swahili healthcare texts. Third, conjunctions were also discussed and a conclusion made that both English and Swahili use them in more or less the same way in healthcare texts. Additive and causal conjunctions were the most prevalent. Fourth, lexical cohesion was found to be the most prevalent cohesive device in healthcare texts whereby translators maintained cohesiveness by use of equivalent or close lexical items. Nonetheless, Swahili healthcare texts were found to be slightly more cohesive than English healthcare texts.

In the same chapter, it was found that the source language used explicit language in expressing taboo words but the translators made use of veiled language in the presentation of what was considered taboo. The use of veiled language in presentation of taboo words was referred to as euphemism norm in this study. It was, however, noted that not all translators adhered to the use of euphemism as was evident in the text on smoking.

Still in chapter 5, strategies used in translating linguistic and cultural aspects were investigated. It was found that strategies of pure loan word, use of pure loan word preceded by explanation, use of indigenised loan words, use of omission and translation by a more general word or superordinate were used to overcome constraints of non-lexicalisation. Further, strategies used at the sentence or paragraph level were addition and omission. On the part of translation of taboos, strategies of substitution, use of general word, paraphrasing and cultural substitution were used.

6.3 Contributions of the Present Study

This study has contributed to the understanding on how DTS can be used manually to extract and analyse texts in order to unravel not only linguistic but also cultural aspects of healthcare texts. The study established how cohesive devices are used in English-Swahili healthcare texts to achieve cohesion. In addition, the study has shed light on the translation of taboo words in healthcare texts. By unravelling the strategies used in translating linguistic and cultural aspects, the study is handy for translators in the healthcare translation domain.

The study has also brought to the fore the use of illustrations in translations not as a strategy but as a stand-alone aspect which is equally taken into consideration in the translation process. By finding out that illustrations are customised or domesticated in some instances in order to conform with the target culture expectations, it underpins the fact that illustrations hold an important position in translations.

As pointed out in the literature review, there are limited studies that focus on translation not only in Kenya but also in East Africa where the Swahili language is dominant. This study, therefore, adds to the much-needed literature not only on translation and specifically on the use of DTS in healthcare translation but also to healthcare communication as an interdisciplinary.

Theoretically, this study effectuated four norms: explicitation norm, explicitness norm, euphemism norm and illustrations norm. The explicitation norm manifested in the absence of ellipsis in the Swahili healthcare texts in spite of its presence in the English healthcare texts. It therefore pointed to the idea that translators make explicit that which is implicit in the ST. Regarding the explicitness norm, it came out that ST use explicit language in presentation of what is considered taboo. The converse of explicitness norm is euphemism norm which was prevalent in Swahili healthcare texts whereby the translators used veiled language in presenting what is considered taboo in the target culture. Last but not least is the illustrations norm which was arrived at after finding that most of the healthcare STs and TTs make use of illustrations.

6.4 Recommendations

Based on the findings from the present study, I recommend the following:

> Translation of all documents

The ministry ought to ensure that all healthcare texts are translated into Swahili in order to avoid a scenario whereby some texts are only available in English. Failure to translate some texts into Swahili only serves to alienate a given population from vital healthcare information.

Centralised translation

There is need to centralise translation of healthcare texts by the Ministry of Health. The current situation whereby various interested parties do their own translations and put the ministry logo leads to translations that are so detached from the target audience's reality. There are texts that are meant for populations outside Kenya but the same texts are adopted in the Kenyan situation without any changes, save for the ministry logo, to reflect the reality on the ground.

6.5 Limitations of the Study

The major limitation faced in this study is the limited number of English-Swahili healthcare texts. The researcher found out that whereas there are many texts in English touching on healthcare, there were no translated Swahili equivalents of some of them. Consequently, questioning the representativeness of these findings will not be totally unwarranted.

The analysis of texts in this study was done manually and this has its own shortcomings unlike the use of a parallel concordancer in the analysis.

It cannot go unmentioned that instances of mistranslations in the sample texts limited the study in one way or another. This being a descriptive study, it was not possible for the researcher to point out or correct mistranslations in the texts.

6.6 Future Research

The researcher has investigated the translation of linguistic and cultural aspects in English-Swahili healthcare texts by manually analysing them. That this was done indicates a possibility to carry out a similar study but use Corpus-based Translation Studies.

There is need for a research that focuses on the target audience's perception of the translated health materials. In other words, a study that gives focus to the coherence of the translated healthcare texts. Such a study will shed light on the effectiveness of the translated texts and what ought to be done, if any, to improve their responsiveness.

Furthermore, a research can be conducted focusing on the translators of healthcare texts with the aims of establishing what informs their decision making process, their training background on translation, suggestions on how quality translations can be achieved among others.

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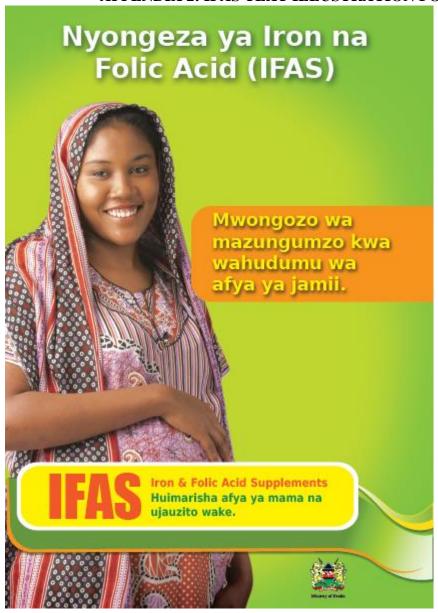
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APPENDICES

