



Exploring the isiZulu Translation Process of Medical Content at UKZN Medical School

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DECLARATION

I, Sinethemba Dlamini (student number: 216010196), hereby declare that the dissertation titled **'Exploring the isiZulu translation process of medical content at UKZN Medical School'** is my original work except where otherwise indicated. The dissertation has not been submitted or formed the basis for the award of any degree or examination at any other university.

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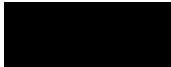
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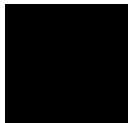
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DEDICATION

I dedicate this dissertation to people who have felt in despair, unloved, not good enough and empty. Throughout this journey, I have learned that choices and self-discipline reflect our hope and desire for excellence. The love put in this dissertation sends a message of hope to those who have given up on themselves because they were told that they are not good enough. This dedication serves as a motivation for people to rise above their hopelessness and strive for a better future.

To my adorable son, Lakhanya Zayne, you have given me a purpose to live and exceed my capabilities. May you live to read this as a reminder of my love and hard work in shaping a better future for you.

To my grandparents, your teachings were not loud but effective in taking me through this academic journey. You have shown pride in me before I could achieve anything in life. Sadly, your daughter did not live to witness this achievement. Your courage, endless support and teachings in life do not go unnoticed. Therefore, I dedicate this dissertation to you.

With love

Sinethemba Dlamini

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Psalm 107:1: "Give thanks to the Lord, for he is good; his love endures forever."

The Lord almighty has given me strength, encouragement and wisdom to embark on this academic journey. My academic journey has been more than a learning curve but a process of reinstating capabilities and self. I want to extend my heartfelt gratitude to everybody who has shown interest, love and support for my goals throughout this journey. People have believed in me more than I believe in myself. Indeed, the grace of the Lord has carried me this far.

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LIST OF ABBREVIATIONS

DOH	Department of Health
DHET	Department of Higher Education and Training
MBChB	Bachelor of Medicine and Bachelor of Surgery
NRMSM	Nelson R. Mandela School of Medicine
UKZN	University of KwaZulu-Natal

ABSTRACT

Communication is essential for healthcare practitioners who intend to understand their patients. KwaZulu-Natal has the largest isiZulu-speaking population in South Africa. In some parts of KwaZulu-Natal, especially in the rural areas, many patients are monolingual. Therefore, it is vital that isiZulu and/or other African indigenous languages be integrated into health sciences curricula across the country. At UKZN (University of KwaZulu-Natal), isiZulu has made significant inroads into the MBChB (i.e. Bachelor of Medicine and Bachelor of Surgery) curriculum. However, more research and further integration of isiZulu is urgently needed. This study explores the isiZulu translation process of medical content used to develop a web-based learning tool at the Nelson R Mandela School of Medicine to assist non-isiZulu-speaking students in enhancing isiZulu for clinical communication.

Translation is a way of building a language communication relationship between patients who are native speakers of isiZulu language and non-isiZulu-speaking medical students. This study intends to generate new knowledge on the isiZulu translation process of medical content by addressing the problem of translating English medical content into the isiZulu language. Specifically, it relates to medical terminology that is non-existent in isiZulu. The main objectives of this study are to review language policies on the use of isiZulu in a medical context, to explore the isiZulu translation process of medical content to improve clinical communication in a clinical setting and to understand the influence of social aspects during the translation process. The study is based on two theoretical frameworks: Nord's Functionalist theories (1992) and Vinay and Darbelnet's translation approach (1995).

This is a textual study; thus, it uses textual analysis of information from the ongoing UKZN medical school project of medical translated content. This study reflects on the translator's challenges and process when translating medical content from English into isiZulu. Moreover, it reflects on how the translator employs theories to guide the translation process. The study suggests that the isiZulu translation process of medical content for a communicative context is influenced by the social factors attached to language use and the differences in the grammatical nature of writing the languages involved in translation. The steps undertaken in the study highlight that the value of the isiZulu language to AmaZulu impacts the value of isiZulu and how isiZulu is used for communication purposes. The isiZulu language semantically dictates that certain terms should be avoided because of the derogatory status they carry on their social use, which affects the choice of terms during translation.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

South Africa is a unique country with twelve official languages. "Language is one of our most precious possessions and a quintessence of our humanity" (Mutasa, 1999:83). Language contributes to identity and is a tool that enables people to become functioning members of a social group. Thus, language provides an important connection between people and the social environment through communication. The language diversity in South Africa profoundly impacts people and their social surroundings, and the use of various languages promotes social inclusion and multilingualism. Furthermore, language diversity encourages understanding and respecting different cultures in South Africa. However, this diversity has negatively affected monolingual people in terms of health communication and the benefits of healthcare services (Maseko, 2018). The significance of language communication in the delivery of healthcare services in South Africa has been emphasised by numerous scholars, such as Engelbrecht, Nkosi, Wentzel, Govender and McInerney (2008); Tyam (2015); Matthews and Van Wyk (2018b).

In response to the language communication challenges, translation has developed over the years and has been utilised as a communication tool between language groups (Qassem & Vijayasarithi, 2019). Williams and Chesterman (2014) state that translation studies must be inspired by something, it must have an area of focus and address specific aspects of the language. Translation of content in the health sciences intends to promote multilingualism and improved language competence in African indigenous languages. In this regard, Dlamini (2016) highlights that translation should display linguistic, social and cultural features to the fullest extent. Therefore, translation in this context helps to close the gap caused by language and cultural differences between people.

This study focuses on the translation process of medical content as a communicative text written in English. Medical content is analysed and translated into isiZulu. The study explains the steps taken in the process and analyses these using Nord's functionalist theory of translation (1992). The functionalist theory provides the translator with a guide on successfully producing a culturally and linguistically appropriate translation product. In addition, the theory provides key aspects involved in the translation process. This translation process and study are motivated by a web-based isiZulu project, MediZulu, which aims to enhance medical students' communication skills. In addition to exploring the translation process of the medical content,

this study emphasises the significance of improving isiZulu communication skills to improve the doctor-patient relationship through language communication. This is critical because health information must be communicated in a language understood by patients, and the doctors must learn the language.

This chapter provides a comprehensive outline of the entire study. The first section, 1.2, provides the background information and rationale for embarking on this study. In section 1.3, the problem statement is addressed. Section 1.4 provides the aim and objectives of the study. Section 1.5 provides the research questions the study will answer. Section 1.6 defines the key terms related to the study. The last section, 1.7, provides the outline of the chapters in the dissertation.

1.2 Background and Rationale of the study

1.2.1 Limited isiZulu Proficiency

The AmaZulu, also known as the Zulu people, are an ethnic group from Southern Africa, primarily from South Africa. They are one of the largest ethnic groups in the country and have a rich cultural heritage. Most native speakers of isiZulu language are located in the province of KwaZulu-Natal, South Africa. Growing up in a social environment where isiZulu is the first language makes one aware of the language-related barriers encountered in public healthcare settings. Accompanying the grandparents to the local clinics and hospitals allowed the researcher to notice several communication challenges during clinical consultations. Communication between non-isiZulu-speaking doctors and elders is beyond their monolingualism; it is based on understanding how elders express themselves using certain words in the isiZulu language.

Furthermore, the expressions used in isiZulu further challenge the doctors' limited comprehension of isiZulu. For instance, elders identify genital organs differently, relating them to isiZulu cultural references and tradition. A male genital organ is called *umuzi* because it is the seed that enables a man to produce children and have a family in isiZulu *ukukhula komuzi* (expanding the family). However, the general understanding of *umuzi* would be a home. A female genital organ is called *inkomo* because it is the girls' pride. In this context, *inkomo* is paid for with a cow by the suitor towards the girl's mother during dowry negotiations. A second language speaker would understand *inkomo* as livestock rather than a human body organ. A second language speaker is a person who is not fluent or uses isiZulu as an additional language

to the home language. The abovementioned examples reveal how AmaZulu use isiZulu words to express themselves in relation to their bodies. The societal norms influence language use and how people communicate with others (Qassem & Vijayasarithi, 2019).

In addition, as a tutor in the first-year isiZulu module at the Nelson R. Mandela School of Medicine (hereafter NRMSM), University of KwaZulu-Natal (hereafter UKZN), the researcher has noticed second language students grappling with isiZulu communication because medical content is taught predominantly in English with a limited amount in an African language (isiZulu at UKZN). For instance, in one of the practical activities that required the medical students to act as doctors and patients in three pairs, the researcher noted the following: In the first pair, the student doctor issued medication without understanding the patient's medical condition. In the second pair, the student doctor was unaware of the patient's age but still prescribed medication. In the third pair, the student doctor did not prescribe medication or an injection because of a lack of understanding of how critical the condition was. This practical activity showed the significance of understanding the language used for effective healthcare services.

1.2.2 Clinical communication in KwaZulu-Natal

Many societies in South Africa have deep value and respect for African indigenous languages and culture. Mkhize, Dumisa and Chitindingu (2014:130) state that "language is a primary tool by means of which higher mental functions such as thinking and intention are formed." South Africa acknowledges the significance of languages and officialised twelve languages used within the country's borders. Amongst all the South African official languages, isiZulu is the most spoken language in the country. Additionally, isiZulu is the most common language in the province of KwaZulu-Natal, as many villages of AmaZulu are located therein. KwaZulu-Natal has approximately 82,5% of isiZulu first language speakers (Stats SA, 2022). Nevertheless, clinical communication is often in English in public clinics and hospitals where most disadvantaged people receive healthcare services (Matthews & Van Wyk, 2018a). Because of their limited English proficiency, some patients cannot comprehend or communicate with non-isiZulu first-language-speaking doctors.

Clinical communication is one of the major problems in KwaZulu-Natal, considering that the native speakers of isiZulu language may be served by doctors who cannot speak isiZulu (Engelbrecht *et al.*, 2008; Khumalo & Makhubu, 2015). Levin (2011) argues that doctors

should acquire communication skills and cultural understanding of the African indigenous languages because the lack of language competence associated with culture is a major barrier to the delivery of health services.

The Department of Health conducted training workshops in KwaZulu-Natal facilitated in English, and this was done without considering that most patients in the province are isiZulu first language speakers (Matthews & Van Wyk, 2018a). The inability to comprehend the given information implies that the patients received no information. Moreover, patients struggle to explain and express themselves because of language barriers. Malele (2021) argues that languages should be treated as a basic human right, allowing people to use their home languages to express their health issues openly. Based on the patient's rights, translation of medical content has been shown to help doctors improve communication skills in the health department (Karwacka, 2018).

Numerous studies have focused on translating medical content and terminology because over 95% of medical papers are written in English (Karwacka, 2018; Matthews & Van Wyk, 2018a). These studies pay particular attention to the challenges encountered when translating medical content. There is an argument based on the relationship between general language and science, emphasising the competence of medical translators and understanding that science is communicated using language. In African indigenous languages, translation is beyond transferring information from one language to another; it is based on cultural communication. A study by Maseko (2018) describes culture's important role in medical translation. The emphasis is on the cultural elements used in the process of translating the source texts to produce a culturally acceptable target text for AmaZulu audiences. Gqaleni, Mbatha, Mkhize, Makhathini, Buthelezi, Davids and Moodley (2010) highlight the influence of isiZulu culture, where some terms can be used in other languages but regarded as 'private or sacred' in an isiZulu cultural context. This implies that translators must know how to use isiZulu words in a socio-cultural context.

1.2.3 IsiZulu at the Nelson R Mandela School of Medicine, UKZN

English, as the lingua franca, is a bridge language for communication worldwide, and this normalises communication by neglecting the use of African indigenous languages. Considering the aforementioned clinical communication challenges in KwaZulu-Natal, the UKZN implemented different strategies to help non-isiZulu medical students improve their

communication skills. The university considers the significance of teaching the isiZulu language in the medical profession because non-isiZulu-speaking medical students must serve most AmaZulu patients (Diab, Matthews & Gokool, 2016). Hence, implementing isiZulu modules or learning programmes at the tertiary level may be effective for improving practice communication, which may be used to solve communication challenges.

Based on an entry-level proficiency test, the Medical School offers isiZulu to first-year non-isiZulu speaking medical students. The module introduces the language in year one, offering basic knowledge of isiZulu. Diab *et al.* (2016) argue that the content taught at this stage cannot equip a non-isiZulu-speaking student for appropriate doctor-patient communication. Therefore, medical students are taught the communicator role in years two and three to enrich their isiZulu communication skills (Matthews & Van Wyk, 2018b). During clinical years four to six, many students lack clinical isiZulu communication skills, leading to ineffective doctor-patient conversations. The reason is that isiZulu resources are limited during the clinical and hospital rotation years (Matthews & Gokool, 2018; Gokool & Visser, 2021).

Due to the limited resources, the website project MediZulu was born to further assist medical students in enhancing isiZulu communication skills by translating medical content. The MediZulu website is a learning resource for medical students and other healthcare professionals to enhance isiZulu communication skills. The learning resource is part of the UKZN's language offering. The MediZulu website provides a comprehensive medical course covering various aspects of medicine, including resources on specific body systems, in-depth history taking, complete examinations, key vocabulary, and a summary of various conditions. The website also provides audio recordings of the medical content for non-isiZulu speaking students to help them learn the pronunciation of isiZulu terms. As a researcher and translator for this website project, which aims to improve clinical communication, I encountered many translation challenges in different medical contexts. Translating texts from English into isiZulu often leads to longer sentences, making it difficult for a non-isiZulu speaker to understand. It was also observed that isiZulu lacks medical terminology, further exacerbating the translation process (Engelbrecht *et al.*, 2008).

1.3 Research Problem

From the researcher's observation as a tutor, the problem is that UKZN medical students lack isiZulu clinical communication skills in their clinical years (i.e. Years 4-6). Non-isiZulu-

speaking medical students cannot efficiently and effectively communicate with patients who are isiZulu first language speakers, which implies that appropriate health services may not be provided. More than 80% of the patients treated by medical students are isiZulu first-language speakers, raising concerns about clinical communication and delivery of healthcare services to isiZulu-speaking patients. These issues have also been identified in earlier studies (Matthews & Gokool, 2018).

The researcher has also observed limited medical content, terminology and resources available for students. Most medical content is available in English. Hence, the researcher translated medical content in isiZulu that was required for the development of the MediZulu website, which is much needed resource for the students. Given the limited isiZulu medical content and the lack of resources, the current study contributes to the existing literature and generates additional knowledge on translating medical content to improve medical students' isiZulu communication skills.

1.4 Research Aim and Objectives

The study aims to explore the isiZulu translation process and ultimately develop new isiZulu medical content to improve medical students' isiZulu clinical communication skills to bridge the gap between non-isiZulu students' lack of isiZulu proficiency and their clinical communication with AmaZulu patients.

To achieve the aim of the study, the following objectives were implemented:

1. To review language policies towards an appraisal of the use of isiZulu in a medical context.
2. To explore the translation process of medical content from English into isiZulu.
3. To understand and emphasise the influence of social aspects in the translation process of medical content.

1.5 Research Questions

The key research questions of the study are:

1. Why is a review of language policies essential for using isiZulu in a medical context?
2. What is the process used to translate medical content from English into isiZulu?
3. How do social aspects influence the translation process of medical content?

1.6 Definition of terms

This section provides the definitions of terms used in the study:

a) Translation process

The translation process involves converting text from the source language (SL) by finding an equivalent in a target language (TL), ensuring accuracy, cultural relevance, and contextual understanding. The process includes comprehending the original text, analysis of its meaning, and rendering it into the target language (Bell, 1991). This process entails steps from the pre-translation to the actual translation of the source text, post-translation, proofreading or verification of the text, and finalisation of the translation. Munday (2008) provides a summary of Holmes's framework which expands an understanding of the translation process. The framework raises concerns on the cognitive ability (ability to perceive, process and respond to information) of the translator when given a text to translate. Holmes implies that there is so much processing in the translator's mind during translation. Munday (2008:63) further highlights the stages involved in the process, and these stages include the following:

- Reading and comprehending of texts in the language they are written in.
- Deverbalisation of the linguistic and stylistic norms of the source text to obtain a certain meaning.
- Re-expression where the target text is constituted
- Verification of the translated text.

b) Clinical communication

Clinical communication refers to the process of exchanging information, ideas and feelings between healthcare professionals, patients, and families to ensure high-quality, patient-centred care (Matthews & Van Wyk, 2018a).

c) Medical content

According to the researcher's definition, medical content refers to information, educational materials, or resources related to medicine, healthcare and wellness. This content can be created for various audiences and may be written under different learning systems in Health Sciences.

1.7 Outline of chapters

This dissertation consists of six chapters, which are summarised below.

Chapter One: Introduction

This chapter introduces the study's rationale and provides an overview of the study. The researcher begins by acknowledging South Africa as a language-diverse country amongst many worldwide. The chapter also states the problem the study intends to address and solve. The chapter includes the purpose of the study and the objectives the research intends to achieve. There are three main questions which the study aims to address concerning the isiZulu translation process of medical content.

Chapter Two: Literature Review

This chapter comprehensively summarises the reviewed literature based on language use and clinical communication. It is based on information from the secondary sources. The study focuses on current literature related to the research problem. The literature review in this study provides information on the significance of doctor-patient communication skills in providing efficient healthcare services and on the different barriers existing in this context. The researcher argues the significance of teaching medical students the isiZulu language by reviewing different language policies and the constitution. Moreover, literature related to understanding the isiZulu translation process is provided. This chapter concludes with a discussion on translation being a relevant tool to improve communication skills in clinical settings.

Chapter Three: Theoretical Framework

This chapter discusses different theories employed in the study related to translation. The study employs translation theories, which aim to contribute to the translation process in language studies. The study employs the functionalist theory by Christiane Nord (1992), which emphasises the purpose and understanding of the source text. A translation theory by Jean-Paul Vinay and Jean Darbelnet (1995) provides strategies and techniques to help the translator tackle various translation challenges encountered.