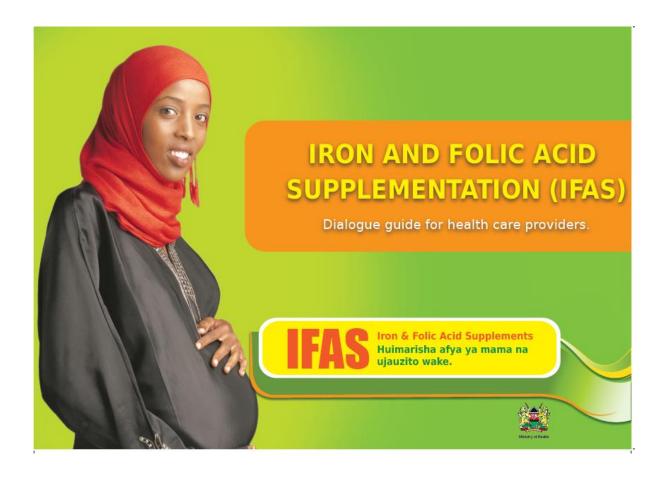
APPENDIX 1: PERMISSION LETTER

P.O BOX 57035-00200,
Nairobi.
25 April, 2017
The Head, Disease Surveillance and Outbreak Response Unit,
Ministry of Health,
P.O Box 20781-00202,
Nairobi.
Dear Sir/Madam,
RE: REQUEST FOR HEALTHCARE TEXTS FOR RESEARCH PURPOSES
I am presently a Doctor of Literature and Philosophy student at the University of South Africa (UNISA) conducting research on the linguistic and cultural aspects of translated Swahili healthcare texts. I am hoping that the results obtained from my study will shed some light on healthcare translation and even inform policy making.
This letter therefore humbly seeks your permission to use healthcare texts that are both in English and Swahili languages. I assure you that texts obtained will only be used for research purposes.
I hope that this request will be approved.
Yours faithfully,
Douglas Ondara Orang'i
PhD Candidate
UNISA.

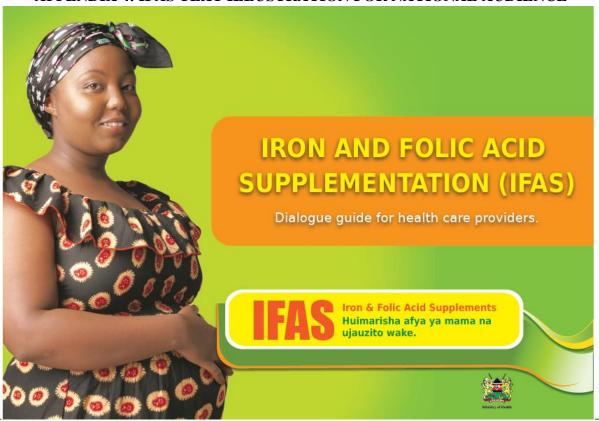
APPENDIX 2: IFAS TEXT ILLUSTRATION FOR COAST



APPENDIX 3: IFAS TEXT ILLUSTRATION FOR NORTH EASTERN KENYA



APPENDIX 4: IFAS TEXT ILLUSTRATION FOR NATIONAL AUDIENCE



APPENDIX 5a: EXTRACT FROM AIDS TEXT

Facts and Feelings About AIDS

AIDS is a new disease in the community. This disease, which is spread by a virus, is found in many countries around the world. The virus which causes AIDS is called the Human Immune Deficiency Virus (HIV). In this manual, we shall call it the AIDS virus to make it easier for the readers. The AIDS virus is found mostly in blood, semen, and vaginal fluids. AIDS is usually passed sexually from one person to another. The virus can also enter the body in four other ways: through a transfusion with infected blood, through an infected mother to her unborn child, through breast milk, and through infected blood in or on needles, syringes or other instruments.

In this manual, we use the words "HTV infection" to talk about somebody who is infected with the AIDS virus, but is not yet sick. Everyone who is "HIV infected" will become sick with AIDS some day.

At present, there is no vaccine to protect people against HIV infection. There is also no medicine that will cure AIDS although there are drugs that can help some of the diseases linked with AIDS. But AIDS is a preventable disease. It can be prevented if people know which behaviours could cause them to get the AIDS virus, and if they change these behaviours.

Education about AIDS and supportive health services are the only ways we have right now to help people prevent the spread of HIV. As a health trainer, you may know that giving general health messages is not enough to change a person's beliefs and actions. To make a health message personal and effective, you need to know what a person's needs and concerns are about health in general and about AIDS. You also need to know the problems a person faces as he or she tries to make changes.

As a first step to becoming a trainer about AIDS, it will help if you look at your own feelings about AIDS. Next, you can learn or review some basic medical facts about AIDS. This manual will help you with these two tasks.

There are three lessons in this manual. These lessons will give you a chance to think about and discuss what you know and believe about AIDS. You will also have a chance to discuss your worries and concerns about the disease. You will be able to add to what you already know about HIV and AIDS, and you may be able to correct any wrong ideas you may have heard about AIDS. Although this manual may not give you all of the information you want and need to know about AIDS, it should give you a good start.

APPENDIX 5b: EXTRACT FROM AIDS TEXT (SWAHILI)

Ukwell na Hisla kuhusu UKIMWI

UKIMWI ni ugonjwa mpya katika jamii. Huu ugonjwa unaoenezwa na viini unapatikana katika nchi nyingi dunjani. Viini vinavyosababisha ugonjwa huu vinaitwa Virusi vya UKIMWI katika kitabu hiki tutaviita VVU ili kumrahisishia msomaji. Virusi vya UKIMWI hupatikana sana sana katika damu, mbegu za uume na maji ya kutoka uke. UKIMWI kwa kawaida huenezwa kwa njia ya ngono kutoka mtu mmoja hadi mwingine. Viini vinaweza kuingia mwili kwa njia zingine nne: Kwa kupewa damu iliyoambukizwa; mama aliyeambukizwa kwa mtoto wake ambaye hajazaliwa; maziwa ya matiti; na njia ya damu iliyoambukizwa kwenye sindano na vyombo vingine (vya kutoboa ngozi).

Katika kitabu hiki, tunayatumia maneno "kuambukizwa na viini" kuzungumzia juu ya mtu aliyeambukizwa na viini vya UKIMWI, lakini bado hajawa mgonjwa. Kila mtu "aliyeambukizwa na viini" hatimaye atakuwa mgonjwa wa UKIMWI siku moja.

Kwa sasa, hakuna dawa ya kukinga watu dhidi ya kuambukizwa au dawa ya kuponyesha UKIMWI ingawa kuna madawa yanayoweza kusaidia kwa magonjwa yanayoambatana na UKIMWI. Lakini UKIMWI ni ugonjwa unaoweza kuzuiliwa. Unaweza kuzuiliwa kama watu watatambua tabia zinazoweza kuwapa viini vya UKIMWI, na kama watazigeuza tabia hizi

Elimu kuhusu UKIMWI na huduma za kusaidia za afya ndizo njia za pekee tulizo nazo kwa sasa za kuwasaidia watu kuzuia kuenea kwa viini. Kama mkufunzi wa afya, inawezekana unajua kwamba kupeana ujumbe wa jumla wa afya hakutoshi kubadilisha imani na matendo ya mtu. Ili ujumbe wa afya uwe wa kibinafsi na wa manufaa, unaweza kuhitajika kujua mahitaji na hofu ya mtu kuhusu afya kijumla na kuhusu UKIMWI. Unahitaji pia kujua shida anazokuwa nazo mtu anapojaribu kufanya mabadiliko.

Kama hatua ya kwanza ya kuwa mkufunzi kuhusu UKIMWI, itakusadia kama utazichunguza hisia zako kuhusu UKIMWI. Kisha, unaweza kujifunza au kujikumbusha kweli za msingi za kimatibabu kuhusu UKIMWI. Kitabu hiki kitakusaidia na kazi hizi mbili.

Kuna masomo matatu katika kitabu hiki. Haya masomo yatakupa fursa ya kufikiria na kuzungumzia kile unachojua na kuamini kuhusu UKIMWI. Pia utapata nafasi ya kuzungumzia wasiwasi na liofu yako kuliusu UKIMWI. Utaweza kuongezea kile unachojua tayari juu ya viini vya uambukizaji na UKIMWI, na unaweza kusahihisha makosa au mawazo yasiyo sahihi ambayo umeweza kusikia juu ya UKIMWI. Ingawa kitabu hiki hakitakupa habari yote unayohitaji na unayotaka kujua kuhusu UKIMWI, kitakupa mwanzo mwema.

Masomo katika kitabu hiki yanatokana ha hali ambazo zinaweza kuwa za kawaida au ngeni kwa jamii yako. Unaweza kuiongoza jamii kwa kuiga, au kwa kujadili masomo. Kama hadithi hazifai kwa hali ya jamii yako, zigeuze.

APPENDIX 6a: CANCER TEXT TITLE (ENGLISH)



APPENDIX 6b: CANCER TEXT TITLE (SWAHILI)



APPENDIX 7a: CANCER TEXT EXTRACT (ENGLISH)

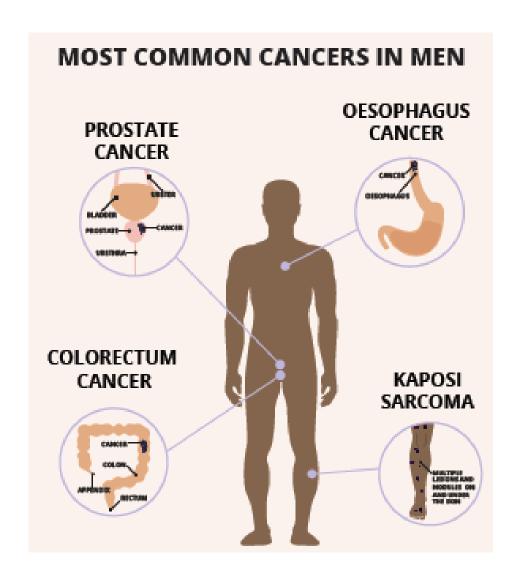
Cancer can start in almost any part of the body. The most common cancers in Kenya are:

MEN:

Prostate, Oesophagus, Kaposi sarcoma, Stomach, Colorectum

WOMEN:

Cervix, Breast, Oesophagus, Stomach, Kaposi sarcoma

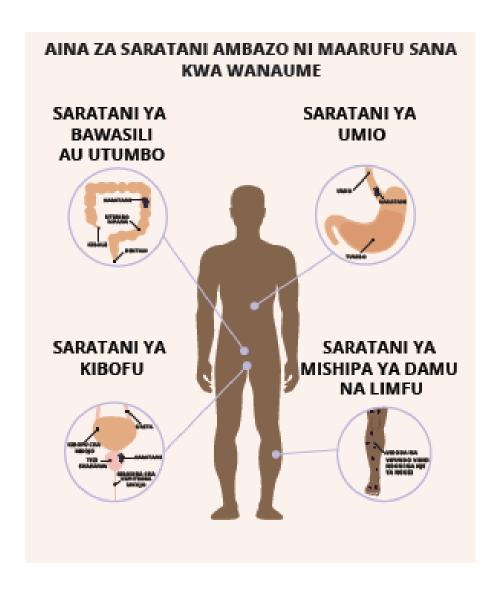


APPENDIX 7b: CANCER TEXT EXTRACT (SWAHILI)

Aina za saratani ambazo zimeenea kwa wingi sana nchini Kenya ni pamoja na:

WANAUME:

Saratani ya Kibofu, Saratani ya Umio, Saratani ya mishipa ya damu na limfu, Saratani ya tumbo, Saratani ya bawasili au utumbo wa nyuma.