Chapter Four: Methodology

This chapter discusses research methods utilised to obtain the required information for the study. This study uses textual analysis, implying that text information is used as the data source and that different language policies are reviewed. The study aims to analyze the social and cultural appropriateness of the target texts written in isiZulu and translated from English. The analyzed text is the medical content extracted from the MediZulu website, which is the dataset for this study. This chapter also states that ethical clearance has been granted.

Chapter Five: Results and Discussion

This chapter provides a discussion based on the outcomes of the study. It attempts to address the research questions. The discussion focuses on the isiZulu translation process of medical content. The researcher reviews the language policies on using isiZulu in a medical context. The researcher further provides a step-by-step process of translating medical content and uses Nord's functionalist theory (1992) to explain the process. In addition, the chapter explains how the isiZulu language is attached to culture and the AmaZulu as a social group. Thus, there is a discussion on the social aspects influencing the isiZulu translation process of medical content.

Chapter Six: Conclusion

This chapter describes and summarises the study. The information discussed throughout the study is evaluated to conclude whether the aim and objectives from chapter one were achieved. The chapter provides recommendations for future research in this field of study. The recommendations are related to producing more language tools to assist medical students in enhancing their isiZulu language proficiency and communication skills. This chapter ends with a discussion of the limitations and contributions of the study.

1.8 Conclusion

This chapter briefly introduces the study based on the isiZulu translation process of the medical content from the MediZulu website. This chapter provides the study's background and rationale, which is motivated by the researcher's experience with doctors and patients in a clinical setting. The researcher's experience includes understanding the challenges encountered by non-isiZulu speaking doctors when communicating with patients who are isiZulu first language speakers in KwaZulu-Natal. The chapter states the research problem is medical

students lacking isiZulu communication skills, which affects doctor-patient communication. Therefore, the study aims to explore the isiZulu translation process, and the objectives look into the step-by-step process of translating medical content and the social aspects influencing the translation. Questions were implemented to achieve the above-mentioned objectives of the study. The definitions of key terms used in the study are provided for a better understanding of the context. The chapter ends with an outline of the study in which each dissertation chapter is summarised.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides a literature review on the isiZulu translation process and pedagogy at a tertiary level, specifically in the medical school at the University of KwaZulu-Natal. Furthermore, it presents a literature review related to translating medical content from English to the isiZulu language. The first section of this chapter briefly discusses doctor-patient communication and its significance. The next section, 2.3, discusses language as a barrier to communication, necessitating the translation of medical content. Section 2.4 summarises and analyses different South African language policies to understand the significance of translating medical content from English into isiZulu. The last section, 2.5, provides a comprehensive discussion on translation as an activity beyond transferring words but as a process. Translation literature is analyzed from a global perspective and the existing medical translations in the South African official language, including isiZulu medical content.

2.2 Doctor-patient communication

2.2.1 *Defining 'communication'*

'Communication' is derived from the Latin 'communicare' meaning 'common'. Communication is a process whereby people aim to create meaning and install commonality in the passing and understanding of information amongst each other. Li (1999) suggests two significant concepts to define and understand communication: relationship and content. Li (1999:388) refers to communication as a process carrying the content of the message. Li (1999) further emphasises that the message is conveyed from one communicant to another, building a relationship.

Communication is an interaction within a social context where there is a sender and receiver of information by verbal or non-verbal means. Moreover, the communication process involves at least two communicants to act as a source who sends the message and a receiver who receives the message (Li, 1999:389). People use different levels and types of communication, such as verbal, non-verbal, written, visual, non-human, mass or codes of communication. The above-mentioned serve a distinct purpose of allowing communication to be effective in different contexts and audiences.

People communicate for numerous reasons, including belonging, being heard, being understood, asking for help, or socialising with others. The aforementioned implies that there

is always a significant purpose for communication between people. Communication becomes effective when the communication objectives are achieved. Thus, communication is a key factor in the success of any relationship. Communication serves a significant purpose in maintaining the health and well-being of people, which relates to culture, languages and self-expression. The three aforementioned aspects also carry a significant relationship with each other. For instance, "language is viewed as a window on culture" (Carley, 1994:291). Language is attached to culture and the situation in which people find themselves. The above-mentioned implies that an understanding of these concepts is extended where culture identifies and defines language, and vice versa. Li (1999) emphasises cultural information communication, where communication is attached to cultural values, further building a bond or relationship between communicants. Language is identified as a significant aspect of communication between communicants. In a healthcare context, language is a tool patients use to access the healthcare system, obtain knowledge on health services, and make personal health decisions (Yeo, 2004). A face-to-face interview is the most frequently used form of communication during health services consultations. Vermeir, Vandijck, Degroote, Peleman, Verhaeghe, Mortier, Hallaert, Van Daele, Buylaert and Vogelaers (2015:1258) state that "face-to-face communication is essential to get the full conversation." The statement emphasises the idea that communication is not only about words but also involves body language and facial contortions, which may further assist should there be language communication challenges.

Understanding and defining the concept of 'communication' is significant in this discussion because communication involves using different languages and cultures. The language and cultural challenges are the main concerns in this study, which explores translation to solve communication challenges in the field of medicine. Moreover, communication is defined as a significant tool that is part of people's daily lives, meaning that it is one of the factors of human social functioning.

2.2.2 The significance of doctor-patient communication

Doctor-patient communication helps build a special relationship between a doctor and a patient, intending to provide and receive appropriate healthcare services. It is a relationship attached to the health or well-being of human beings. Doctor-patient communication is the key to ensuring that doctors and patients understand each other during the consultations. The concept of 'communication' is generally understood as an exchange of information, ideas, thoughts, feelings and emotions through speech or written behaviour. Thus, communication between

doctors and their patients is significant and effective when language is understood better (Engelbrecht *et al.*, 2008; Diab *et al.*, 2016; Gopaul, 2018). A plethora of studies (Gqaleni *et al.*, 2010; Tyam, 2015; Maseko, 2018; Gopaul, 2018) have been conducted on effective communication between doctors and patients, ensuring good health service is provided. Matthews and Van Wyk (2018b:194) highlight that "communication in the health profession has been emphasised internationally to improve healthcare services."

Attached to communication is a relationship that develops between a doctor and a patient, considering that a patient's life is in the hands of the doctor. Goold and Lipkin (1999:26) argue that "the doctor-patient relationship has been and remains a keystone of care: the medium in which data are gathered, diagnoses and plans are made, compliance is accomplished, and healing, patient activation and support are provided." Communication is the most significant aspect required to ensure that doctors and patients initiate a good relationship (Yeo, 2004). Mabasa (2006:3) states that health progress and the services' effectiveness are highly dependent on information communication. Thus, Goold and Lipkin (1999:26) highlight that there are skills and knowledge that doctors should have to build and maintain a good doctor-patient relationship. The skills and knowledge that doctors should have include work ethics, attentiveness to detail, patience with patients during consultations, in-depth knowledge of different aspects of medicine, language knowledge, and communication skills. Good communication between the doctor and patients builds a good relationship and improves health service outcomes (Matthews & Van Wyk, 2018a; Gopaul, 2018).

Doctor-patient communication is important in different ways. For instance, the communication between a doctor and the patient builds trust between them because they understand each other to some extent. The patient is convinced that the health care services will be outstanding because the patient feels heard and understood by the doctor (Engelbrecht *et al.*, 2008). This implies that the doctor understands the patient's symptoms, concerns and medical history. Furthermore, the patient trusts the doctor's diagnoses, medical recommendations and treatment plans. Patients who can effectively communicate their symptoms and concerns with the doctor are most likely to receive the right care, and doctors who understand the language used by their patients are most likely to provide efficient health care. The positive communication experience between the doctors and patient does contribute to the overall healthcare service satisfaction of the patient and the relationship. Language communication and building the doctor-patient relationship are not the only important factors. South African healthcare professionals

encounter diverse patients, including ethnicity, gender, culture, beliefs, religion and education. Doctors should understand their patients' differences, understand their origin, and maintain a good relationship.

Healthcare professionals are responsible for knowing and understanding their patients' medical conditions and, most importantly, where they come from to improve their communication skills (Tyam, 2015). Therefore, medical students at the University of KwaZulu-Natal are expected to utilise the knowledge learned from the isiZulu module to improve their vocabulary, proficiency, and basic interpersonal communication skills and better understand the Zulu culture. For instance, in the neurology content for the University of KwaZulu-Natal medical school website, the student is expected to ask their patient about '*umelaphi wesintu*' (traditional healer), implying that culture and tradition still play a significant role in people's lives and should be integral to the provision of healthcare services. It can be assumed that doctor-patient communication goes beyond exchanging words and clinical diagnosis.

2.2.3 Challenges faced in doctor-patient communication

Many challenges may contribute to inefficient and ineffective healthcare services in clinics and hospitals in South Africa and around the world. Communication is always challenging when communicants do not use the same language or come from the same cultural group. Doctor-patient communication is the focal aspect of delivering healthcare services. Yet, it is the most experienced challenge because it impacts the overall outcomes of the service provided by the doctor (Yeo, 2004). Studies by Bender, Clawson, Harlan and Lopez, (2004), Matthews and Van Wyk (2018b) and Abor (2019) looked into clinical communication. They indicated a challenge in maintaining or achieving a good doctor-patient relationship in clinics and hospitals.

Doctors and patients have the challenge of communicating with each other for several reasons. The main challenge during doctor-patient communication is the ability to comprehend what is said by either the doctor or the patient. This implies a lack of understanding of information that may be symptoms or concerns of the patient. This may further complicate or confuse the doctors because they may not know the actual problem and how to treat any medical issue leading to negative healthcare outcomes (Yeo, 2004; Levin, 2011; Vermeir *et al.*, 2015; Gopaul, 2018). Miscommunication between doctors and patients leads to misunderstanding of information and may lead to medical errors, risking patients' lives. Vermeir *et al.* (2015:126)

emphasise that "poor communication can lead to various negative outcomes: discontinuity of care, compromise of patient safety, inefficient use of valuable resources, dissatisfaction in patients and over-worked physicians and economic consequences, often hidden."

Doctor-patient communication challenges are beyond the exchange of words but may also be based on the patient's character. It is significant to consider that patients are different human beings, and they may express themselves differently. For instance, a challenge could be a patient's lack of self-expression. This is when patients cannot fully express themselves because they feel intimidated, uncomfortable or shy, which may affect their ability to communicate openly with the doctor. Moreover, some patients may lack health literacy, which leads to misunderstandings or miscomprehension of medical information. This may further affect the health decisions taken by the patient.

Abor (2019) conducted a study that explored clinical communication in a hospital called 'Tamale Teaching Hospital' located in the Northern region of Ghana in Africa. The study was motivated by complaints about problems and challenges encountered by doctors and patients during clinical communication. Abor (2019) highlights that no communication and language policies have been implemented to help improve doctor-patient communication skills. Moreover, there are no policies to protect the rights and use of languages in Ghana. With the lack of competencies and policies, nurses in the hospital are poor communicators and discriminate amongst patients based on their social status. As a result of the above-mentioned challenges, Abor (2019) introduced communication skill training to clinical staff at the hospital. This study is relevant in this section because it highlights the significance of clinical communication and the challenges experienced in different regions, particularly in the Global South.

The challenges of doctor-patient communication begin as early as when medical students do their clinical rotations. Some medical students cannot communicate with their patients during clinical rotations. Tyam (2015:11) highlights that "students experience isiXhosa second language training for doctor's consultations as a challenge." The reason is that some medical students at the University of Cape Town are not isiXhosa first language speakers, whilst isiXhosa is the second most spoken language in the province of the Western Cape (Stats SA, 2022). Similarly, UKZN non-isiZulu medical students cannot communicate with AmaZulu patients (Matthews & Van Wyk, 2018a). Considering the aforementioned, universities have noted that South Africa is a diverse country with a multilingual population. Universities have

taken the initiative to offer African languages at their institutions. However, this may not be enough to ensure medical students are well-equipped to communicate and offer health services to different ethnic groups in South Africa. Matthews and Van Wyk (2018a, 2018b) emphasised that for medical students to tackle their communication challenges and effectively communicate with patients, the institution has a responsibility to expose medical students to an African indigenous language (isiZulu in KwaZulu-Natal) so that they acquire communication skills. Institutions such as Stellenbosch, Wits, University of Cape Town and many others offer African languages within the health sciences programmes to try to tackle challenges associated with doctor-patient communication during the medical student's practice and clinical rotations (Tyam, 2015; Mohamed, Roche, Claassen & Jama, 2019).

Due to the aforementioned communication challenges doctors encounter, the UKZN medical school offers a mandatory isiZulu module in the first year and communicator role skills throughout the other years of the degree. The isiZulu module intends to upskill students simultaneously with language and communication skills. The idea is that doctors are placed in areas where people speak foreign languages. This is also problematic as "clinical training lacks role modelling of linguistic competencies" (Gopaul, 2018:5).

Doctor-patient communication is important in this study because it gives direction to the problem that the study intends to address. Moreover, it highlights the significance of doctor and patient communication in achieving the best medical results. There is an in-depth understanding of the important aspects that translators of medical content should consider.

2.3 Barriers to Communication

Barriers to human communication are a worldwide problem (Klimova & Semradova, 2012:207). Such barriers are factors that interfere, disrupt or stop people from exchanging information and thoughts. These factors are a problem because they impact what information a receiver receives and what a sender sends. This implies that communication between communicants is restricted. When looking into communication barriers, an in-depth understanding of the word 'communication' is required. Communication is not just an exchange of words but a shared meaning, beliefs, and self. Many people are challenged to understand or know the previously mentioned personal identity to communicate effectively. Thus, communication barriers are experienced in numerous societies.

Communication is a significant tool in the effectiveness of health care services, but doctors and patients continue to experience massive barriers to communication. Some scholars argue that communication barriers delay the delivery of healthcare services (Levin, 2011; Gopaul, 2018; Mohamed *et al.*, 2019). Several barriers exist in KwaZulu-Natal, and research conducted on isiZulu language communication indicates that culture and language are barriers affecting contemporary healthcare service delivery. As a result of language and cultural diversity, doctors and patients cannot communicate for effective and efficient healthcare services (Benjamin, Swartz, Hering & Chiliza, 2016).

2.3.1 Language barriers

Language is one of the most significant barriers to communication in people's everyday lives due to diversity. A language barrier is an inability to converse in a language both the sender and receiver know to communicate effectively because the receiver misunderstands the message. Communication challenges have existed for decades and have been identified in several global languages in many situations. People represent diversity, implying that their differences become a barrier in a certain period and situation. South Africa is amongst the most diverse countries, rating eighty-seven percent (87%) globally in the Linguistic Diversity Index (LDI). This implies a slim probability that people who speak the same language meet because of the language differences (LDI, 2024).

English was first introduced as a medium of instruction during the colonial government era in South Africa. Not everybody was privileged enough to acquire the skills and knowledge of the English language. Hence, there is a large number of people who are still monolingual (ability to speak one language only). While English is the fourth most commonly used language, isiZulu is the most common language overall in South Africa (Benjamin *et al.*, 2016; Stats SA, 2022). However, English remains the preferred language doctors use when communicating with their patients. This is also encouraged by the idea that the English language is a medium of instruction and that medical content is taught, written and learnt in English, limiting medical students' exposure to other languages. The problem has developed because first-language English doctors and medical students experience language barriers when communicating with non-English speakers.

Language communication is the most significant part of the doctor-patient consultation because it develops trust between doctors and patients (Engelbrecht *et al.*, 2008:145), and the doctor

needs to understand the patient's condition, complaints and inquiries before providing an appropriate healthcare service. Li (1999:391) highlights that "communication problems are simply due to the lack of knowledge of the language" because communication is based on understanding information from the sender. Language barriers are caused by monolingualism and limited language proficiency, especially in English (Levin, 2011). Patients from rural backgrounds and with poor education are mostly monolingual, which may indicate that they can communicate only slightly or completely fail to communicate.

Yeo (2004) argues that language is not the only barrier because there are still miscommunications between doctors and patients in the presence of translators. Levin (2011) and Mohamed *et al.* (2019) report that in cases where patients have limited language proficiency, the healthcare service is poor because of the language barrier affecting doctor-patient communication. Furthermore, the language barrier to communication has made many patients uncertain about the health service received. This implies that language barriers prolong the service offered to the patients or decrease the quality of healthcare service. Yeo (2004:63) states that "the consequences of language barriers range from miscommunication to inefficient use of health care services."

Globally, language barriers to communication for health care services have become a social phenomenon, and numerous scholars have attempted to review the subject with the intention not only to understand the phenomenon but also to pay attention to aspects that could solve this problem. De Moissac and Bowen (2017) report that a large population of Francophones had limited access to health care because they were French speakers in Canada. This implies that French was not a dominant language in Canada, which made it difficult for people and language policy planners to accommodate Francophones. In South Africa, studies on translation into African languages and clinical communication indicate that certain amendments in languages used in various areas had to be made to overcome the language barriers. Furthermore, the minority residing in a specific area will likely experience a language barrier. Hence, decisions such as using isiXhosa and Afrikaans in the Western Cape were made because they are the dominant languages (Mohamed *et al.*, 2019) and isiZulu in KwaZulu-Natal (Stats SA, 2022).

Approximately ninety-five percent (95%) of medical content and information is written in English with terms derived from other foreign languages. Therefore, scholars question medical content development in South African indigenous languages. What can be done to accommodate people who cannot understand English? As a result of this question, a deeper

analysis of language barriers helps us to understand the impact of language itself and how the lack of language proficiency has affected the delivery of healthcare services in South Africa.