APPENDIX 8a: PEER EDUCATION ILLUSTRATION IN HIV/AIDS MANUAL (ENGLISH)



APPENDIX 8b: PEER EDUCATION ILLUSTRATION IN HIV/AIDS MANUAL (SWAHILI)



APPENDIX 9a: EXTRACT FROM HIV TEXT (ENGLISH)

ACTIVITIES THAT CAN TRANSMIT HIV

- Vaginal sex
- Direct blood transfusion of untested blood
- Sharing needles
- Contact with blood of an infected person
- Breastfeeding
- Mother to infant during delivery
- Mother to infant during pregnancy
- Exchange of blood
- Contact with semen
- Contact with vaginal fluids

ACTIVITIES THAT CANNOT TRANSMIT HIV

- Being near a person with HIV
- Sharing a drinking cup with a person with HIV
- Hugging a person with HIV
- Kissing a person with HIV when blood is not present
- Shaking hands with a person with HIV
- Proper use of a condom during sex

APPENDIX 9b: EXTRACT FROM HIV TEXT (SWAHILI)

VITENDO VINAVYOWEZESHA KUAMBUKIZA VIRUSI VYA UKIMWI

- · Ngono kwa njia ya kawaida (mwanamke na mwanamme)
- · Kuongezewa damu isiyopimwa
- · Kutumia sindano pamoja
- · Kugusa damu ya muathirika
- · Kunyonya maziwa ya mama
- · Maambukizo ya mama kwa mtoto wakati wa kujifungua
- · Maambukizo ya mama kwa mtoto wakati wa uja uzito
- · Au kubadilisha damu
- · Kugusana na shahawa
- · Kugusana na ute wa ukeni

VITENDO AMBAYO HAVIWEZI KUAMBUKIZA VIRUSI VYA UKIMWI

- Kuwa karibu na mtu mwenye Virusi vya UKIMWI
- · Kutumia kikombe kimoja na mtu mwenye Virusi vya UKIMWI
- · Kumkumbatia mtu mwenye Virusi vya UKIMWI
- · Kumbusu mtu mwenye Virusi vya UKIMWI
- · Kumshika mkono mtu mwenye Virusi vya UKIMWI
- Matumizi sahihi ya kondomu wakati wa ngono.

APPENDIX 10a: EXTRACT FROM AIDS TEXT (ENGLISH)

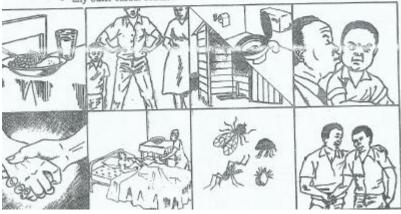
HIV is spread in very specific ways. In each case, there must be a person with HIV and a way for the blood, vaginal fluid or semen of that person to get into the blood stream of another person, either through the mucous membrane or a break in the skin or directly into the blood stream through blood transfusion, a sharp instrument, or from mother to child. There is also a small risk that HIV can be passed from mother to child through breast milk. There are many ways that HIV cannot be spread.

How is HIV not spread?

As you just read, HIV is spread in four ways: during sexual intercourse with an infected person; through infected blood during transfusions; from an infected mother to child during pregnancy or at birth; and by infected blood instruments such as needles. You cannot get HIV from casual or social contact with an infected person.

You cannot get HIV, the virus that causes AIDS, from any of the following:

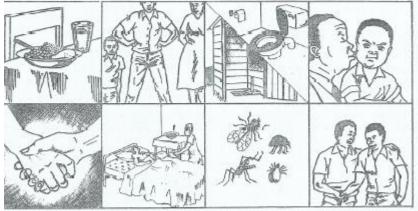
- touching shared food, cups and plates
- clothing or towels
- toilets
- hugging or kissing
- shaking hands
- living in the same household with an infected person
- insects
- any other casual contact



APPENDIX 10b: EXTRACT FROM AIDS TEXT (SWAHILI)

Huwezi kupata VVU, virusi vinavyosababisha UKIMWI, kutokana na:

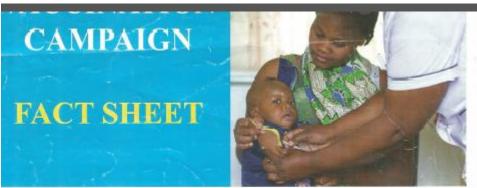
- kugusa chakula, vikombe au sahani zilizotumiwa na yule aliyeambukizwa
 mavazi au taulo
- vyoo
- kukumbatiana au kubusiana kikawaida
- kusalimiana kwa mikono
- kuishi nyumba moja na mtu aliyeambukizwa
- wadudu
- mawasiliano mengine yoyote ya kawaida



Utafiti mwingi umefanyika ukiwahusu watu wanaoishi nyumba moja na wale walio na UKIMWI na wale wanaowatunza wagonjwa nyumbani. Hakuna mmoja wao aliyepata UKIMWI kutokana na kushirikiana kwa hali ya kawaida na wagonjwa wa UKIMWI.

Masomo pia yamefanywa juu ya uenezaji wa VVU na wadudu kama mbu. Hakuna kisa chochote kimegunduliwa cha UKIMWI, kutokana na kuumwa na wadudu. Kuongezea, kama wadudu wangeeneza UKIMWI, watoto wengi na wazee wangeambokizwa kama vile wanavyoshika malaria. Hivi sivyo.

APPENDIX 11a: EXTRACT FROM MEASLES AND RUBELLA TEXT (ENGLISH)



What is Measles? Measles is a highly infectious and serious disease caused by a virus. Complications may include one or a combination of the following:

- Severe diarrhoea severe pneumonia
- Ear infections (Otitis media) with sometimes presence of pus from the ears.
- Brain damage.
- Rlindness

What is Rubella?

Like Measles, Buhella is a highly infectious viral disease that can cause serious health complications to newborns such as birth defects, including heart problems, loss of hearing and eyesight, and brain damage

What are the signs and symptoms of Measles and Rubella?

MEASLES	AUBELLA
High fever	Low fever
Rash	Rash
Cough	Swollen glands in head/neck
Runny nose	Red and watery eyes
Red and watery eyes	Aching joints
White spots inside cheeks	Mild or no symptoms

How are Measles and Rubella spread?

Both diseases are highly infectious and spread easily through coughing and sneezing.

Who can get Measles and Rubella?

- Anyone not vaccinated against Measles and Rubella diseases.
- Young children are at highest risk of complications, including death due to their weak immunity.

How are Measles and Rubella treated? Measles and Rubella are viral infections hence has no specific treatment available. Disease management with good nutrition and rehydration is purely supportive to prevent complications.

How can Measles and Rubella be prevented?

- By vaccination. Measles-Rubella vaccine is a and effective to prevent both diseases and is given as a
- single injection.
 Every child should receive the free vaccine dose during this vaccination campaign irrespective of previous
- Every child should receive measles doses at 9 and 18 months through routine immunizations.

Why Measles - Rubella vaccination now?

Statistics indicate that there is a steady increase in the number of people infected with Measles and Rubella viruses in the country. The cases are spread out throughout the country affecting both males and females. However, females are at high risk of Rubella disease complications and when infected could lead to bearing children with serious birth defects.

What is the target population for this campaign?

All children aged between 9 months to 14 years.

How will Measles - Rubella vaccine be given?

- The vaccine will be given in the form of an injection in the
- Ensure all children 9 months to 14 years receive Measles -Rubella vaccines now

For more information, contact:

Ministry of Health, National Vaccines & Immunization Programme (NVIP) Box 43319-00100 Nairobi.

Tel. 0722858010

Email: head_epi@gmail.com

APPENDIX 11b: EXTRACT FROM MEASLES AND RUBELLA TEXT (SWAHILI)

YA MAGUNJWA YA UKAMBI NA RUBELLA UKWELI KAMILI



Je. Ukambi ni nini?

Ukombi ni ugonjwa hatari wa kuambukiza unaosabahishwa na virust. Madhara yake yanaweza kuhusisha moja au mchanganyiko wa dalili hizi:

- Kuhara sana
- Homa ya mapafu (nimonia)
- Maambukizo ya masikio (Otitis media) wakati mwingine vanavohusisha kutokwa na usaha.
- Kuharibiwa kwa ubongo.
- Upufu.

Je, Rubella ni ninir

Kama vile ukambi, Rubella ni ugonjwa hatari wa kuambukiza unaosababishwa na virusi na unaoweza kusababisha madhari mabaya ya kiafya kwa watoto wanaozaliwa kama vile kasoro za maumbile, matatizo ya moyo, kupoteza uwezo wa kusikia na kuona, na kuharibiwa kwa ubongo.

Je, ishara na dalili za Ukambi na Rubella ni zipi?

UKAMBI	RUBELLA
Joto kali ya mwili	Joto kiasi ya mwili
Upole (harara)	Upele (harara)
Kikohozi	Tezi kuvimba kichwani/shingoni
Ramasi telezi puani	Macho mekundu yenye machozi
Macho mekundu yenye machozi	Kuumwa na viungo
Madoa meupe kinywani	Dallii kidogo

Ukambi na Rubella husambazwa vipi?

Magonjwa yote mawili huambukizwa na kusambazwa kwa urahisi mno kupitia kukohoa na kupiga chafya.

Ni nani anayeweza kuambukizwa Ukambi na Rubella?

- Mtu yeyote ambaye hajapata chanjo dhidi ya Ukambi na flubells.
- Watoto wadogo wapo katika hatari kubwa ya kuadhiriwa, na hata kufa kwa sababu ya upungufu wa kinga mwilini.

Je, unatibu vipi Ukambi na Rubella?

Ukambi na Rubella nii magonjwa ya kuambukizwa kupitia virusi na kwa hivyo hakuna matibabu maalum yanayopatikana. Kuyadhibiti magonjwa kupitia kula lishe bora na kudumisha maji mwilini ni niia ya kusaidia kuzuta madhara zaidi tu

Je, unaweza kuzuia vipi Ukambi na Rubella?

- Kupitia chanjo ya Ukambi na Rubella ambayo inapatikana sasa, ni salama na ina Uwezo wa kukinga magonjwa yote
- mawili na hutolewa kama sindano moja. Kila mtoto anapaswa kupata chanjo bila malipo katika rusiniu huu wa hampaini ya chanje bile le chanjo za hapo awali.
- Kila mtoto anapaswa kupata chanjo dhidi ya Ukam anapofika umri wa miezi 9 na 18 kupitia utaratibu wa chanjo za kawaidla.

Mbona wahitaji chanjo ya Ukambi na Rubella?

Takwimu zaonyesha kwamba kumekuwa na ongezeko la visa vya watu wanaoambukizwa na magonjwa ya virusi vya Ukambi na Rubella nchini. Visa hivi vimesambaa kote nchini na vinahusisha wanawake na wanaume. Licha ya hivyo, wanawake wamo katika hatari zaidi ya madhara ya ugonjwa wa Rubella na wanapoambukizwa wanaweza kuzaa watoto walio na upungufu wa kimaumbile

Ni akina nani wanalengwa katika hii kampeini? Watoto wote wallo na umri kati ya miezi 9 hadi miaka kumi na

Jinsi gani chanjo ya Ukambi na Rubella Ітаполима?

- Chanio itatolewa kama sindano kwenye sehemu ya kuu ya mkono wa kulia.
- Hakikisha watoto wote walio kati va umri wa miezi tisa mpaka miaka kurni na nne (14) wanapokea chanjo dhidi ya Ukambi na Rubel la sas

Kwa maelezo zaidi wasiliana na: Wizara ya Afya, Kitengo Cha Chanjo Nchini (NVIP)

Sanduku la Posta; 43319-00100 Nairobi

Tel. 0733454010

Kipepesi: head_epi@gmail.com

Chanjo huokoa maisha.

APPENDIX 12a: EXTRACT FROM POLIO TEXT (ENGLISH)



VACCINATE AND PROTECT

CHILDREN UNDER 5 YEARS AGAINST POLIO.

What is polio?

Poliomyelitis (polio) is a highly infectious disease caused by the poliovirus. The disease spreads fast and causes paralysis and even death.

What are the dates of polio campaigns?

From Saturday 5th to Wednesday 9th December, 2015, a polio campaign will be conducted across the country

Health teams will be inoving from house to house to vaccinate all children under the age of five (5 years). Polio vaccine is also available in all public health facilities.

What is the current situation of polio in Kenya?

The risk analysis done in Kenya in January 2015 showed that 66% of targeted population was still at moderate or high risk of getting polio in case an imported case was to be found in the country, hence putting everyone in Kenya at risk of getting polio disease. Therefore, the country has planned these polio preventive campaigns in order to protect all children under 5 years who are at highest risk. There is no cure for polio and can only be prevented by immunization.