2.3.2 Cultural barriers

South Africa is a diverse country with multiple cultural groups, cultural beliefs and backgrounds. Spencer-Oatey (2012) states that culture is the most complicated concept to define and understand; thus, different definitions of culture were reviewed. The different interpretations of the concept reflect how cultures also differ from one group to another. Culture is defined as "the set of attitudes, values, beliefs, and behaviour shared by a group of people, but different for each individual, communicated from one generation to the next" (Matsumoto, 1996:16, as cited in Spencer-Oatey, 2012:2). Culture is a special intellectual quality owned by people belonging to a certain social group. Moreover, culture brings a sense that includes morals, customs and knowledge about other people's lives. Amongst the compiled definitions of culture, the definition that stood out states that "culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioral conventions that a group of people shares and that influence (but do not determine) each member's behavior and his/her interpretations of the 'meaning' of other people's behavior" (Spencer-Oatey, 2012:2). Culture shapes how people perceive the world, interact with one another, express themselves, and understand their place in society.

Culture is one of the barriers to communication between doctors and patients during consultations. Though culture is linked or attached to language, it is a separate barrier to communication. Li (1999:392) argues that "major barriers to inter-cultural communication may not lie in a lack of linguistic skills per se, rather, in differences in cultural backgrounds and their consequences on communication." Diab *et al.* (2016) highlight that patients in clinics and hospitals are diverse in numerous ways, including religion, gender and culture, implying that patients' beliefs may affect how they view healthcare services.

Yeo (2004) states that there are negative outcomes due to cultural barriers apart from language. The main challenge associated with culture is how patients express their symptoms and health conditions in a cultural communication style. Moreover, the challenges influence cultural beliefs and norms in providing healthcare services regarding illnesses, diagnosis and treatment of patients. Culture does influence the patient's preference for using Western or traditional medication. Simultaneously, doctors may not be able to respond to or understand cultural

aspects because they are unaware of the attachment between other people and their cultures. Doctors are not fully equipped to attend to culturally related matters of their patients or to demonstrate cultural sensitivity regarding the understanding of people's cultures, respect for the elders, and how they are protective of their bodies, and they use euphemistic language in communication. Mohamed *et al.* (2019) highlight cultural competence, stating that doctors should understand the cultural beliefs of the patients within that specific area.

As a result of the previously mentioned concerns about cultural barriers, doctors have a responsibility to extend their knowledge of patient's cultures. Furthermore, they should not only aim to understand the patient's condition, but they should also understand where they come from and how they would prefer to do things. Effective communication is when a doctor enquires about the background and beliefs of patients to understand the condition and specific health care services needed. It is assumed that a doctor who understands patients' preferences in terms of medical treatment may arrange or consider medication that aligns with cultural values. Spencer-Oatey (2012:1) highlights that the doctor-patient consultation is based on 'interpretation of meaning', implying that doctors should understand behaviour attached to culture and its meaning. For instance, in isiZulu culture, a person who has epilepsy may be mistaken for a person who suffers from ancestral calling (*amadlozi*), and vice versa.

Considering the above cultural challenges encountered in clinics and hospitals, some medical institutions have attempted to teach different South African indigenous languages to improve doctor-patient communication skills. Furthermore, they aim to enrich the doctors' understanding of culture, especially in black societies. Matthews and Van Wyk (2018b) emphasise that students should not only be taught the language but they should also be familiarised with the cultures of the people they serve. For instance, AmaZulu believes in traditional healers, herbalists and faith healers. Hence, doctors should understand that certain patients would consider getting a diagnosis from a traditional healer rather than a Western medical doctor.

Cultural competence is important for providing appropriate healthcare services that respect the diversity of people in South Africa, promote effective communication, and enhance health outcomes. Culture is important in this study because people are attached to their cultures and cultural beliefs. Moreover, people express themselves in a cultural communication style and use culturally sensitive language. People cannot be convinced otherwise about what they believe in; hence, doctors must familiarise themselves with the different cultural aspects used

by the people they serve. Doctors should learn or understand patients' languages and be aware of their culture, especially in a multilingual and diverse South African context.

African languages and cultures should be taught to medical doctors in training, and universities should consider incorporating these two aspects within their curricula. Hence, language policies have been planned and implemented in different departments and universities. The next section provides an overview of the significant use of language policies in South Africa.

2.4 Language Policies of South Africa

Language policies are planned interventions developed and implemented by the state down to the institutions. The policies exist to promote and protect official languages. They are altered by comparing and evaluating the status of the language. In South Africa, policies provide a framework for developing and strengthening the indigenous languages. Cele (2021) states that the language policy is a response to the apartheid system, where many South African indigenous languages were neglected and reduced in the social world. "Policies aim to promote multilingualism and sensitivity in language usage in the higher education and healthcare environment" (Matthews & Gokool, 2018:149).

Section 6 of the South African Constitution gives assurance of equal status to eleven official languages (The Constitution of the Republic of South Africa, 1996). The languages are English, isiZulu, isiXhosa, Afrikaans, isiNdebele, Sepedi, Sesotho, Setswana, Siswati, Xitsonga and TshiVenda. However, due to the 2023 amendment of the aforementioned section of the Constitution, sign language was added as the twelfth official language of South Africa (Parliament, 2023). In recognition of the historically neglected use and status of the indigenous languages in South Africa, the Pan South African Language Board was therefore established by the national legislation. According to the Pan South African Language Board Act 59 of 1995, the Constitution of the Republic of South Africa recognises the principle of development of the aforementioned official South African languages (PanSALB, 2006). Section 3(f) states that the board must promote the use of South African indigenous language resources, which must be promoted globally (The Constitution of the Republic of South Africa, 1996). Therefore, the Pan South African Language Board Act aims to protect and promote linguistic diversity and ensure all South African citizens can access services and resources in their languages. Language policies exist to indicate the language interest of many existing departments in South Africa. Language policies are significant in this study because they guide

language rights and the regulations of languages used in different social structures in South Africa.

2.4.1 Department of Health Language Policy

The Department of Health is one of the units in which effective operation is dependent on communication. This includes communication between clinical practitioners or doctors and their patients. The Department of Health Act 12 of 2012 follows the regulations regarding section 6 of the South African Constitution on using official languages (DOH, 2015). In accordance with section 21 of the National Health Act of 2004, the Department of Health language policy aims to ensure effective communication between doctors and patients in clinics and hospitals. The Department of Health language policy ensures that communication and services are available in multiple official languages to accommodate all South African citizens. This language policy promotes using indigenous languages during doctor-patient consultations in clinical settings (Patients' Rights Charter 2007; DOH, 2015).

To cater to South African citizens who speak different languages, the Department of Health has utilised translation to accommodate people linguistically and ensure that health documents and information are available in different official languages. Moreover, the Department offers training to its employees. Health professionals are trained to communicate with patients who speak different languages effectively. The training focuses on language communication skills and pays attention to cultural differences or culture attached to language (refer to the training and capacity building of DOH language policy, 2015).

The South African Department of Health has eventually brought all official languages and the distinguished approach of multilingualism into the language policy. Mutusa's study (1999:9) emphasises how adopting translation procedures has helped improve communication in the health sector. The Department of Health aimed to recruit translators from indigenous language groups to serve in the health sector, where communication is vital for service delivery. Today, many documents are bilingual, multilingual, or written in at least one of the indigenous languages. For instance, isiZulu is an official written communicative language used to communicate with the public in KwaZulu-Natal and other provinces in South Africa. Figure 2.1 below shows how the Department of Health has used African indigenous languages to communicate with people of different language groups in South Africa. The communication in the pamphlets concerns the significance and impact of vaccination.



Figure 2.1 Communicative information on vaccines in different African languages (English, isiXhosa and Sepedi). (source: <https://www.health.gov.za/nhi-edp-comm/>)

Comparable to the Department of Health's language policy in South Africa, the Department of Health in North Carolina initiated Spanish language and culture learning training for health professionals following the rapid increase in Latino immigrants (Bender *et al.*, 2004). This training aimed to equip doctors with communication skills in multiple languages, especially Spanish. Bender *et al.* (2004) state that the training was initiated because of the cultural and linguistic challenges experienced in healthcare settings between doctors and patients. The aforementioned reveals that there may be some health departments around the globe experiencing similar language communication challenges and that the language policies intend to comply with the language rights of patients. The Department of Health's language policy guides this study because it highlights that health services should be communicated in the language the patient understands to fulfil a patient's rights by encouraging multilingualism.

2.4.2 The Patients' Rights Charter

In accordance with Act No. 108 of 1996 in the Constitution of the Republic of South Africa (1996), which states that people have the right to access health care services, the Department of Health developed a National Patients' Rights Charter. The National Patients' Rights Charter states the fundamental rights patients are entitled to when receiving health care services. The

National Patients' Rights Charter was developed to ensure patients' rights are always known and protected. Furthermore, the charter ensures that health practitioners comply with patients' rights. Therefore, the National Patients' Rights Charter also exists to help patients fight for their rights, report any violation experienced and be aware of their responsibilities as clients of the Department of Health (Patients' Rights Charter, 2007).

According to the Patients' Rights Charter (2007), health is a crucial aspect of life; the right to life and access to health care are fundamental human rights as a South African citizen. The Department of Health ensures people get effective healthcare services in their local clinics and hospitals. In accordance with the Constitution of the Republic of South Africa section 6, based on the use of official languages and the human right to access health care services (The Constitution of the Republic of South Africa, 1996), the National Patients' Rights Charter highlights that "Everyone has the right of access to health care services that include: health information that includes the availability of health services and how best to use such services and such information shall be in the language understood by the patient" (Patients' Rights Charter, 2007). This implies that patients' home language and preferred languages should be utilised during health consultations. Essentially, healthcare professionals are expected to know and understand languages used by the patients they serve in different communities.

Patients are entitled to many rights, including the right to receive healthcare services that respect their personal values, preferences, and cultural beliefs. As a result of the aforementioned rights, doctors have a responsibility to familiarise themselves with the cultures and religions of different people they serve. The purpose of this is to communicate with patients about what they believe in and better understand them as human beings. Therefore, healthcare professionals should fulfil two rights: the right to healthcare and the equal use of official languages in South Africa.

The Charter is significant to this study because it highlights the importance of human rights, which the study intends to address as its roots and attempts to state the significance of language and language communication in fulfilling the human right to access health care services. Therefore, the study focuses on the translation process of medical content to teach doctors the language used by their patients so that they can understand and deliver information in the patient's language. Moreover, it emphasises the importance of respecting patients' cultural, religious and personal beliefs through language communication. The translation of medical content must consider cultural differences and sensitivities. Translating medical content

benefits doctors and ensures that both doctor and patient comprehend the information shared between them.

2.4.3 Department of Higher Education and Training Language Policy

The Department of Higher Education and Training (DHET) oversees the country's institutions of higher education and vocational training. "Language plays a very important role in the process of transformation of education systems" (Tyam, 2015:13); therefore, the Department of Higher Education and Training has developed language policies based on constitutional and legislative provisions. The constitutional provisions in respect of language in education are found in sections 6, 29(2), 30, and 31(1)(a) of Act 108 of 1996. The language policy framework for public higher education institutions is determined in terms of section 27(2) of the Higher Education Act 101 of 1997.

The Department of Higher Education and Training language policy aims to promote multilingualism in institutional policies and practices, thus strengthening indigenous languages' use in South African institutions. The language policy aims to provide guiding principles on language rights and the development of language policies at different institutions, considering that they are located in different provinces with different languages. Moreover, the language policy plays a significant role in informing the policies of all South African institutions on the medium of teaching and learning according to their linguistic diversity (DHET, 2020). Thus, language policies promote the use of indigenous languages and language proficiency in specific programmes in institutions.

South African higher education creates an inclusive system for teaching and learning in schools. Higher education institutions promote communicative competence among students and staff in different South African official languages because the education constitution affirms that everybody has the right to receive education in the official language of their choice. Many higher institutions had to comply with the national language policies and develop new language policies and programmes to accommodate indigenous official languages. Furthermore, indigenous languages should not only be used for teaching and learning but, importantly, for communication skills, considering that some professions, such as health sciences, utilise language communication skills to provide effective health care services to patients. Therefore, it is necessary to teach South African Indigenous languages in Health Sciences programmes (Gokool, 2018).

Reflecting on the use of language in South African universities, there are twenty-six (26) universities. Many of these institutions use English as the medium of instruction and this could imply that there could be challenges with adopting indigenous languages. Cele (2021) criticises the national language policy as political rhetoric, lacking guidelines for developing indigenous languages in a teaching and learning domain. Cele (2021) further states that universities are still unable to use indigenous African languages, and the "development of language policy for transformation and social inclusion in South African higher education has significantly failed to achieve the ideal order of social redress" (Cele, 2021:25-26). Nonetheless, some universities have new language policies which intend to explore the status of the current medium of instruction and include other languages. For instance, the University of South Africa language policy uses English as the language of instruction (UNISA, 2016). Other official languages are used in student support, where students receive information in the language of their choice. The language policy of Stellenbosch University used Afrikaans for many years until they revised their language policy in 2021. The revised language policy focuses on using three official languages, Afrikaans, English, and isiXhosa, the only indigenous languages (SU, 2021).

Similarly, the University of Cape Town has adopted isiXhosa as a medium of instruction because it is the second most spoken language in the Western Cape province. (Tyam, 2015; Mohamed *et al.*, 2019). The University of Cape Town introduced Afrikaans and isiXhosa communication courses for students studying medicine from year one to year four (Mohamed *et al.*, 2019). This was implemented because most people served by the medical students in the Western Cape are either Afrikaans or isiXhosa first language speakers. In addition to English, isiZulu has been adopted as a medium of instruction by universities, including the University of Zululand, the University of South Africa, the University of KwaZulu-Natal, the University of the Witwatersrand, Mangosuthu University of Technology, Durban University of Technology, University of Pretoria, University of Johannesburg and Vaal of Technology (Cele, 2021). This study specifically focuses on the University of KwaZulu-Natal language policy drawn from the DHET language policy.

2.4.4 The University of KwaZulu-Natal Language Policy and Plan

The University of KwaZulu-Natal planned its own language policy with instructions from the Minister of Higher Education and Training according to the Higher Education Act of 1997 and in accordance with the previously mentioned language policies and human rights in the

Constitution of the Republic of South Africa. The University of KwaZulu-Natal language policy and plan document was proposed and implemented in 2006 and later revised in 2014 (UKZN, 2006 and 2014).

The University of KwaZulu-Natal language policy recognises the need to develop and promote proficiency in the official languages, particularly English and isiZulu. The University of KwaZulu-Natal bilingual language policy (2006 and 2014) promote alongside English, the use of isiZulu in the university intending to improve communication skills, intellectualization, and language proficiency and to achieve equal institutional and academic status of English and isiZulu. The language policy emphasises the development of indigenous languages in South African institutions, with high recognition of isiZulu in the province of KwaZulu-Natal.

In light of the language policy and plan, the university introduced a compulsory isiZulu module to comply with the UKZN language policy (UKZN, 2014), providing a linguistic and cultural ethos favourable to all students. The Basic isiZulu module is offered to all undergraduate students while the mandatory Year 1 isiZulu module is specifically offered to the medical students. The medical-specific isiZulu module is taught to year one medical students only (Matthews & Gokool, 2018). No formal isiZulu teaching is provided in the subsequent years of the curriculum.

Since many students enroll in the compulsory isiZulu modules, which requires them to engage with community members, the language policy supports vocational isiZulu learning, bilingualism, and social cohesion across various professions, based on the assumption that students will practice their professions within KwaZulu-Natal. Therefore, non-isiZulu speakers are encouraged to learn isiZulu to improve their communication skills. The university also should produce academics and professionals who can communicate with different groups of people (Matthews & Van Wyk, 2018a). As a result, the policy recognises the need to develop and promote proficiency in the South African official and indigenous languages, specifically isiZulu.

Considering the importance of doctor-patient communication, the Skills Lab Department of the Medical School has integrated isiZulu within the Communication Skills module and students are taught isiZulu communication skills in years 2 to 3. Some interventions such as the isiZulu communication videos proved to be beneficial to medical students because these offer isiZulu communication videos based on clinical communication (Diab *et al.*, 2016).

Students were exposed to objective structured clinical examinations, requiring students to conduct an history-taking with isiZulu-speaking patients in Years 2 and 3 (Matthews & Gokool, 2018). Because these isiZulu interventions are only offered in the preclinical years 1 to 3, medical students encounter communication challenges in the subsequent years 4 and 5 of the MBChB degree, causing possible communication gaps during their practice.

Hence, the MediZulu website, an online resource developed to assist students during the clinical years of study. The MediZulu website, as a learning resource, fills the gap and has made a remarkable contribution to enhancing isiZulu for clinical communication with AmaZulu patients (Gokool, Reddy, Moosa & Odayar, 2024). The UKZN language policy is significant in this study for its guidance on the language used at the university and the significance of translating medical content from English into isiZulu for teaching and learning isiZulu communication skills from the MediZulu website (UKZN, 2014)..

2.5 Translation of medical content

2.5.1 Defining the concept of translation

Translation is a process defined or understood differently by many language scholars. Bell (1991) defines translation, highlighting two key terms: the process and product of translation. Bell (1991) states that translation is transferring information from one language to another to produce accurate content in a different language. Bell (1991) further states that translation is a product of translating the source text to produce an accurate target text regarding lexical and grammatical language and content.

The translation is further defined by authors such as Bardaji (2009), and Zainudin and Awal (2012:328), who state that translation is a process of converting written information from one language into another while maintaining its meaning, tone and intent as much as possible. Pinheiro (2014:122) defines translation as "decoding a written piece of discourse from the source language according to our private language but considering the private language of the original writer and the original context as much as possible, and then coding that piece again according to our corrected-to-an extreme vision of the target language and context." The concept of translation is defined by Dlamini (2016:2) as "a very old crucial activity in multiple disciplines which is essential for global understanding."