Is the polio vaccine safe?

YES, it has been tested, the vaccine is safe and effective and approved by WHO. Additionally, all medical supplies and commodities including vaccines that are used in the country must undergo rigorous quality control testing procedures by the Pharmacy and Poisons Board; the body legally mandated to ensure quality, safety and efficacy of all medical products under CAP 244 of the Laws of Kenya.

Further, the Oral Polio Vaccine (OPV) being used is the same as the one used routinely both at public, Faith based and private health facilities to vaccinate children at birth, 6 weeks, 10 weeks, 14 weeks and during polio campaigns. Several doses of the vaccine provide additional protection and boost the immunity of your child without any harm. To stop the spread of polio we need to vaccinate to protect our children each and every time.

For more information contact:

IMMUNIZATION SAVES LIVES!

APPENDIX 12b: EXTRACT FROM POLIO TEXT (SWAHILI)



Polio (Ugonjwa wa kupouza) ni nini?

Polio ni ugonjwa wa kupooza maoambukizwa kwa haraka na husababishwa na virusi vya polio. Ugonjwa hun husababisha kupooza na hata kiifo.

Polio haina tiba lakini inaweza kuzuiliwa kupitia chanjo.

Kampeni ya polio ni lini?

Kutoka Jumamossi larche 5 hada Jumatano tarche 9 Desemba, 2015. Kampeni ya polio itafanyika kote nchini. Wahudumu wa afya watapeana chanjo nyumba kwa nyumba. Huduma hii pia mapatikana hospitalini zote ambayo inapeana chanjo.

Hali ya polio Nchini iko vipi?

Katika mwezi wa Jamari, 2015, wizara ya afya ilifanya utabiti wa hali ya ugonjwa ya polio nchini, kaunti 32 ilipatikana kuwa kwenye hatari kubwa ya mkarapuko wa ugonjwa wa polio nchini kutokana na viwango vya chini vya chanjo. Pia Kenya iko na haadhi ya majimui ambao hali ya chanjo dhidi ya ugonjwa wa polio iko chini na hali hii uweka watu wote kwenye hatari ya majampukizi iwapo ugonjwa hii italigia humu nchini.

Je, chanjo ya polio ni salama?

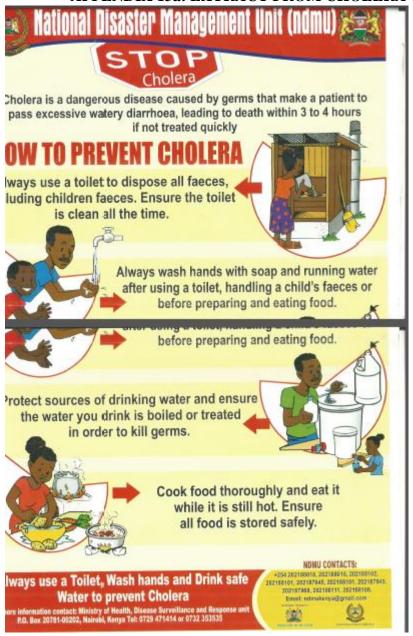
Ndao, ni salama na imepitishwa na Shirika la Afya Ulimwenguni (WHO), Pia, dawa zote pamoja na dawa ya ebanjo upimwa na wizara ya Afya kabla ya kuidhimishwa kutumika humu nehini.

Chanjo hii ya pulio ni sawa na ile inayopeanwa kwa kliniki za afya kote nchini. Kwa kawaida motto upewa chanjo hii anapoliwa, akiwa na umri wa wiki sita, kumi, kumi na nne na wukati wa kampeni.

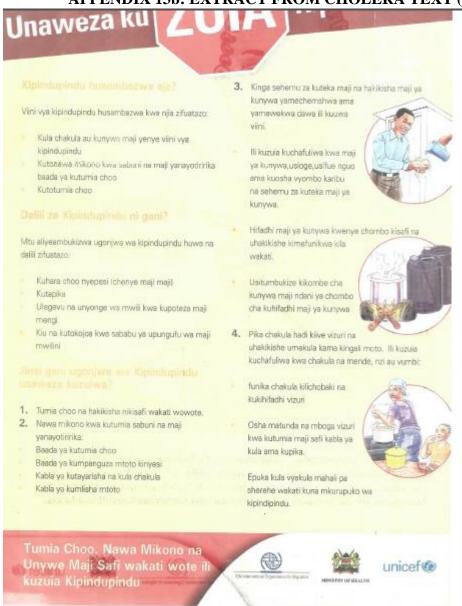
Chanjo kadhaa zaweza kupeanwa ili kuongeza kinga ya motso bila madhara yoyote.

Pamoja - Tuchanje watoto wote tuangamize Polio Kenya!!!

APPENDIX 13a: EXTRACT FROM CHOLERA TEXT (ENGLISH)



APPENDIX 13b: EXTRACT FROM CHOLERA TEXT (SWAHILI)



What is malaria?

Malaria is the opponent in a game of life and death that no one should have to play. An infectious disease transmitted by the Anopheles mosquito, malaria affects 3.3 billion people around the world, resulting in nearly 1 million deaths annually. Whereas most of these deaths occur in sub-Saharan Africa, there's an urgent need across the African continent for dedicated players, good equipment, and winning strategies to stop this preventable and treatable disease.

What is the Malaria Safe Playbook?

The United Against Malaria partnership has assembled a collection of resources and best practices from key players in the field to encourage even more organizations to tackle malaria as a critical development issue. We call this resource guide the Malaria Safe Playbook for the UAM partnership. "Malaria Safe" refers to actions that lead to a future free of malaria, such as mosquito net distributions and education workshops for employees and company health workers.

Building off of what has worked to date, the Playbook offers communication tools, reference guides, and contacts for decision-makers in the public and private sector. These materials may be found online, along with this accompanying report, at www.malariasafe.org.

What is United Against Malaria?

United Against Malaria is a partnership that aims to build support for universal access to mosquito nets and malaria medicine in Africa—a critical first step toward eliminating malaria deaths by 2015—using people's passion for football as a catalyst. We achieve our aims by building political will and public support in developed countries to unite against malaria, by strengthening the political commitment of African leaders to prioritize malaria, and by increasing the use of prevention tools and malaria treatment in Africa.