Translation plays a significant role as a form of communication that allows people from different languages and cultures to mediate understanding and share ideas amongst each other in different contexts (Maseko, 2018:25). Safi and Nasser (2022:942) further emphasise that "translation can be regarded as an excellent means of communication among nations using different languages. Via translation, many works, arts, sciences, thoughts, and cultures have been available to all." Thus, translation is said to be a process where information is reproduced in the receptor's language in terms of meaning and style, and information is translated from one language to another. Overall, translation is an act of communication and a communicative process involving different role players (Azhideh, Farahzad & Razmjou, 2010:4), where information moves from a sender to a translator to a receiver to make sense and provide an understanding of content.

The translation process is undertaken in many fields due to new production, new devices, new drugs and also for communication with local language speakers. Translation involves more than substituting words from one language to another; it requires a deep understanding of both languages. This includes understanding grammar, syntax, idiomatic expressions and cultural references intended to convey a message. Therefore, translation is a profession which requires skills for the process to be successful. Moreover, the translation should not only focus on language, but it should also target the different cultures of people. This implies that content and text should be analyzed in a cultural-linguistic context.

2.5.2 The significance of translating medical content

Medical content refers to any material related to health care that is used to transfer information or for communication between health care practitioners and patients. Medical content may be material such as patient educational documentation, clinical guidelines, medication information, training material or any policies related to the health department. Lee-Jahnke (2005:81) states that "medical translation has always been of major importance within the field of translation." The translation of medical content aims to improve the use of South African indigenous languages because, amongst twelve official languages, English is the most dominant language during doctor-patient communication or consultation. Translating medical content empowers specific indigenous languages, addresses language barriers, and improves health care services for linguistically diverse South Africa.

Medical content is translated to ensure that language communication is effective during doctor-patient communication (Maseko, 2018). Translation ensures that patients fully understand everything communicated to them and allows doctors to comprehend any information shared by the patient. The information shared between the doctor and the patient could be medical symptoms, health conditions, the treatment plan, or medical health instruction, which is significant in ensuring that the patient receives the best health care services. Therefore, in accordance with the language policies and patients' rights, translating medical content with the aim of accessibility is significant. Medical information should be available and accessible to people of different languages (Patients' Rights Charter, 2007). This allows inclusivity and equal access to healthcare services, which may improve health outcomes and reduce medical errors or misunderstandings of information shared between doctors and patients.

The significance of translating medical content goes beyond the understanding of language; it promotes the understanding of different cultures. People have cultural differences, and doctors must learn about people's cultures (Matthews & Van Wyk, 2018b, Levin, 2011). The process of translating medical content unconsciously pays attention to cultural nuances and differences in healthcare beliefs and practices. Moreover, translated medical content ensures that medical information is shared and communicated in a culturally sensitive manner. It also promotes effective communication in a multilingual and multicultural group of people.

2.5.3 A global perspective on the translation of medical content

The challenges of clinical communication among doctors and patients are experienced globally. Translation is one of the tools used as a solution and method of helping medical students and doctors learn different languages. Karwacka (2015:271) argues that "translation is crucial in disseminating knowledge and new discoveries in the medical field globally". Research shows that most medical content published in English originated from Latin, the second century's dominant language for medicine and science (Karwacka, 2015:273). Latin and Greek influenced the English science of medical terminology because various medical terms originate from the aforementioned languages. Globally, the original language of medical terms has given many language communication challenges. The challenges have given many scholars the courage to embark on different studies and projects empowering different indigenous languages.

Due to numerous communication challenges encountered in the field of medicine, Chinese scholars developed a Chinese-English dictionary of Chinese medicine. The dictionary aimed to develop Chinese medical terms and vocabulary for people who do not understand Chinese. Wiseman (2000) studied translating Chinese medical terms, examining the terminological problems in developing and translating Chinese terminology. The study highlights that the dominance of Western medicine has affected not only the languages but also how medicine as a discipline is viewed. Furthermore, it has affected the translation process of medical content and terms. Wiseman (2000) highlights the significance of understanding the different medicines and their significance. The Chinese play a significant role in improving the knowledge of Chinese in terms of medicine. The study on Chinese translation relates to the present study because there is a need to develop relevant dictionaries. Moreover, the study contributes to examining and analysing terminological issues in developing new medical terms in medicine.

It is noticeable that medical students continuously experience language communication challenges when communicating with patients. The medical school at the University of Zimbabwe encounters challenges between Shona and non-Shona speakers during clinical communication. Shona is a language used by over half of the population in Zimbabwe, and there are communities where Shona is the only language used. Mpofu and Mangoya (2005) compiled a bilingual Shona-English dictionary of biomedical terms. The dictionary was compiled with the aim of improving the Shona language proficiency of medical students and the efficiency of doctor-patient communication. The reason is that medical students could not communicate with patients who are Shona's first language speakers. The dictionary comprises modern and traditional practice terms, considering that communication also adapts to people's lives. Thus, Mpofu and Mangoya (2005) state that there are many gaps that language translation has to fill, such as cultural gaps that may cause communication problems between doctors and patients. Attempting to fill the cultural divide is a social problem and a translation problem. Mpofu and Mangoya (2005:121) highlight that "problems of equivalence between Shona and English biomedical terms occur when some medical conditions are culture bound." However, the dictionary has medical terms based on social and cultural beliefs. Furthermore, Shona has many terms that are not standardised and are avoided during social interaction, challenging the process of choosing medical information and terms to include in the dictionary. Overall, the bilingual dictionary is the beginning of Shona language development in the field of medicine.

A language translation study by Berghammer (2006) reviews the translation process to produce appropriate and accurate German-English medical terms. German medical terms are taken from the English language. Some medical terms exist with equivalents, while other terms do not have these. Berghammer (2006) also reviewed medical phrases used in English and German to construct meaningful sentences across different language groups. Thus, Berghammer (2006:43) states that "translation requires more than exchanging terms or phrases in one language for another, adhering to the rules of grammar, and choosing the appropriate register because language is closely linked to subject-matter knowledge." This study on German-English translation links with the study conducted by reviewing the translation process of transferring English terms to a target language. The study identifies the challenges encountered in the translation process of medical terms.

The translation of medical content has developed in many languages, including Swedish. Rask (2008) analysed the medical text translation from English to Swedish. The translation project is from a textbook for a nursing school, which is used to teach nurses about 'person-centred dementia care'. In the Rask (2008) study, the text was translated into symptoms of dementia, physical causes in medicine, and incidences. Rask (2008) argued that translating medical terminology in the project was not the only problem but that cultural aspects also contributed to the problems encountered by the translator. Rask (2008) highlighted that the study focused on finding the equivalences and considered the cultural differences within the target audience. Thus, the study aimed to incorporate the cultural aspects influencing medical terminology during the translation process of medical text from English to Swedish. However, when the cultural aspects were considered in the translation, the Swedish language lacked formal equivalences. As a result of the challenges experienced during the translation process, the researcher consulted different learning tools to provide guidelines. The tools included textbooks, books, dictionaries, and websites written in Swedish. Rask (2008) used three steps to achieve the desired goals of the translation project. Step one entails reading and obtaining a good understanding of the text and the target audience it is intended for. Step two is the translation of the text from English into the Swedish language. Lastly, step three is the presentation of translation challenges encountered, investigation of the cultural aspects and standardization of terminology in the translation. This study is significant in this review because it offers different steps translators utilise in translating medical content.

Al-Jarf (2018) studied translation issues of English and Arabic equivalents of medical terms. The study reviewed dictionaries and glossaries written from English to Arabic and aimed to assist medical students in improving their knowledge of Arabic. The study was also conducted to ensure that students could provide health care services in a language understood by their patients. According to the research on Arabic equivalents, translators encountered many challenges when translating medical terms from English to Arabic. Amongst the challenges were inappropriate equivalents, inconsistency of equivalents and word-for-word translation (Al-Jarf, 2018:102). The aforementioned further challenges the learning and teaching of medical terms in the Arabic language. The study by Al-Jarf (2018) links to this study by addressing some of the translation issues in finding accurate equivalents while translating medical content.

In another study conducted by Rongre (2018) on the development of medical terminology from English to Indonesian, the author (2018:66) reviewed different translation techniques and their impact on the accuracy of the developed medical terms. The study contributed to developing translation as a field of medicine and improving language, science, and technology in Indonesia. The study's results proved that the translation is accurate, acceptable, and readable for non-Indonesian speakers. Rongre (2018) further concluded that the techniques may affect the overall process and outcomes of the translated medical terms. This study links to the conducted study by identifying different techniques used to solve translation challenges in translating medical content.

Ortega, Hardin, Perez-Cordon, Cox, Kim and Truesdale (2022) conducted a study on using online resources as a tool for instruction in teaching the Spanish language to medical and clinical students. Medical Spanish educational material was developed following the report on barriers and challenges encountered in the course resources. The demand for Spanish learning resources was based on improving Spanish language communication skills among doctors and patients. The study's objectives included obtaining medical knowledge of different organ systems, symptoms and diseases. This is important because medical students should be able to interview, comprehend information and examine patients.

Most importantly, medical students must be able to diagnose and explain the patients' health conditions in Spanish to avoid medical errors and poor healthcare outcomes. Ortega *et al.* (2022) highlight that attached to the objectives, the study is attentive to the use of sociolinguistics in the health of Hispanic and Latino people, considering that there is a high

population of Spanish speakers in the United States. Considering sociolinguistics during Spanish translation helps medical students enrich their knowledge of their patients' behaviours, norms, and cultures, and they pay attention to the Spanish communicative elements (grammar, vocabulary, and culture) while teaching language communication. Although Spanish education lacks standardization in some fields, technology bridges the geographical gap, allowing students to access online material. The study on Spanish translation links with the present study because of the nature of the product used to teach doctors communication skills. This study focuses on a web-based learning resource for teaching a second language to medical students, similar to the online material used to teach Spanish language.

It is important to review medically translated content and terms in different languages apart from the official South African languages to understand the similar challenges within the context of translation. For instance, the aforementioned case shows that there are challenges to having multiple equivalents for medical terms, which is a challenge in the consistency of the language used. Moreover, some terms do not have equivalents, which affects the overall translation of the target language because the translation might not state exactly what was intended by the source language. This implies that the translated information is compromised.

2.5.4 The translation of medical content into South African official languages

Considering that South Africa is a language-diverse country and there are rights attached to the use of official languages, scholars such as Mabasa (2006), Gqaleni *et al.* (2010) and Malele (2021) recognised a need not only to review aspects around doctor-patient communication but also bring interventions to tackle the communication challenges. The interventions include utilizing translation, promoting multilingualism and empowering indigenous languages. Multilingualism may be achieved by translating content from one language to another and considering the targeted audience (Ndlovu, 2013). The neglect of indigenous languages has been reversed because indigenous languages are now considered important in a culturally and linguistically diverse country (Mkhize, Dumisa & Chitindingu, 2014).

Other interventions, including translating medical content from English into other South African indigenous languages, have improved communication in clinics and hospitals. Mabasa (2006) translated equivalents for medical terminology from English into Xitsonga. His study focuses on medical terms because of their impact on health communication between doctors and patients who are Xitsonga first-language speakers. Mabasa (2006:4) argues that lacking

technical concepts in indigenous languages should not be permanent because various ways can be utilised to develop and improve South African indigenous languages in different fields. Furthermore, information should reach out to people in Xitsonga because that is the language better understood by people of the region. The translation of equivalents of medical terminology was therefore developed. In the study, Mabasa (2006) observed a lack of terminology in medicine, a lack of relevant material, and no equivalents for numerous English terms. Moreover, there is a lack of standardization, which affects the accuracy of information shared by people and leads to misunderstandings. Mabasa (2006) highlights that the challenge of finding the exact terms for the source and target languages led doctors to utilise words that could not be understood by the patients who speak Xitsonga.

Considering the challenges encountered by non-African medical students and healthcare practitioners during communication, a medical student from the University of Cape Town developed a mobile isiXhosa website (UCT News, 2013). The isiXhosa website aims to help non-isiXhosa medical students translate medical content and be able to comprehend information conveyed by isiXhosa-speaking patients. This intervention can be considered a convenient translation tool because most people prefer using mobile phones for almost everything. Moreover, the website can be utilised and easily accessible compared to other tools used in translation, such as books or dictionaries. The website offers medical translation in at least five languages: Afrikaans, French, Spanish, isiXhosa and isiZulu. Further website developments will include sound recordings, which will help students learn how to pronounce different medical terms. Moreover, the website will be expanded to include more indigenous languages because doctor-patient communication is a global challenge, and translation is the solution (UCT News, 2013).

IsiNdebele is one of the official languages that is being developed in South Africa. With gaps and limitations of isiNdebele study resources, Malele (2021) developed a bilingual glossary (English and isiNdebele) to develop and improve the usage of isiNdebele language in South Africa. The English-isiNdebele glossary has translated medical terms to develop isiNdebele terminology and language and help doctors and patients improve their communication skills. Malele (2021) highlights that one of the challenges in translating isiNdebele as a Nguni language lies in the idea that it may differ geographically, considering that Zimbabwe also has isiNdebele language speakers. The study on isiNdebele glossary development provides ideas for this study on translating a language that differs according to geographical areas.

Reviewing the literature on translated medical content or terms from other languages is relevant to this study because it gives the researcher ideas about the purpose of developing different tools, such as dictionaries, glossaries, or a translation website. Furthermore, all scholars embarked on translation studies driven by concerns about doctor-patient communication challenges. The reviewed translation relates to the study conducted and helps the researcher who is also a translator to gain an understanding of possible challenges encountered during the translation process.

2.5.5 Translation of isiZulu medical content

IsiZulu is the most used language in South Africa, more specifically in KwaZulu-Natal (Stats SA, 2022). Given the challenges faced in doctor-patient communication, translation of medical content is essential. Literature has characterised translation as a process that considers many aspects related to the language users. However, language communication in the health sector has been given insufficient attention in local contexts (Tyam, 2015; Diab *et al.*, 2016; Matthews and Van Wyk, 2018a; Matthews & Gokool, 2018).

The University Language Planning and Development Office (ULPDO) efforts at UKZN do not go unnoticed in the field of translation. The office implemented an isiZulu term bank intending to assist different disciplines within the institution with scientific terms in the isiZulu language (UKZN, 2013). The term bank has not gone as far as offering terms in all disciplines. However, it offers isiZulu terms in the nursing and anatomy disciplines within the health sciences. With no major information in medical or clinical terms in medicine, the existing terms exist to help medical students understand terms in the isiZulu language. The term bank has contributed to the translator's knowledge and provides terms to utilise during isiZulu translations.

Norms and the social understanding of things influence translators' strategies in translating the isiZulu language. The Department of Health has attempted to translate information from English into isiZulu; hence, health promotion material has been used in the past few years. Research by Gqaleni *et al.* (2010) reflects on translating referral forms, forms for traditional health practitioners (THP), record keeping and training manuals that are related to education on HIV/AIDS. The manuals were translated from English into isiZulu to provide patients with information in their language. It was observed that some medical and clinical terms do not exist in isiZulu; therefore, translators use terms generally used in society because they would make more sense than new, confusing terms. For instance, high blood pressure is called ***ihigh-high***

or *iBP* in AmaZulu society. However, high blood pressure would usually be translated as *umfutho wegazi ophhezulu*, which was developed by observing and understanding the nature of the condition in the human body.

Another example would be words to refer to sexual intercourse, commonly called *inkonzo yasekamelweni*, while the correct isiZulu equivalent is *ucansi*. *Inkonzo yasekamelweni* (bedroom service) is derived from the idea that people service each other sexually in the bedroom. Since isiZulu speakers have not been informed or have moved away from the correct isiZulu medical terms because of their derogatory status during social interaction, people have developed terms convenient to them in their clinical language use.

Numerous challenges are associated with translating medical content from English into isiZulu. The challenges are related to isiZulu standardised terminology, isiZulu grammatical writing and the influence of the social use of isiZulu terms. The main intention is to translate content and medical terms in a way that will be understood by the patients when communicated. This is to translate content and medical terms in a way that patients will understand when communicating with a medical student or doctor. However, the translation process encounters major challenges because the isiZulu language lacks equivalents medical terminology. IsiZulu is one of the languages attached to culture, tradition and norms. This implies that isiZulu translation goes beyond converting words from English into isiZulu; it requires conveying cultural nuances and references. One has to ask themselves if something is culturally acceptable in an isiZulu social context. For instance, AmaZulu avoid specific terms because of the derogatory status of social use, affecting how people use these terms during conversations (Gqaleni *et al.*, 2010). IsiZulu is sensitive in calling out the terms of the genital organs such as penis (*umthondo*), testicles (*amasende*) and vagina (*inhlunu*). Some relation names are avoided, these include mother (*unyoko*), father (*uyihlo*) and wife (*umfazi*). Another issue that translators must pay attention to is that AmaZulu is linguistically diverse, implying that they may have other dialects or variations based on their locations or regions. For instance, isiZulu, spoken by people in the North and South of KwaZulu-Natal, is different. The use of the isiZulu language according to regions is further discussed in Chapter Five.

Other challenges related to isiZulu translation are related to grammar and semantics. Medical content translated from English into isiZulu should be clear and accurate. This ensures that the correct message is passed on to the receiver, avoiding misunderstanding of information. Ndlovu (2013) points out the challenge of semantic shift in coinage, implying that words lose

their intended meaning in translation. There may be challenges where there are no accurate terms for the translated content to maintain what the sender wishes to say. Conversely, a study conducted by Engelbrecht *et al.* (2008:150) highlighted that "there are isiZulu words that cannot be translated in the way that the patient stated them." IsiZulu translators dealing with medical content are always challenged by the lack of vocabulary or terms in the isiZulu language, such as pulmonary embolism, aorta and albinism. Ndlovu (2013) refers to the aforementioned challenge as non-lexicalised terms.

English and isiZulu are from different language families, which challenges their grammatical nature of writing in translation. Doke (1971) and Canonici (1996) highlight that isiZulu is a conjunctive language from the Nguni family, different from how English is written disjunctively. Analyzing isiZulu grammatical writing begins with understanding how isiZulu words are formed. IsiZulu words are formed by different units or formatives discussed in Chapter Five. The formatives exist to bring meaning to the formation of isiZulu words (Doke, 1971). The words further form sentences that intend to transfer information. In forming sentences, the syntactic rules of writing isiZulu sentences are followed. Canonici (1996:5) argues that the sentence may have two characteristics in the isiZulu language, implying that the sentence should be correct and meaningful. The sentence is correct when it follows the isiZulu grammar rules, such as using interrogative words (Cope, 1984), and it is meaningful when it makes sense to the reader (further discussed in Chapter Five).

This part of the review is significant to the translation study because it offers background information on translating medical content in isiZulu and other languages. Moreover, the existing literature indicates the challenges in the medical field of translation. From the above literature review, this study has provided a guideline on tackling a translation process of medical content for a contemporary diverse society. As an emerging researcher, limited information is available (Mohamed *et al.*, 2019), and the existing data does not discuss multilingualism in the healthcare profession (Engelbrecht *et al.*, 2008). Therefore, this study contributes to the existing body of knowledge by comprehensively analysing the isiZulu translation process of medical content to assist non-isiZulu speaking students in enhancing isiZulu language communication proficiency.

2.6 Conclusion

This chapter provided a comprehensive review of the literature by numerous scholars on the significance of clinical communication and translation in medicine. It reviewed different aspects of medical content translation. Some literature indicates that language is a significant communication issue between doctors and patients. This chapter reviewed the literature on doctor-patient communication and barriers to communication. Some studies indicated that language is not the only barrier to communication between doctors and patients; culture is also important. A discussion of the different language policies was also provided to better understand the status of language in South Africa. Translation is viewed as a solution to communication challenges because it promotes multilingualism and empowers indigenous languages. Scholars have utilised translation to promote indigenous languages through the development of dictionaries, glossaries and websites. Overall, the above discussion helped inform the researcher of the study expectations and the need for further research. The researcher has found a gap in understanding and addressing the significance of the language barrier in the healthcare profession. There is a lack of research on improving clinical communication skills and translating medical content into isiZulu. Hence, this study explored the translation process of medical content from English into isiZulu to improve clinical communication skills for effective health services.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

This chapter is a comprehensive discussion of the theories scholars and translators use in translation studies. The framework may be viewed and understood as a theory (Lederman & Lederman, 2015). Kivunja (2018) analyses the definition of theory in multiple ways, stating that "a theory is a set of propositions consisting of defined and interrelated constructs, presents a systematic view of the phenomena described by the variables, and a theory explains phenomena." A theory emerges from a research process and is a well-substantiated explanation of some aspect of the natural world based on trustworthy evidence and supported by observation, experimentation, and reasoning. As a result of the existence of theories, the theoretical framework is the structure that supports a theory in a research study. A theoretical framework plays an additional role in the study because theories carry numerous and intensely knowledgeable ideas for use in the study conducted. It is a summary of concepts and theories emerging from the experimental and published knowledge on the theoretical background, analysis of data and interpretation of the meaning carried by the data (Kivunja, 2018:46). A theoretical framework is important in research because it is used in the synthesis of the data and the researcher's ideas in relation to the study. The overall purpose of translation theory is to help researchers and translators understand the process of translating different texts into different languages (Azhideh *et al*, 2010). This study utilises two translation theories discussed in this chapter. Section 3.2 discusses Nord's functionalist theory (1992) and the theory's different aspects, such as the role-players in the translation context. Section 3.3 discusses Vinay and Darbelnet's translation theory (1995), the two proposed translation strategies, and the corresponding procedures.

3.2 Functionalist Theory

German translation scholar Christiane Nord developed Nord's functionalist translation theory in the 1980s (Zheng, 2018). Nord's functionalist theory was developed from Skopos's theory. The Skopos theory originated in Germany, developed by Hans J. Vermeer (1978) and later revisited by Christiane Nord (1992) (Zheng, 2018). Vermeer's sentiment on translation emphasized actions based on the aim and purpose, which exist as relative concepts because the purpose is the foundation for achieving the aim. The purpose further determines the methods and strategies employed in the translation process (Nord, 1997a). The Skopos theory focuses on the source text's purpose, comprehension, situation, target audience, and contextual

background. Calvo (2018) highlighted that the Skopos theory has notable contributions to translation. Still, it has been criticised for overlooking translation practice as a role played by professionals to avoid misinterpretation of the source text. Nord understood what Vermeer emphasised in the Skopos theory but was concerned about the people (initiator, translator and receiver) who serve a significant role in the translation process rather than focusing only on the text itself (Zheng, 2018). Nord (1992) expanded on Vermeer's idea of the Skopos theory: the functionalist theory focuses on the role players and different aspects of the translation process involved towards achieving the aim and purpose of the translation project.

The concept of 'functionalism' refers to the function and purpose of texts in the translation process (Zheng, 2018:623). The theory mainly focuses on the purpose of translating source text. Furthermore, the theory implies that the purpose comes mainly from the initiator or commissioner, and the translator acts on the given purpose of the target text. The functionalist theory by Nord (1992) emphasizes the communicative function of the translation and the roles involved in the process. Furthermore, the theory focuses more on the purpose and outcomes of translation in a communicative state than on translating words from one language to another. This implies that translation is a communicative action carried out to achieve a certain purpose in communicating in a language. The theory allows translators to engage and understand the content's functional aspects and the text's structure (Nord, 1997b). The functionalist theory by Nord (1992) takes a translator into a step-by-step translation process, giving the translators no chance to make translation decisions out of the context of the text. Figure 3.1 below provides a short summary of the steps taken in the translation process, beginning from the understanding that we are different role players in the translation process. The role players are further discussed in the next section of this chapter.

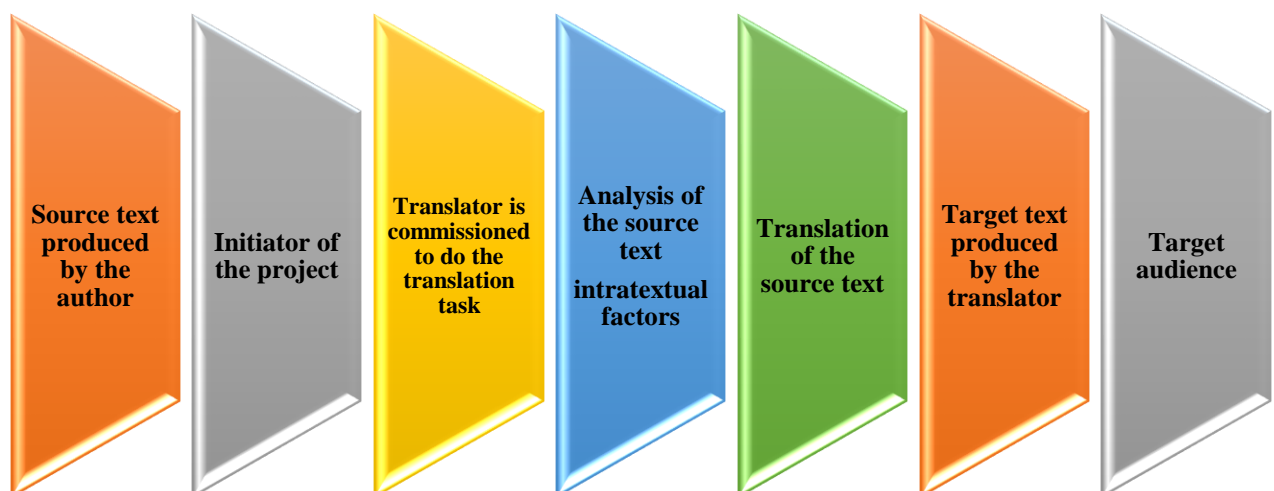


Figure 3.1 Summary of the steps in the translation process according to Nord's functionalist theory (1992).

Sineke (2005) argues that translation is an intercultural action, and Nord gives translation scholars and translators a culture-related principle. Azhiden *et al.* (2010) highlight that the functionalist theory emphasises that theories are more interested in the functionality and sociocultural aspects of the text. Thus, culture is significant in the functionalist theory because culture defines human behaviour, how people comprehend linguistic aspects and other factors attached to human communication (Aveling, 2003; Nord, 2010). Therefore, the functionalist theory does not only analyze the syntax and semantics of text but also pays more attention to the purpose and target audience of the text (Nord, 2010). Considering the aforementioned, translation then becomes a process which analyses and pays attention to different aspects involved in the translation process. Moreover, Nord (1992) highlights that translation exists when well-informed role players ensure that the overall purpose and objectives of translation are achieved. Thus, the functionalist theory by Nord (1992) is relevant to this study as it provides the researcher with a better understanding of the different roles entailed in the translation process. The role players and comprehension of the text are discussed in the next section.

3.2.1 *The Role players in the translation process*

The functionalist approach emphasises the importance of role players involved in the translation process (Dlamini, 2021:43). These role players play a significant part in the translation task, being an idea in mind until the translation text meets its audience. This chapter section discusses different roles and their importance in the translation process, as stated by Nord (1992).

3.2.1.1 *The Initiator and Commissioner*

The initiator and commissioner is a person who initiates the translation process, provides a detailed function of the translation and instructs the translator on the translation task (Nord, 1997a). The initiator is responsible for understanding the purpose of the target text and requests that a translator conduct the translation task. Dlamini (2021) highlights that an initiator always has a reason in mind for requesting that a translation be done. Thus, a translator is commissioned to do the translation task. For instance, in the case of the current study, a lecturer teaching clinical communication skills at the University of KwaZulu-Natal College of Health

Sciences may initiate and commission that all clinical content or teaching material related to clinical content be translated into isiZulu in accordance with the university's language policy. This implies that the university has observed and identified language gaps in the academic curriculum, which may lead to activate multilingualism in students. Therefore, teaching and learning the same content in different languages requires translation.

3.2.1.2 The translation brief

The brief describes the translation aspects the initiator requires (Nord, 1997a:30). A brief refers to instructions related to a specific translation task (Dlamini, 2021). Nord (1992) emphasises the significance of having a clear and detailed translation brief. A translation brief should clearly state the purpose of the task and indicate the text's audience and specific requirements of the translation project. A translation brief is important for acting as a guide on decisions made by a translator in the translation process. A translation brief should give clear instructions and details so the translator can make assumptions regarding the target text (Nord, 2005). Therefore, the brief ensures that the translation results meet the audience's expectations. However, translation does not instruct the translator on the aspects involved in the translation process; a translator makes decisions based on the purpose of the translation and their competencies.

Nord's functionalist theory (1992) proposes the translation brief as a guide to perform a task, implying that the instructor pays attention to the elements of source text and target language (Dlamini,2021:45-50). A translation brief must carry all the important points of the translation task. Such could be a brief project description, the commissioned translator, the languages involved, the text's type and function, the translation's purpose, the intended function and the target audience.

3.2.1.3 The translator

Nord (1992) developed a summary of important factors to be considered during the translation process. These factors question who the translator of the text is, what the purpose of the text is, and for whom the text is translated. These questions provide important information and also inform a suitable translator for the task. A translator is a person who enables communication to occur between people of different languages and cultures (Nord, 1997a). The role of the translator is significant in the translation process (Nord, 1997a:21). Nord (1992) argues that a translator not only transfers text from the source language but also ensures that the text aligns

appropriately with the target culture and audience. This implies that the translator should fully understand the translation task and the languages involved in the translation process. A translator may need to make linguistic, stylistic and cultural changes to ensure the text serves its purpose. Nord's functionalist theory states that the translator's decisions in the translation process are guided and controlled by the function and communicative purpose of the task (Nord, 1997b).

Aveling (2003) argues that translators who are regarded as good translators make translation mistakes because translation is a human action and interaction. Moreover, a good translator studies the grammatical structure, lexicon, communication situation, and social and cultural context of languages involved in translation (Dlamini, 2021). Calvo (2018) reiterates that the purpose and function of the translation task given inform the strategies the translator should utilise in the process. Nord's functionalist theory (1992) asserts the specific knowledge and competencies of the translator for the translation to be effective. Competence refers to "the knowledge and skills required for communication" (Gambier & Doorslaer, 2010:55). A translator must have the following competencies to carry out a translation task: grammatical competence, discourse competence, socio-linguistic competence, strategic competence and extra-linguistic competence (Bell 1991, as cited in Dlamini 2021). The competencies are drawn by Dlamini (2021) from the translation studies by Roger Bell (1991). The translator's competencies are briefly discussed below, and each competence provides an example in isiZulu that is related to this study:

- a) *Grammatical competence* refers to the ability to understand and apply the grammatical rules of the source and target language during the translation process. Dlamini (2021) refers to grammatical competence as knowledge of numerous aspects of language, such as structure, vocabulary, syntax, morphology, phonology, and semantics. This implies that through the aforementioned knowledge, a translator can fully comprehend the text and produce a target text that is grammatically acceptable in a target language. Furthermore, the translator can accurately and fluently convey the source text's meaning. For instance, the sentence structure of English and isiZulu are different because sometimes it does not make sense when translated literally. English is written disjunctively, meaning that words are separated when writing sentences (Where do you work?), whilst isiZulu is written conjunctively with different language units connected

to form single words (*Usebenzaphi?*). Therefore, the translator must know both languages' correct grammar and structure.

- b) *Discourse competence* refers to the ability to produce appropriate spoken and written texts (Gambier & Doorslaer, 2010). Discourse competence is the ability to produce appropriate text interpretation and understand the meaning of the text in a given context. This implies that the translator must be able to use appropriate language, tone, and gestures, ensuring that the target audience is accommodated. For instance, the translator should be familiar with the genre if the translation is in the health sciences or medicine. The translator should understand the appropriate wording that can be used in discourse in a clinical setting. In a critical condition of a patient, a doctor cannot say 'You will die' – '*Uzoshona*' but the words used should show empathy and give hope to the patient, i.e. 'It does not look good but we are trying to help' – '*Kona akukuhle kodwa siyazana ukukusiza*'
- c) *Socio-linguistic competence* refers to knowledge of how language is used in different socio-linguistic contexts (Dlamini, 2021). This competence focuses on how the same content is used to address different social groups, ensuring that the language used is appropriate and culturally sensitive. For instance, isiZulu has unacceptable words because of the social status or use attached to them. The passing of the late King of AmaZulu Goodwill Zwelithini would be sociolinguistically incompetent to say that the king has died, but in isiZulu we say the king has knelt down (*ikhotheme*).
- d) *Strategic competence* refers to the ability to fill the language gaps to improve communication and understanding. For instance, people name things according to their use and understanding. A blood pressure cuff called a sphygmomanometer measures blood pressure in the upper arm. Due to the nature of the cuff inflated with air, blood pressure is measured as *ukufutha* (inflate or pump) in clinics and hospitals. Antenatal care of pregnant women is called *ukuxukuza* (shake), which is drawn from the idea that during the abdominal examination, the abdomen of the pregnant woman is shaken. Therefore, a translator may use such concepts to allow people to comprehend information better.
- e) *Extra-linguistic competence* refers to the ability to apply general knowledge of things occurring in the social world (Dlamini, 2021). This implies that the translator should research and be updated on world matters. For instance, the translator must know current health matters such as COVID-19, the increased rates of HIV/AIDS, issues around the tuberculosis pandemic and the responses to the pandemic.

3.2.1.4 *The source texts*

The source text is written content that serves as data for translation, analysis, or adaptation into another language. The source text is produced by an author for certain purposes, which may not be related to translation but may later be used for a different audience (Nord, 1997a). Thus, it is significant to attentively analyze the text and understand what the producer of the text was trying to state. Maseko (2018) argues that the source text is about understanding the text's purpose and the intratextual factors involved in translation. These factors include subject matter, content, lexis, nonverbal elements, sentence structure, suprasegmental features, composition, and presuppositions (Nord, 1992). Nord (1997b:48) highlights the intentionality and text function in the translation process. The emphasis is on questions like: what does the text intend to do? What are the purposes assigned to the text that needs to be translated? Understanding the aforementioned helps the translator know the condition in which the text is translated. Translators must have sufficient knowledge about the communicative purposes of the target text.

Nord (1997a) presents a model of source text analysis as the first step towards understanding the type of text in the translation process. The text may be informative, meaning that it is "plain communication of facts" (Munday, 2001:73), or it may be expressive, meaning that the composition is based on creativity and operative text may raise awareness or intend to reinforce a certain behaviour. The model presented by Nord entails analyzing the:

- i. Subject matter: involves the cultural elements found in the source text.
- ii. Content: the main ideas and information presented in the source text. The information focuses on the discourse and extra-linguistic aspects of the topic.
- iii. Text composition: analyzing how content is written, focusing on the organization, structure, and style of the source text.
- iv. Presupposition: the assumptions and background knowledge of the source text and the target text. Presuppositions are crucial for interpreting meaning, as they can reveal underlying intentions, cultural context, and nuances found in the text.
- v. Lexis: the vocabulary and language used within a text. Analysis involves examining word choice, terminology, and stylistic elements to gain insights into the source text.
- vi. Syntax: analysis of the sentence structure in the source text. This includes the analysis of the word order formation of phrases and clauses in sentences.