APPENDIX 14b: EXTRACT FROM MALARIA TEXT (SWAHILI)

Malaria ni nini?

Malaria ni mpinzani katika mchezo wa kufa na kupona ambao hakuna mtu anapaswa kuucheza. Malaria ni ugonjwa wa kuambukiza ambao huenezwa na mbu aina ya Anofelesi. Malaria imeathiri watu bilioni 3.3 duniani. Hii ni takribani vifo billioni 655,000 kwa mwaka. Ambapo idadi kubwa ya vifo hivi hutokea kusini mwa jangwa la Sahara; kuna haja ya dharura kwa bara la Afrika kupata watendaji waliojitoa kwa dhati, vifaa bora, na mikakati ya ushindi kutokomeza ugonjwa huu unaoweza kukingwa na kutibika.

Malaria Safe Playbook au Kazi bila Malaria ni nini?

Ushirika wa Tuungane Kutokomeza Malaria (UAM) umekusanya rasilimali na harakati za washirika mbalimbali ili kuhamasisha mashirika na taasisi kujiunga katika mapambano dhidi ya Malaria ambayo ni tatizo kubwa la kimaendeleo. Tunauita Mwongozo huu "Malaria Safe playbook". "Kazi bila malaria" ni neno linalotumika kuzungumzia mipango na harakati za kuwa na taifa ambalo halina malaria kabisa, kwa kugawa chandarua, vikaokazi vya elimu kwa wafanyakazi na watumishi wa sekta ya afya ndani ya kampuni.

Tuungane Kutokomeza Malaria (UAM) ni nini?

UAM ni ushirikiano unaolenga kujenga muhimili wa pamoja juu ya upatikanaji wa vyandarua na tiba za Malaria Afrika nzima- ambayo ni hatua muhimu kuelekea kutokomeza vifo vitokanavyo na Malaria ifikapo mwaka 2015- kwa kutumia ushabiki wa Waafrika kwenye mpira wa miguu kama chachu. Tunafikia malengo yetu kwa kujenga utayari wa kisiasa na uungwaji mkono kwenye nchi zilizoendelea kuunga mkono mapambano dhidi ya malaria, kwa kuimarisha uazimiaji kisiasa wa viongozi wa Kiafrika wa kuweka kipaumbele mapambano dhidi ya malaria, na kwa kuongeza matumizi ya kinga na matibabu dhidi ya malaria ndani ya Afrika.

APPENDIX 15a: EXTRACT FROM TETANUS, DIPHTHERIA AND PERTUSSIS (ENGLISH)

VACCINE INFORMATION STATEMENT

Tdap Vaccine

What You Need to Know

(Tetanus, Diphtheria and Pertussis)

Many Vaccine Information Statements an available in Spanish and other languages. See www.inmunics.org/vis Hojas de información nobre vaccunas estás

Hojas de información sobre vacunas est disposibles en español y en muchos obidiomas. Visits www.immunize.org/vis

1 Why get vaccinated?

Tetanus, diphtheria and pertussis are very serious diseases. Tdap vaccine can protect us from these diseases. And, Tdap vaccine given to pregnant women can protect newborn babies against pertussis...

TETANUS (Lockjaw) is rare in the United States today. It causes painful muscle tightening and stiffness, usually all over the body.

 It can lead to tightening of muscles in the head and neck so you can't open your mouth, swallow, or sometimes even breathe. Tetamus kills about 1 out of 10 people who are infected even after receiving the best medical care.

DIPHTHERIA is also rare in the United States today.

It can cause a thick coating to form in the back of the throat

 It can lead to breathing problems, heart failure, paralysis, and death.

PERTUSSIS (Whooping Cough) causes severe coughing spells, which can cause difficulty breathing, vomiting and disturbed sleep.

 It can also lead to weight loss, incontinence, and rib fractures. Up to 2 in 100 adolescents and 5 in 100 adults with pertussis are hospitalized or have complications, which could include pneumonia or death.

These diseases are caused by bacteria. Diphtheria and pertussis are spread from person to person through secretions from coughing or sneezing. Tetanus enters the body through cuts, scratches, or wounds.

Before vaccines, as many as 200,000 cases of diphtheria, 200,000 cases of pertussis, and hundreds of cases of tetamus, were reported in the United States each year. Since vaccination began, reports of cases for tetamus and diphtheria have dropped by about 99% and for pertussis by about 80%.

2 Tdap vaccine

Tdap vaccine can protect adolescents and adults from tetanus, diphtheria, and pertussis. One dose of Tdap is routinely given at age 11 or 12. People who did not get Tdap at that age should get it as soon as possible.

Tdap is especially important for healthcare professionals and anyone having close contact with a baby younger than 12 months

Pregnant women should get a dose of Tdap during every pregnancy, to protect the newborn from pertussis. Infants are most at risk for severe, life-threatening complications from pertussis.

Another vaccine, called Td, protects against tetamus and diphtheria, but not pertussis. A Td booster should be given every 10 years. Tdap may be given as one of these boosters if you have never gotten Tdap before. Tdap may also be given after a severe cut or burn to prevent tetamus infection.

Your doctor or the person giving you the vaccine can give you more information.

Tdap may safely be given at the same time as other vaccines

3 Some people should not get this vaccine

- A person who has ever had a life-threatening allergic reaction after a previous dose of any diphtheria, tetanus or pertussis containing vaccine, OR has a severe allergy to any part of this vaccine, should not get Tdap vaccine. Tell the person giving the vaccine about any severe allergies.
- Anyone who had coma or long repeated seizures within 7 days after a childhood dose of DTP or DTaP, or a previous dose of Tdap, should not get Tdap, unless a cause other than the vaccine was found. They can still get Td.
- Talk to your doctor if you:
- have seizures or another nervous system problem,
- had severe pain or swelling after any vaccine containing diphtheria, tetanus or pertussis,
- ever had a condition called Guillain-Barré Syndrome (GBS),
- aren't feeling well on the day the shot is scheduled.