3.2.1.5 *The target texts*

A target text refers to written content transferred from another language text. A translator produces a target text translated from a source text while ensuring it is appropriate to the target language and audience (Nord, 1997a). Thus, Calvo (2018:21) highlights that translations should respond to the communicative function of the text expected by the target audience. This argument implies that the target text should follow all the grammatical rules of the target language. Furthermore, the translation style used must be suitable and culturally appropriate for a target language and audience.

3.2.1.6 *The stages of the translation process*

In the analysis of Nord's functionalist theory, Dlamini (2021) summarises the four stages involved in the translation process when a translator is given a task.

- a) *Pre-translation*: This stage refers to when an initiator gives the translator the translation brief.
- b) *Median translation*: At this stage, the translator reads the texts with understanding and determines the text's type and function. The translator attentively analyses the text to determine the method that should be used in the translation.
- c) *Actual translation*: the next stage is where a translator decides on the strategies and techniques that will suit the text.
- d) *Post translation*: the final stage is where the translator analyses the extratextual factors which impact the process and control of the text (Nord, 2005; Maseko, 2018). The translator edits the translations and ensures that the correct language structure is used.

Nord's functionalist theory of translation is relevant to this study because it examines all texts involved in translation. Moreover, the theory instructs the translator on the translated text's content, purpose and structure. Functional analysis of a source text in its communicative situation allows the translator to detect any translation challenges in the text. However, this study does not employ all the role players according to Nord, but it discusses role players that are relevant in the context of the project. Overall, the theory focuses more on the cultural aspects that enrich the meaning of the text that is being translated, as well as the communication and the whole translation process. The aforementioned exists as a guide in translating medical content from English into isiZulu. Through Nord's functionality, the translator working on the

medical content better understands what the source text entails and what is expected in the target text.

3.3 Vinay and Darbelnet Theory

Jean-Paul Vinay and Jean Darbelnet developed a comparative stylistic analysis using different translation strategies and procedures (techniques) in their French and English translations (Panou, 2013). Vinay and Darbelnet's first English version publication 1995 distinguished between direct and oblique translation strategies. They further came up with seven procedures which were allocated to strategies according to their role in translation. Vinay and Darbelnet's translation procedures are explained at three linguistic levels: lexical, morphosyntactic, and semantics (Bardaji, 2009:161). Safi and Nasser (2022) refer to the translation procedures as the three different borders of stylistics. According to Safi and Nasser (2022:943), the first border is the 'lexicon', which focuses more on the vocabulary, units of translation or terminology, including the idiomatic expressions used in the translation process. The second border is the 'structure', where attention is given to morphology and grammar (how words are formed and the meaning of different units) of the text being translated. The last border is the 'message', where the translation focuses on the overall composition of the text. This is a level where a translator ensures that the target text carries sense and meaningful content. Overall, Vinay and Darbelnet's theory provides a structured approach to translation with a systematic framework for making decisions during the translation process. Moreover, Vinay and Darbelnet's theory is widely used in language translation, and the theory has contributed remarkably to the professional practices of translation for analyzing translation (Munday, 2016; Rongre, 2018; Safi & Nasser, 2022).

Vinay and Darbelnet's theory has been influential in several translation studies (Rask, 2008; Bardaji, 2009; Panou, 2013; Rongre, 2018), but there is no theory without criticisms. Molina and Albir (2002) revisited these techniques used in translation and proposed that translators should understand translation methods, strategies and techniques well. Molina and Albir (2002) argue that Vinay and Darbelnet's theory can confuse understanding whether translators encounter language or text problems. Molina and Albir (2002) highlight that due to the nature or origin of Vinay and Darbelnet's translation theory, the theory may not adequately address other challenges encountered by translators from other languages and cultures. This implies that the theory could be more applicable in French and other languages of the same group. Still,

it may not be applicable in South African indigenous languages or align with cultures such as isiZulu.

The theory is further criticised based on the strategies Vinay and Darbelnet regard as part of the methodology. Molina and Albir (2002:507) define translation method as "the way a particular translation process is carried out in terms of the translator's objectives". This implies that a translator is responsible for choosing a method best suited for the text and the target audience. While strategies are part of the translation process, the criticised procedures become techniques that affect the overall results of the translation and the choices made by the translator. Molina and Albir (2002:508) further state that any method chosen affects the text and the translation techniques utilised in the process. Bardaji (2009) argues that translation strategies exist to solve translation problems and challenges but are not methods undertaken by the translator in the translation process. Additionally, Saridaki (2021) criticises the translation theory regarding how the techniques are classified in the direct translation strategy. For instance, including borrowing in the classification system may not be adequate because borrowing refers to the direct inclusion of words from one language to another without translating them (Saridaki, 2021:136). Moreover, calque and literal translation can be regarded as special translation cases, not as techniques. The theory is criticised for paying more attention to language equivalence expressions that cannot be assured as a successful translation, especially in dictionaries and glossaries (Panou, 2013). Panou (2013:2) argues that Vinay and Darbelnet's (1995) theory highlights that translation is possible even if the translation does not pay attention to culture and grammatical factors. The criticisms mentioned above imply that the theory overlooks the socio-cultural factors which may affect the target text and its audience. It is not concerned about the content of the text and the factors surrounding it. In spite of the criticisms of Vinay and Darbelnet's theory, the study utilises the theory. The theory still provides procedures that allows the translators to find translation solutions at different linguistic levels.

3.3.1 Translation Strategies

Translation strategies refer to the plan or method employed by a translator to achieve the expected outcome in translation (Vinay & Darbelnet, 1995). Molina and Albir (2002:508) define strategies as "procedures used by the translator to solve problems that emerge when carrying out the translation process with a particular objective in mind." A strategy involves the decisions a translator makes regarding how to manage a source text, including the factors

that a translator should consider in the translation process. These factors include the purpose of the translation text, the target audience, the nature of the text and the cultural differences and references. Vinay and Darbelnet's (1995) theory introduced two translation strategies: direct and oblique translation. The strategies were introduced considering that languages are different, and sometimes the translator cannot translate into the target language without interfering with the syntactic order of the source language (Saridaki, 2021). Therefore, the strategies have procedures which are employed by a translator to describe the translation results, to address specific linguistic challenges encountered in the process and to ensure that the translation carries the accurate meaning from the source language to the target language (Vinay & Darbelnet 1995; Dlamini 2016). Molina and Albir (2002:508) argue that strategies and procedures serve different purposes in solving translation problems. Translation strategies focus more on the whole text and the plan of the whole translation, while translation procedures only focus on the clauses and smaller units of the language (Safi & Nasser, 2022:944).

3.3.2 Direct Translation Strategy

Direct translation refers to the literal transfer of words from the source language to the target language (Rask, 2008:6). The direct translation strategy is employed when the languages involved in the translation process are from the same language family (Dlamini, 2021). For instance, the Southern Bantu language family in South Africa consists of the Nguni language family (isiZulu, isiXhosa, isiNdebele & Siswati), the Sotho language family (Northern Sotho, Southern Sotho and Setswana) and there are also minority languages such as Tshivenda and Xitsonga. The above-mentioned implies that if the languages are from one family, then the translation process may not affect the target language's morphological, syntactic order and lexical. Vinay and Darbelnet (1995) allocated three procedures under the direct translation strategy (Meifang and Li, 2009; Rongre, 2018). The procedures in this study are called techniques: borrowing, calque and literal translation.

3.3.2.1 Borrowing

Vinay and Darbelnet's theory (1995) highlights that borrowing is the simplest translation method or the easiest technique a translator can adopt (Meifang and Li, 2009; Safi and Nasser, 2022). Saridaki (2021:135) states that borrowing is "transferring the source language word directly to the target language without formal or semantic modification is the simplest of all translation procedures." Moreover, it transfers the word exactly as it is from the source

language to the target language, ensuring that it phonologically and morphologically suits the target language (Rask, 2008; Dlamini, 2021). This implies that in the borrowing technique, words are not literally translated between languages (Safi & Nasser, 2022:945). Borrowing only exists to "fill the semantic gap" in different languages (Meifang & Li, 2009:354). Borrowing may be different in two ways: through loaning and transliteration. Loaning words refers to words with morphological changes from the source language (Dlamini, 2021). Translating medical content from English into isiZulu includes loaned terms; the target language uses prefixes to suit the language. For instance, *istethoscope* is borrowed from the English word **stethoscope**, a medical device used to check the heartbeat, and it has a noun prefix 'i-' to suit the isiZulu language. Transliteration is similar to adoption in the borrowing technique, affecting the word's phonology and morphology. This implies that the borrowed word changes its structure and the way it sounds (Dlamini, 2021). For instance, *ithiyeta* is borrowed from the English word **theatre** for the place where medical operations are done in a hospital.

3.3.2.2 Calque

A calque is a translation technique where a phrase or word is translated literally, maintaining the original structure while adapting it to the target language. Vinay and Darbelnet (1958:85) and Munday (2001:56) further state that it is "a special kind of borrowing where the SL expressions or structure is transferred in a literal translation." Calque is a type of borrowing where expression form and phrases are taken from other languages without considering the linguistic or cultural differences between languages (Molina & Albir, 2002; Meifang & Li, 2009). When the calque technique is employed, the result may be lexical calque or structural calque. Lexical calque does not involve the syntactic structure of the targeted language. However, the lexical calque presents new expressions. Structural calque introduces new constructions in the target language. The calque technique enriches the target language by introducing new vocabulary, expressions and phrases. However, the disadvantage of this technique is that it leads to misunderstandings of the borrowed expression. An example of calque translation is the following:

English example: **Blood is thicker than water.**

IsiZulu example: *Igazi lijyile kunamanzi.*

3.3.2.3 *Literal Translation*

Literal translation refers to the "word-for-word" translation of text from the source to the target language (Vinay & Darbelnet, 1995; Meifang & Li, 2009). Literal translation occurs when a translator translates directly in terms of words from the source language to the target language. Dlamini (2021:82) defines literal translation as a technique which considers the linguistic structure and translates the source text as it is. As a result, this technique may cause a loss of sense or meaning of the text. Literal translation is the most common technique used when the languages being translated belong to the same family, which may include how cultural-linguistic is expressed. Safi and Nasser (2022:946) state that literal translation occurs when the source text is translated into a target language in a grammatical and idiomatic manner. Even though translators often use literal translation, certain aspects make it unacceptable. For instance, literal translation may have a different meaning or may not have meaning. Moreover, the literally translated text is likely to have a complicated structure at the end because every word is translated from the source to the target language. An example of literal translation is the following:

English example: **I will give you medication.**

IsiZulu example: *Ngizokunika imithi.*

3.3.3 *Oblique Translation Strategy*

Oblique translation refers to the free transfer of the words (Rask, 2008). Oblique translation is the strategy employed when languages involved in translation are from different families. This implies that the languages have structural dissimilarities, which demand more stylistic skills when translating (Dlamini, 2021). Therefore, word-for-word translation is impossible in oblique translation (Molina & Albir, 2002). Vinay and Darbelnet (1995) allocated four procedures under this strategy. The procedures are transposition, modulation, equivalence and adaptation.

3.3.3.1 *Transposition*

According to Vinay and Darbelnet (1995), transposition may be understood as two types: obligatory and optional. Obligatory transposition changes the word class because of the grammatical rules (Dlamini, 2021) or changes the sentence position. Transposition is a technique where the words change from one language to another without interfering with the

meaning (Munday, 2001; Dlamini, 2016). Meifang and Li (2009:354) argue that transposition is "replacing one-word class with another without changing the meaning of the message." While the meaning remains the same, grammatical changes occur in the source language's syntactic structure, which may shift word classes in the target language (Molina & Albir, 2002). Thus, Safi and Nasser (2022:950) assert that transposition includes exchanging a certain class of the source language with a different one in the target language, maintaining the meaning. Examples of the changes in the word class may be the following:

- a) **To go to the hospital**, the word 'hospital' changes from being a common noun to being a locative adverb, *ukuya esibhedlela*.
- b) **Be given an injection**, the word 'injection' is a noun which changes to become a verb *jova*.

Obligatory transposition also changes the sentence position of the translation to make more sense. An example of a change of sentence position may be:

- c) **The young doctor** becomes *udokotela omncane*.

The changes in the sentence positions are due to the isiZulu syntax, where a noun is followed by an objective (words that describe nouns and pronouns). The optional transposition refers to the change that a translator may or may not choose to adopt when translating. The overall results of the optional transposition do not affect the meaning of the sentence, words or phrases. "Optional transposition is only observed in the change of sentence position" (Dlamini, 2021:67). For instance, the sentence '**Grandmother will go to the clinic in the morning**' can be translated in two ways with different word positions, which still maintains the meaning:

- a) *Ugogo uzoya emtholampilo ekuseni*.
- b) *Ekuseni ugogo uzoya emtholampilo*.

3.3.3.2 Modulation

Modulation is a technique utilised at the semantic level of translation. Moreover, modulation involves a translator changing the text's point of view without altering its content. Safi and Nasser (2022) state that modulation is referred to as the 'category of thought' because a translator pays more attention to the meaning of the text. The modulation technique is utilised when the content in the source language is unacceptable in the target language (Saridaki, 2021). Modulation allows a translator to transfer the same ideas in the source text using different

linguistic means that are more natural and culturally appropriate in the target language. The changes made by the translator may include grammar, structure, expressions, tone, style, or word order, but they should be done in a more suitable and preferred form. Dlamini (2021) highlights that translation using the modulation technique may not be traced back to the source language, even though the meaning is the same. Different ways of modulation can be used in translation depending on the translator and the function of the text, as in the examples below:

- a) **She is admitted in the hospital**, which may be translated as *ulalisiwe esibhedlela* (she is sleeping at the hospital).
- b) **You will get better/ you will recover**, which may be translated as *uzosinda* (you will survive).

3.3.3.3 Equivalence

Equivalence is a technique where the source text and the target text explain the same condition (Vinay and Darbelnet, 1995). Equivalence intends to find expressions in a target language with the same meaning as the source language. Saridaki (2021:136) states, "Equivalence is the replacement of an SL situation by a communicatively comparable TL situation." Equivalence refers to cases where the source text and the target text describe the same situation but use different styles, structures or cultural translations (Munday, 2001:58; Molina & Albir, 2002; Dlamini, 2021:92). Safi and Nasser (2022:954) state that the equivalence technique is utilised when a translator understands the source text and finds equal terms to explain or mean the same situation in the target language. Moreover, the translator intends to find or create culturally and situationally appropriate equivalences in both languages, such as euphemistic terms, expressions and idioms (Rask, 2008; Panou, 2013). The translator should ensure that the equivalence aligns with the linguistic, semantic, cultural and function of both the source and target text.

Translators encounter several challenges when dealing with equivalence and non-equivalence. Some challenges are related to cultural concepts, lack of terms in the lexicon, semantical complexity of source language terms or having terms that do not mean the same thing in both target and source text. These challenges have caused the translation technique to be evaluated. Thus, Panou (2013) explains that equivalences are not assured translations but exist to suit the requirements of the target language because they are based on dynamic, meaning and communicative purposes. An example of the equivalence translation is the following:

- c) English example: **I have not seen you in a long time/ long time, no see.**
- d) IsiZulu example: *Mehlomadala.*

3.3.3.4 Adaptation

Adaptation is a translation technique that is used to fill a cultural gap between languages of different cultures and families (Vinay & Darbelnet, 1995). Adaptation is a specific type of equivalence involving the change in the source text due to the cultural references and differences between languages involved in the translation process (Saridaki, 2021). Therefore, adaptation refers to changing cultural references or understanding of words in different situations (Munday, 2001; Molina & Albir, 2002; Rask, 2008). Translators employ the adaptation technique when a word in the source language does not have an equivalence or translation in the target language. Gambier and Doorslaer (2010:4) argue that texts adapt depending on certain language restrictions. Hence, translators ensure that a text is given in a manner that is suitable and corresponds with the level of people it is intended for. Dlamini (2021) highlights that adaptation may affect the text's syntax and meaning because of the cultural gap. For instance, isiZulu has more cultural references than the English language. *Umelaphi wesintu* or *isangoma* is translated as a **diviner** in English because of the spiritual relation.

Vinay and Darbelnet's theory (1995) is appropriate for this study because the model uses different procedures that the translator can use to simplify the translation of medical content for non-isiZulu speakers. The content that is being translated does not belong to the same language family as isiZulu; therefore, this theory is a guide on how to find solutions to the challenges encountered in the process of translating medical content from English into isiZulu for non-isiZulu speakers. The theory provides the translators with different procedures that focus on syntax, sentence structures, meaning of content and the cultural references considering that the languages are from groups of different cultures.

3.4 Conclusion

This chapter discusses the relevant theoretical frameworks in a translation study. The chapter highlighted that a theoretical framework is significant for providing background knowledge that helps the current research. This chapter discussed Nord's functionalist theory (1992) and Vinay and Darbelnet's translation theory (1995). The functionalist theory intends to focus on the text's function and examine the translator's professionalism and the translation process. The

functionalist theory is based on action-oriented and culture-oriented communication (Nord, 1992). Vinay and Darbelnet (1995) presented two strategies that are utilised in translation: the direct translation strategy and the oblique translation strategy. Direct translation is the literal word transfer from the source text into the target language. Under the direct strategy, there are three procedures: borrowing, calque, and literal translation. Oblique translation strategy is the free transfer of words, where there is a change from one part of the speech in the source text to another in the target text. The oblique translation strategy discusses four translation procedures: transposition, modulation, equivalence, and adaptation. The theories are significant to this study and play different roles. Nord's functionalist theory takes the translator through the text's translation process and when challenges are encountered in the process. On the other hand, Vinay and Darbelnet's theory provides the translator with translation procedures to use as solutions.