APPENDIX 15b: EXTRACT FROM TETANUS, DIPHTHERIA AND PERTUSSIS (SWAHILI)

TAARIFA YA MAELEZO YA CHANJO

Chanjo ya Tdap

Unachohitaji Kujua

(Pepopunda, Dondakoo na Kifaduro)

Many Veccine information Statements as available in Spanish and other languages See www.lmmunits.org/vis Hojas de información sobre vacunas está disposibles en español y en muchos otro idiomas. Visite www.lmmunits.org/vis

1 Kwa nini nipokee chanjo?

Pepopunda, dondakoo na kifaduro ni magonjwa hatari sana. Chanjo ya Tdap inaweza kutulianda kutokana na magonjwa haya. Na, wanawake wajawazito wanapopewa chanjo ya Tdap inaweza kuwalinda watoto walio tumboni kutokana na

PEPOPUNDA (Pepo punda) ni nadra sana nchini Marekani siku hizi. Ni ugonjwa unaosababisha mkazo na upindani mkali wa misuli, kwa kawaida mwilini mzima.

 Unaweza kusababisha upindani wa misuli katika kichwa na misuli ili usiweze kufungua mdomo wako, kumeza, au wakati mwingine hata kupunua. Pepopunda huua nakriban mtu 1 kati ya watu 10 wanao ambukizwa hata baada ya kupokea matibabu bora.

Dondakoo pia ni nadra sana nchini Marekani siku hizi. Ni ugonjwa unaosababisha gaga nene kutokea katika nyuma mwa koo.

 Unaweza kusababisha matatizo ya kupumua, kusita kwa moyo, kupooza, na kifo.

KIFADURO (Kifaduro) husbabisha kikohozi kikali cha muda mrefu, kinachoweza kusababisha ugumu wa kupumua, kutapika, na kukosa usingizi.

httaa meen, aa kukosa usingizi.

Pia unaweza kusababisha kupoteza uzani wa mwili, udhaifu, na kuvunjika mbavu. Hadi vijana 2 kati ya 100 na watu 5 wazinsa katika ya 100 wenye kifaduro hulazwa hospitalini au wana maiatsizo, yanayoweza kujumuisha mimonia au kifo.

Magonjwa haya husababishwa na bakteria. Dondakoo na kifaduro husambazwa kutoka mtu mmoja hadi mtu nuwingine kupitia unyevu wa kukohoa na kuchichimua. Pepopunda huingia mwilimi kupitia mikato, mikwaruzi, au vidonda.

Kabla ya chanjo kugunduliwa, zaidi ya visa 200,000 vya dondakoo, visa 200,000 vya kifaduro, na mamia ya visa vya pepopunda, viliripotiwa Marekani kila mwaka. Tangu chanjo kuanza kupeanwa, ripoti za kesi za pepopunda na dondakoo zimepungua kwa takriban 99% na za kifaduro kwa 80%.

2 Chanjo ya Tdap

Chanjo ya Tdap inaweza kuwalinda vijana na watu wazima kutokana na pepopunda, dondakoo, na kifaduro. Dozi moja ya Tdap hupewa mtu mara kwa mara akiwa na umri wa msiaka 11 au 12. Watu ambao *hawakapoka*o Tdap katika umri huo wanafaa kupokea chanjo hiyo haraka iwezekanavyo. Tdap ni muhimu hasaa kwa wataalamu wa afya na mtu yoyote anayeingiliana na mtoto mchanga mwenye umri chini ya miezi 12

Wanawake wajawazito wanafaa kupokea dozi ya Tdao wakati wa kila ujauzite, ili kulinda watoto walio tumboni kutokana na kifaduro. Watoto wachanga ndiyo walio katika hatari kubwa ya matatizo hatari ya kutishia maisha ya kiifaduro.

Chanjo nyingine, inayoitwa Td, hulinda watu kutokana na peopunda na dondakoo, lakini sio kifaduro. Nyongeza ya Td inafaa kupeanwa kila miaka 10. Tdap inaweza kupeanwa kama moja ya nyongeza hizi ikiwa hujawahi kupokea Tdap hapo awali. Tdap pia inaweza kupeanwa baada ya mkato au kichomo kikali ili kuzuia maambukizo ya pepopunda.

Daktari wako au mtu anayekupatia chanjo hii anaweza kukupatia maelezo zaidi.

Tdap inaweza kupeanwa kwa usalama wakati wowote kama chanjo zingine.

3 Baadhi ya watu hawafai kupokea chanjo hii

- Mtu yoyote ambaye ashawahi kuwa na mzio wa kuhatarisha maisha baada ya kupokea dozi yoyote ya chanjo yenye dondakoo, peopoumda au kifaduro, AU ana mzio mkali dhidi ya sehemu ya chanjo hii, hafai kupokea chanjo ya Tdap. Mwambio mtu anaystoa chanjo kuhusa mizio yoyote hatari.
- Mtu yoyote ambaye ashawahi kuwa katika usingizi mzito au kifafa cha mara kwa mara adani ya siku 7 baada ya dozi ya utotoni ya DTP au DTaP, au dozi ya awali ya Tdap, hafai kupewa Tdap, isipokuwa sababu nyingine mbali na chanjo hiyo ipatikane. Bado wanaweza kupokea Td.
- Jadiliana na daktari wako ikiwa:
- una kifafa au matatizo mengine ya mfumo wa neva,
 umekuwa na maumivu au uvimbe baada ya chanjo yoyote yenye dondakoo, pepopunda au kifaduro,
 ushawahi kuwa na ngonjwa unaoitwa Guillain-Barre Syndrome (GBS),
- huhisi vizuri siku ya sindano ya chanjo.

4

Hatari

Unapotuma dawa zingine, hata chanjo, huwa kuna uwezekano wa madhara. Madhara haya huwa sio makali na hupotea yenyewe. Mizio hatari pia inawezekana lakini ni nadra.

Watu wengi wanaopata chanjo ya Tdap huwa hawapati matatizo yoyote nayo.