CHAPTER 4: METHODOLOGY

4.1 Introduction

This chapter provides the methodology employed to conduct, explain and obtain an in-depth understanding of the isiZulu translation process of medical content used to develop the MediZulu website project. This chapter discusses the rules, methods and procedures used by the researcher who is a translator in analyzing text and ensuring that the study's aim and objectives are achieved (Bernard & Ryan, 1998). The discussion on the research methods is significant for providing a structured framework and conceptualizing how data was gathered and analyzed in the study (Chung & Pennebaker, 2019). Moreover, it ensures that the research questions are answered in the process by assisting the researcher in choosing suitable tools and procedures to be utilised in the study (Kothari, 2004). Section 4.2 has the ethical considerations used to guide the study. Section 4.3 discusses the research method employed in the study. This section provides an in-depth understanding of textual analysis in translation studies. The next section, 4.4, summarises the documents reviewed by the researcher for this study. Section 4.5 provides different samples of the isiZulu translated text used for the MediZulu website. Moreover, this section explains how different medical content, sentences, phrases, and words are translated into isiZulu.

4.2 Ethical Considerations

Ethical clearance to conduct this study was granted by the University of KwaZulu-Natal Humanities and Social Sciences Research Ethics Committee (protocol no. HSSREC/00025130/2024).

The study was based on the isiZulu translation process of medical content at the University of KwaZulu-Natal Medical School. The research setting of the study was based at the University of KwaZulu-Natal. This study did not involve any participants. It was based on textual data analysis, existing literature on the field of translation, the theoretical framework of translation works and document reviews. The researcher extracted textual data from the UKZN's medical school website, MediZulu. To follow a standardised procedure, the researcher reviewed all the edited content available on the website. Thereafter, the researcher analysed the texts that were difficult to translate from the source language and culturally insensitive or challenging translations. This ensured that the research considered all aspects of the isiZulu language and culture.

4.3 Textual Analysis

Textual analysis is an 'integral' part of the translation process in language studies (Emery, 1991:571). Textual analysis is a method of study used by researchers to analyze messages in writing (Smith, 2017:1). Furthermore, it is a research method used to interpret and understand written language or explore different texts. Thus, textual analysis is a common methodology used in written translation (Emery, 1991; Nord, 2005; Qassem & Vijayasarithi, 2019). Williams and Chesterman (2014) highlight that many translation studies use text as a source of data. Moreover, in the analysis of the text, there are changes due to different contexts of using a particular language. A researcher questions: what type of data is needed to fulfill the goals of the study?

Text is analysed to make sense of it, understand what it means, and understand the different interpretations found in textual analysis. Mckee (2001) argues that interpretation is not the same throughout different text translations. Therefore, a single correct interpretation does not exist in textual analysis. As a result, no text can be regarded as accurate or inaccurate in any circumstances. Researchers use numerous approaches to analyze text, such as sociolinguistic and linguistic approaches (Qassem & Vijayasarithi, 2019), content analysis, and semiotic and interactional texts (Smith, 2017). The manner or level in which the text is analysed determines what the researcher should look at. For instance, when text is analysed at a linguistic level, the researcher looks at words, phrases and sentences found in the text (Qassem & Vijayasarithi, 2019). When text is analysed at a sociolinguistic level, the researcher pays attention to many aspects of the language and their social use (Bernard & Ryan, 1998). Moreover, the researcher pays attention to the target audience and the meaning of the text in relation to its purpose in the translation process. Qassem and Vijayasarithi (2019) highlight that text analysis has been used to assess the culture attached to language.

This study uses the textual analysis method to analyze isiZulu medical content that was translated from English to develop the MediZulu website. This study used textual analysis to analyze medical content from different themes on the MediZulu website, such as content about various systems. Topics related to reproduction, obstetrics, and other systems, such as the endocrine and cardiovascular systems. Employing textual analysis allows the researcher to think attentively about different aspects that affect the translation process. For instance, cultural references bring translation challenges when transferred from the source text to the target audience. Thus, it is important to analyze text from extratextual information to intratextual

information. Seresova and Brevenikova (2019) state that it is essential to understand the text through the different meanings of words used in the text and the sentences that make up the whole text. Analyzing text allows the researcher to relate the text to real-life conditions. Furthermore, the researcher can identify translation problems encountered during translation process and finds possible solutions. Overall, textual analysis in translation is beyond texts that were translated word-for-word. Still, it requires a translator to search through the context of cultural references and consider the text's target audience. Thus, William and Chesterman (2014) emphasises on the significance of gaining translation experience before embarking on a translation study of this nature.

4.4 Document Review

Document review involves an in-depth examination and analysis of documents in the research process. A comprehensive overview of different documents that are appropriate and contribute to the study was conducted. The study is based on the isiZulu translation process of medical content used for the website project. Therefore, the study reviewed different government documents and language policies to better understand the correct use of South African indigenous languages. The reviewed documents include:

- a) The Constitution of the Republic of South Africa (1996)
- b) The Department of Health Language Policy (2015)
- c) The Patients' Rights Charter (2007)
- d) The Department of Higher Education and Training Language Policy (2020)
- e) The University of KwaZulu-Natal Language Policy and Plan (2006 and 2014)

This study is based on two theoretical frameworks related to the translation process (theories were discussed in Chapter Three). The translation theories adopted in the study include Nord's functionalist theory (1992), which discusses the significant elements and role players involved in the translation process. Another theory adopted in the study is Vinay and Darbelnet (1995), who proposed different techniques for solving translation problems. These theories are further applied and discussed in Chapter Five of this study.

4.5 Translated medical content

This section provides samples of translated texts extracted from the UKZN MediZulu website. The samples of texts were translated to teach non-isiZulu medical students isiZulu in a

communication context showing language-specific structural and rhetorical constraints including non-translated texts in the target language. Figure 4.1 below shows the layout of the UKZN MediZulu website, which served as a data source for this study. The components of the website provide at least English and isiZulu translation, grammatical explanations in both languages and images and audio recordings for pronunciation.



Figure 4.1 The layout of the MediZulu website project (UKZN MediZulu, <https://medizulu.ukzn.ac.za/>).

Extracted from the MediZulu website are samples of translated and verified content shown in Table 4.1. The samples are further discussed in the next chapter.

Table 4.1 Examples of verified medical content.

Content from the source text	IsiZulu translation of the content	IsiZulu verified content
1. Do you experience very bad pain when you get your period?	Ngabe uba nezinhlungu kakhulu uma usesikhathini?	Ngabe uba nesilumo uma usesikhathini?
2. Have you had a recent chest X-ray?	Uke wayenza i-X-ray yesifuba kamuva nje?	Uke wenza isithombe sesifuba kamuva nje?

3. Are you on any contraception?	Ngabe uyazisebenzisa izivikelanzalo?	Ngabe uyahlela? (taken from <i>ukuhlela umndeni – family planning</i>)
4. Nosebleed	Ukuphuma igazi ngamakhala.	Ukumongoza
5. Do you bruise easily?	Ulimala kalula?	Uhuzuka kalula?
6. How many children do you have?	Unezingane ezingaki?	Unamasu amangaki?
7. Pulmonary embolism	i-Pulmonary embolism	Ihlule emaphashini

4.6 Conclusion

The chapter provided the methodology employed in the study on the isiZulu translation process of medical content. Methodology is the most important part of the research because it provides a systematic approach to gathering valid data and influences important decisions taken by the researcher. The first section of the chapter provided the ethical considerations in the study. The next section discussed the textual analysis method often utilised in translation studies. Textual analysis refers to the examination and interpretation of written language. The study further reviewed different documents that align with the study's objectives. The review of documents is intended to support the rights and the use of South African indigenous languages and to promote translation as a tool for developing the languages. The reviewed documents included section 6 of the South African Constitution, the different language policies such as the Department of Health language policy, the Patients' Rights Charter and the Department of Higher Education and Training language policy. Also included was the University of KwaZulu-Natal language policy and plan. This chapter provided examples of different texts and illustrated how each text was analyzed and translated to suit and adapt the isiZulu language and sociocultural influences.

CHAPTER 5: RESULTS AND DISCUSSIONS

5.1 Introduction

This study aimed to explore the translation process of medical content into isiZulu. This chapter discussed and addressed the key research questions. Research question one is discussed in section 5.2 and is based on the review of language policies towards understanding the significant use of isiZulu in a medical context. The second research question is discussed in section 5.3 and is based on exploring the overall translation process of medical content from English into isiZulu. The third research question discussed in section 5.4 is based on sociocultural influences in the isiZulu translation process of medical content for non-isiZulu speakers. The last section, 5.5, provides a summary of the findings of the chapter.

5.2 Research Question 1: Why is a review of language policies essential towards the use of isiZulu in a medical context?

This study reviewed documents and language policies to understand the significant use of African indigenous languages in the medical context. This review explicitly justifies the teaching and learning of isiZulu at UKZN NRMSM to improve clinical communication with AmaZulu patients in KwaZulu-Natal. The reviewed documents stated the following:

- a) To ensure the equal use of all South African official languages and the promotion of the indigenous languages, the study included a review of sections 6 and 3 (f) of the South African Constitution (The Constitution of the Republic of South Africa, 1996). This section of the Constitution promotes the rightful use of isiZulu to communicate between doctors and isiZulu-speaking patients.
- b) The Department of Health Language Policy was reviewed to better understand the language used in the department between employees (doctors) and clients (patients). The Language Policy is based on Act 12 of 2012 which emanates from section 6 of the South African Constitution. This language policy emphasises that information should be available in all South African official languages (DOH, 2015). It informs the study on the significance of using the patients' language when doctors offer healthcare services.
- c) To recognise the rights of patients, the Patients' Rights Charter is based on Act 108 of 1996, which addresses people's right to access health care services (The Constitution of the Republic of South Africa, 1996). The Patients' Rights Charter further highlights that

when people (patients) access healthcare services, healthcare information should be communicated in a language understood by the patient in South African indigenous languages (Patients' Rights Charter, 2007). This Charter is important for the present study as it informs patients' rights, which helps doctors fulfil them when offering healthcare services. The relevance of this Charter is based on supporting the idea that patients should receive information in isiZulu as their home language, which further encourages doctors and medical students to learn isiZulu.

- d) Considering that the study focuses on translating content for non-isiZulu medical students, the study reviewed the Department of Higher Education and Training language policy. The Language Policy promotes multilingualism in higher education institutions, especially in professions requiring social engagement (DHET, 2020). This language policy is relevant to the study because it encourages using multiple official languages, especially the African indigenous languages, in tertiary institutions.
- e) The University of KwaZulu-Natal Language Policy and Plan is based on the South African Constitution and the Department of Higher Education and Training language policy (UKZN, 2013). The Language Policy promotes using the isiZulu language on all university campuses (UKZN, 2006 and 2014). This policy also supports the development of vocation-specific isiZulu resources, such as translating the medical content into isiZulu so that non-isiZulu medical students can learn and acquire language proficiency.

5.3 Research Question 2: What is the process used to translate medical content from English into isiZulu?

The study employs the functionalist translation theory, as Nord (1992) explained, to analyse the translation process of medical content into isiZulu. Nord's theory takes the translation through the process of identifying the purpose of the translation, which includes for whom the translation product is intended. The functionalist theory by Nord (1992), discussed in Chapter Three, is used in this chapter to analyze all the role players and different aspects involved in translating medical content from English into isiZulu. The analysis of the translation process is divided into different steps outlined in Figure 5.1 below.

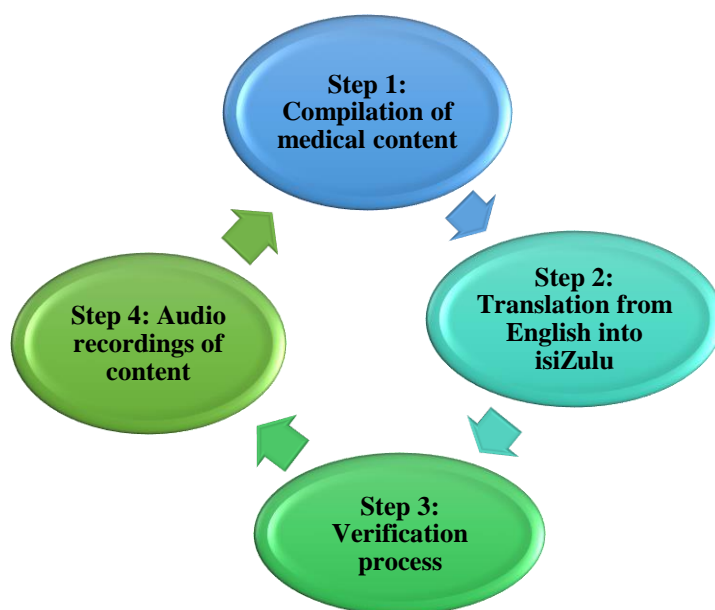


Figure 5.1 Steps used in the translation process of medical content into isiZulu

5.3.1 The initiator and purpose

Nord's theory (1992) emphasises the significance of having a certain purpose or function of the translation to be undertaken. The theory states that any translation process that begins without understanding its purpose or function is pointless (cf. Nord, 1997b). Thus, the study clearly states that the purpose of translating medical content from English into isiZulu is due to the lack of isiZulu language proficiency in non-isiZulu medical students. Medical students should be taught isiZulu as early as possible to fulfil all the rights of patients according to the South African policies discussed in Chapter Two. From the beginning of the medical course, when they are still students, they may use isiZulu to communicate with AmaZulu patient during their clinical practise (cf. Matthews & Van Wyk, 2018a, 2018b). The purpose of the translation is to develop isiZulu clinical content and to teach non-isiZulu-speaking medical students basic isiZulu language to enrich their isiZulu communications skills (cf. Diab *et al.*, 2016 & Gokool *et al.*, 2024).

The initiator of the translation project is an isiZulu specialist and lecturer who identified a gap in the teaching and learning of isiZulu as a second language as a communication tool and skill in a clinical setting. Furthermore, the isiZulu specialist instructed that medical content be translated from English into isiZulu to provide medical students with the vocabulary needed in the clinical years of the study. It is also a source for students to enhance further or reinforce their isiZulu language skills learnt in the first year.

Step 1: Compilation of the English medical content (Figure 5.1).

The first step of the translation process was the compilation of medical content by clinicians and final-year medical students. Medical content was compiled in English according to themes/systems such as the respiratory system or cardiovascular system learnt over the 6-year MBChB curriculum. The themes on the MediZulu website are:

Refresher Course: The refresher course includes content taught in Year 1 of the curriculum, viz. IsiZulu greetings and identification, basic vocabulary on common conditions, basic vocabulary on human body parts, explanation and planning, basic history taking (including the personal details), examination and investigation.

Year 2: Respiratory system, cardiovascular system, urinary system, gastrointestinal system and endocrine system.

Year 3: Central nervous system, musculoskeletal system, reproductive health, haematology, infectious diseases/AIDS

Year 4: Paediatrics, Obstetrics and Gynaecology, Dermatology, Trauma and Ophthalmology

Year 5 and 6: Paediatrics, Obstetrics and Gynaecology, Dermatology, Psychiatry, Ophthalmology and Trauma.

The compiled medical content provides the basic knowledge a medical student should acquire to improve isiZulu communication skills. Thus, the content is constructed in full sentences for non-isiZulu medical students. Under each theme on the MediZulu website, there are four subthemes:

History taking: Here, the content is based on the questions a doctor should ask the patients when taking a medical history of a specific medical condition. The history-taking questions are based on the patient's symptoms, daily activities, lifestyle, medical inheritance or family conditions.

Examination: The content provides instructions that a doctor communicates with patients when doing examinations based on specific medical complaints.

Vocabulary: This provides different terms that medical students should familiarise themselves with when dealing with different medical conditions.

Conditions: Each theme has its own conditions (diseases), and this sub-section provides those conditions affecting different parts of the human body.

5.3.2 The Translation Briefs

The functionalist theory of translation utilises the translation brief to instruct a person recorded as a project translator (cf. Nord, 1992; 1997a and 2005). The translation brief guides the translator because it delivers significant information on the translation project. The translation brief of this study is as follows:

Name of project: IsiZulu translation of the MediZulu website project.

Description of the project: The website project was initiated to help medical students learn the isiZulu language. The project provides isiZulu translations of basic communication for non-isiZulu medical students at the NRMSM, UKZN.

Name of the commissioned translator: Sinethemba Dlamini/ Researcher

Source language (SL): English

Target language (TL): IsiZulu

Purpose of the translation: Medical content on the MediZulu website is translated from English into isiZulu to teach non-isiZulu-speaking medical students.

Target audience: Non-isiZulu-speaking medical students.

Desired product: The overall translated product should be in isiZulu. The translator should apply isiZulu grammar and linguistic rules, paying attention to the meaning and culture of the isiZulu language. The translation should be as simple as possible, considering it is for non-isiZulu-speaking students. Moreover, the translation should be socially and culturally acceptable in isiZulu and AmaZulu. The translated text should improve the students' isiZulu communication and language proficiency. Therefore, the text should focus on medical terminology for doctor-patient communication in a clinical environment.

5.3.3 The Translator

A competent translator should have the necessary qualities and competencies to undertake any translation work. A translator is a person who translates text between languages to transfer information or to fill in a language communication gap. A competent translator is a person who is not only fluent in the source and target languages but who has an in-depth understanding of

their cultures, as previously stated by authors such as Gambier and Doorslaer (2010) and Gopaul (2018) in their analysis. Understanding the language and culture is a good quality that implies that the translator understands the cultural connotations and how culture may dictate semantically that certain words be used or avoided in the source and target languages. Moreover, the translator respects and recognises the cultures of the languages involved in translation. As mentioned above, the translator of the translation project should be fluent in English and isiZulu to translate the medical content successfully.

The study employs the five competencies proposed by Roger Bell (1991) to analyse a good translator further. As discussed earlier, these competencies imply that there is specific and special knowledge that a translator should have for the successful translation of a text (cf. Nord, 1997a; Dlamini, 2021). The knowledge and different competencies help the translator carry out the translation process and produce an expected translated product. The five competencies are significant in this chapter because they inform the skills and knowledge of the researcher as the appointed translator to translate medical content from English into isiZulu. The five competencies used to analyse the researcher as a translator of the project discussed below include grammatical competence, socio-linguistic competence, discourse competence, extra-linguistic competence and strategic competence (cf. Bell, 1991).

5.3.3.1 Grammatical competence

Grammar differs between languages, and correct grammar in every language is important. Grammatical competence implies that a translator should have grammatical knowledge and understand all the rules applied in the source and target language to transfer meaning (cf. Bell 1991) correctly. The researcher as the translator for the project has the required grammatical competence in isiZulu and English. The appointed translator is well-suited for the role, as she has an excellent command of English and isiZulu, her home language, which provides her with deeper cultural knowledge. The translator fully understands the grammatical rules of isiZulu and English and how the two languages differ in their grammatical nature of writing. Grammatical competence is briefly discussed in the next step of the translation process, where there are examples showing the difference between English and isiZulu's grammatical writing during the translation of medical content.

5.3.3.2 *Socio-linguistic competence*

Socio-linguistic competence refers to the translator's ability to communicate with people appropriately. This competence examines the translator's understanding of the relationship between a language and the social group using the language. Moreover, competence examines the ability to apply language in a social context. The emphasis on socio-linguistic competence is based on comprehending and using the correct wording in different language and social contexts. Furthermore, the emphasis is on communicating and responding appropriately to any given social group, cultural group or topic and on the relationships of people communicating using a language. This competence considers the knowledge of different language features such as dialect, cultural aspects and register, which are discussed later in this chapter.

The appointed translator understands the previously mentioned socio-linguistic features because of their upbringing and ethnicity. The translator is from the background and region of the AmaZulu people and, therefore, understands the dialect, the different cultural aspects and the register involved in language communication. The language proficiency and knowledge imply that during the isiZulu translation of medical content, the translator pays attention to the wording, considering that the non-isiZulu speaking medical students may encounter different isiZulu-speaking people. For instance, most people refer to dialect as a language used by a specific region or social group (*ulimi lwesigodi*). Dialect generally allows people to differentiate a social group by identifying the differences in vocabulary, grammar and pronunciation of certain words. The impacts and contribution of dialect in the isiZulu translation are discussed further in the next section, 5.3 of the chapter. Cultural aspects refer to the different phrases and words that are used within a specific cultural group. These words may have a historical meaning or be of specific value and purpose, affecting information delivery (cf. Gopaul 2018). Register as a special language is involved in the translation of medical content. The register is the language used or applied in different social situations. This implies that isiZulu is used differently in clinics and hospitals than in other fields, such as law, education, and engineering.

5.3.3.3 *Discourse competence*

Discourse competence is the translator's ability to produce cohesive and comprehensible translations by understanding how words, phrases, expressions and sentences are combined to have meaning. Additionally, the produced translations should be appropriate to the context,

which implies that the translator should understand the translation's target audience (refer to Chapter Three). The translator of this project understands the purpose of translating medical content and that the target audience is non-isiZulu-speaking medical students. Moreover, the translator has adequate experience in teaching and learning isiZulu as a second language. Therefore, the appointed translator is equipped to provide basic knowledge of isiZulu suitable for non-isiZulu-speaking medical students. The translator provides translation in simplified sentence structures and terms so students can easily understand and grasp the language. Consider the following example below:

Example D1:

- a. When is your expected due date?
- b. *Usuku lokugcina olindele ngalo lunini?*
- c. *Ubeletha nini?*

This example demonstrates how a translator uses discourse competence to make the isiZulu translation understandable and easier to learn. Example 1a is taken from the source text under reproductive health. The medical student has to ask a pregnant patient about her expected delivery due date in isiZulu. Example 1b shows the literal isiZulu translation of example 1a, which may be longer, more complicated for a non-isiZulu-speaking medical student and may not immediately make sense to isiZulu speaking patients. To simplify the question, the translator makes sense of the key term 'due date', meaning baby delivery date. The doctor wants to know when the pregnant woman expects to deliver the baby. Therefore, example 1c is regarded as the translation of example 1a in simplified isiZulu and asks the same question. The overall significance of discourse competence is communicating effectively between communicants, ensuring that language is correctly used and understood.

5.3.3.4 Extra-linguistic competence

Extra-linguistic competence is beyond the translation of the language in the source text; it is a translator's extra knowledge on matters of the social world (cf. Dlamini, 2021). This implies that the translator must be updated on different matters related to the field on which the translation is based and people's social lives. Translators should familiarise themselves with cultural references of the languages involved in the translation process. The knowledge of cultures makes it easy for the translator to comprehend texts with reference to the cultures, and it is easier for the translator to use appropriate words in the target text. The project's translator has knowledge beyond the field of medicine and the cultures of English and isiZulu-speaking

people. The translator understands the current issues and state of the health department in South Africa. This means that the social matters affecting the people are interrelated to the language text. For instance, South Africa is recovering from the dreadful coronavirus - COVID-19 pandemic, which affected individuals of the nation in numerous ways. The Department of Health's response to the matter was to vaccinate people to reduce the transmission of the virus. As a result, the doctors must ask their patients if they received the coronavirus vaccine and understand the different social beliefs attached to this vaccination or related medication. Example E1 below demonstrates interrogation on the vaccination. Example 1a is from the source text (English), and example 1b is the translation in the target language (isiZulu). These questions may be asked to gather additional information about the patient's health or to gain a clearer understanding of their medical history.

Example E1:

- a. Did you get vaccinated for Covid 19? Which vaccine did you receive? How many times did you get vaccinated?
- b. *Ngabe walugomela ukhuvethe? Wagoma ngaluphi uhlobo lomgomo? Ngabe wagoma kangaki?*

5.3.3.5 Strategic competence

Strategic competence is the translator's ability to apply different text translation methods. This competence allows a translator to find solutions to most of the problems encountered during the translation and provide translations that fill cultural and language communication gaps. The translator uses their isiZulu proficiency and knowledge to solve grammatical and socio-cultural-related issues while translating medical content from English into isiZulu. For instance, a translator may use euphemistic language where terms from the source language cannot be literally translated because of their status on their social use in the target language. These could be translations of the terms for genital organs in the isiZulu language. Moreover, the translator may have problems where the target language lacks medical terminology, leading to the use of different techniques proposed by Vinay and Darbelnet previously in Chapter Three (cf. Vinay & Darbelnet, 1995; Molina & Albir, 2002).

Step 2: Translation of medical content from English into isiZulu (Figure 5.1).

Considering that the translator thoroughly understands the purpose of the translation project, the first translation attempt entails reading and analyzing the source text (cf. Dlamini 2021, Nord's model of source text analysis). The translator is required to utilise the competencies to produce the desired product, which is suitable for non-isiZulu-speaking medical students. The translator should read and understand what the text is about. For instance, the source text is based on English clinical communication questions, phrases and vocabulary used during a consultation with a patient. The analysis of the source text allows the translator to note and highlight how the source language has been used in terms of the text's choice of words, phrases and sentence structure. Moreover, the translator may figure out the different strategies that can be applied during the translation process, considering that English and isiZulu belong to different language families. While translating medical content from English into isiZulu, the translator is attentive to the grammatical nature of writing the languages.

5.3.4 IsiZulu grammar

The grammatical nature of writing isiZulu is different from English writing, and this may pose a challenge for non-isiZulu-speaking medical students who want to learn isiZulu. As a result, it is necessary to explain how isiZulu differs from English in terms of grammar. IsiZulu is an agglutinative language, meaning that it has different elements of the language attached to form a meaningful single word (cf. Doke, 1971; Canonici, 1996). When words are analyzed, it is observed that most elements cannot exist independently because they become meaningless. However, when the elements are combined as formatives, they produce meaningful words and sentences. The formatives/morphemes in isiZulu writing may be the roots, stem, prefixes, suffixes, concords, infinitives and affixes (cf. Doke, 1971:34). Different from isiZulu grammatical writing, English is a disjunctive language. What becomes a single word in isiZulu may exist as many elements or words in an English sentence. Additionally, the previously mentioned formatives do not exist as units in English grammatical writing, and English is a gender-sensitive language, while isiZulu does not. This further implies that isiZulu's agglutinative nature of writing forces us to show the morpho-syntactic of the words so medical students can better understand.

Example G1:

- a. I am a doctor.

b. *Ngingudokotela.*

Example G1 shows isiZulu as an agglutinative language, where different isiZulu language elements are combined to form one meaningful word, 'ngingudokotela', in example 1b. The prefix *ngi-* is the concord agreement with the absent pronoun '*mina*' referring to 'I' in English. *-Ngu* is a predicate, which is a copulative unit referring to 'am' in example 1a. '*Dokotela*' is a noun meaning doctor. Example 1a shows the English translation in four words '*I am a doctor*'.

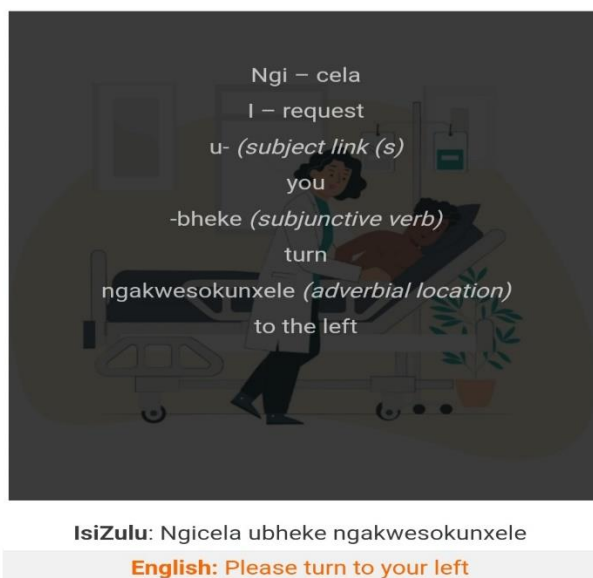


Figure 5.2 The morpho-syntactic explanation of an instruction of the doctor examining a patient during examination (UKZN MediZulu, <https://medizulu.ukzn.ac.za/>).

Figure 5.2 shows the morpho-syntactic writing and translation of the doctor's instruction, '*ngicela ubheke ngakwesokunxele.*' The isiZulu translation on the website shows the morphological decomposition of the words (as shown in Figure 5.2) to show a non-isiZulu-speaking medical student how different elements are combined to form phrases. Given that the target audience is non-isiZulu-speaking medical students and may lack isiZulu grammatical knowledge, providing the morphological structure of the English and isiZulu translation is essential.

5.3.4.1 Syntax

IsiZulu language is attentive to the word order at a sentence level. A sentence may be morpho-syntactically correct but may not be semantically acceptable in isiZulu. A sentence is regarded as meaningful and correct if all the grammatical rules of the language have been followed (cf.

Canonici, 1996). Language elements form words that make up the sentence structures in isiZulu. However, the movement of the different elements in isiZulu makes it complicated for a non-isiZulu-speaking medical student to understand the sentence structure. Since the project is based on improving doctor-patient isiZulu communication skills, this means that there are many questions a doctor can use to interrogate patients during consultations. Thus, the grammar analysis in this section focuses on using interrogative words during the doctor-patient history taking.

The general grammatical rule for interrogative sentences highlights that the interrogative words may be found at the end of the sentence and may not be subjects in isiZulu sentences. In English, interrogative words are usually found at the beginning of the sentence (see the examples below). All interrogative words aim to gather information about something or somebody. However, these words may gather information at a different semantic level (cf. Doke, 1971; Canonici, 1996). This means that some interrogative words in isiZulu may be understood in more than one possible way in English, depending on the context of interrogation (cf. Cope, 1984). The different interrogative words doctors may use during history taking are discussed below.

-Bani is an interrogative noun which intends to question people's identification. This suffix *-bani* is the question *who?* in English. Since isiZulu does not allow interrogative elements to be subjects, the interrogative element *-bani* is placed towards the end of the sentence as shown in example S1.

Example S1:

- a. **Who** do you live with?
- b. *Uhlala nobani?*

The interrogative noun *-bani* may be used as a predicate of identification where it takes the subject position in the sentence as shown in example 2b '*ngubani igama lakho?*' In isiZulu language, the names of people are not objectified; therefore, the English translation of the question uses the interrogative word *who?* in the sentence 'who is your name?' in example 2a. However, in the context that *-bani* is no longer a substantive but functions as a predicate, English uses the interrogative word *what?* as shown in example 2c. The literal translation of 'what is your name?' would be '*yini igama lakho?*' which objectifies the names of people.

Example S2:

- a. **Who** is your name?
- b. *Ngubani igama lakho?*
- c. **What** is your name?

Nini (when), *-phi* (where), *-njani* (how), *-ngani* (why/how) are interrogative adverbs that intend to question based on the descriptiveness of the verb in a sentence. This implies that they question, based on time and place, how something is done and the reasons for action. *Nini* exists as a complete interrogative word for questioning based on time reference. *When* is the question *Nini?* in isiZulu. Example S3 shows how doctors use the interrogative adverb *nini* to gather patient information. The doctor interrogated when the coughing started (see example S3 below).

Example S3:

- a. **When** did the coughing start?
- b. *Ukukhwehlela kuqale **nini**?*

-Phi carries more than one sense of questioning in sentences. *-phi* may be used as an enclitic suffix in a verb to question the locative (see example S4 below), and this is the question *where?* in English. The *-phi* may also be used as a qualifier stem where it intends to interrogate a noun identification, as shown in example S5. Therefore, *-phi* will ask the question *which?* and there are semantical and grammatical changes.

Example S4:

- a. **Where** do you live?
- b. *Uhlalaphi?*

Example S5:

- a. **Which** side is painful?
- b. *Yiluphi uhlangothi olubuhlungu?*

-Njani may be understood in numerous ways depending on the context in which the question is asked. *-Njani* as an interrogative adverb may be a suffix interrogating how something is done, and this is the question *how?* in English. Example S6 interrogates the method the patient uses to take the medication. However, *-njani* may also be used as a qualifier question on the

sentence's object or subject. Example S7 shows *-njani* as an interrogative adjective asking about the patient's wellbeing.

Example S6:

- a. **How** do you take your medication?
- b. *Uyithatha kanjani imithi yakho?*

Example S7:

- a. **How** are you feeling?
- b. *Uzizwa unjani?*

-Ngani is an interrogative adverb that may question why something is done, and the English question is, *why?* Additionally, *ngani* may question by means of what a particular thing happens and use the English question of *how*.

Example S8:

- a. **Why** have you stopped using contraceptives?
- b. *Kungani uyeke ukuhlela?*

Example S9:

- a. **How** may I help you today?
- b. *Ngingakusiza ngani namhlanje?*

-Njani (how), *-ni* (what), *-ngaki* (how many) are interrogative adjectives which are usually used as qualifiers of the objects and subjects in a sentence. This implies that they function to question either the subject or the object. The interrogative adjective *-njani* was previously discussed in the interrogative adverbs section above.

-Ni is used as the suffix of the verbs to interrogate the reasons and maybe a qualifier to interrogate the possession of something. The English word used is *what?* Example S10 shows *-ni* interrogating on reasons, and example S11 shows interrogation on possession.

Example S10:

- a. **What** are you suffering from?
- b. *Uphethwe yini?*

Example S11:

- a. **What** medication are you taking?
- b. *Uthatha muthi **muni**?*

-*Ngaki* is a stem question on the number of things related to the object or subject in the sentence. Thus, -*ngaki* means how many in English. For example, S12, -*ngaki* in the word '*amangaki*' is the qualifier of an object because a patient (subject) is identified as '*u-*' (*wena*) in the word '*uthatha*' and pills are the object in the sentence.

Example S12:

- a. **How many** pills do you take per day?
- b. *Uthatha amaphilisi **amangaki** ngosuku?*

5.3.4.2 Lexis

The analysis of the source text focuses on the English and isiZulu vocabulary. Most English medical scientific terms are derived from Latin and Greek (cf. Karwacka 2015). This challenges translators to find the exact translations in the target language during the translation process. Regarding science terminology development, isiZulu has not reached its peak, where translators can translate scientific terms without encountering challenges. The website project has subthemes and various conditions of different body systems that have vocabulary. Some terms in the themes do not have equivalences in the isiZulu vocabulary. When the translator cannot find an equivalence of the term, different translation techniques are utilised to ensure that the target text is similar to the source text (cf. Vinay & Darbelnet 1995).

Example L1: (Borrowing)

- a. Pneumonia
- b. *Inyumoniya*

Example L2: (Literal translation)

- a. Valvular disease
- b. *Isifo se-valvular*

Step 3: Verification Process (Figure 5.1)

A clinical expert verifies the medical content. This step entails checking whether the content is relevant to be learned by medical students who are non-isiZulu speakers. This implies that translation must use the correct wording and pay particular attention to social influences because the isiZulu language is socio-culturally sensitive. Additionally, isiZulu may not be easily acquired, and the nature of writing isiZulu sentences is longer. Therefore, the verifier ensures that the translations are in simple, shorter sentences. Overall, the translated medical content uses isiZulu clinical terminology, which is culturally sensitive.

5.3.5 *Samples of verified content*

This section discusses the samples of translated and verified texts from the MediZulu website. The samples are used to show the social influence of the isiZulu language and the lack of isiZulu vocabulary in medicine. This section shows selected samples in three steps of the isiZulu translation process. The translated texts shown below are samples written in English as a source language. This is followed by two different isiZulu translations of the source text. The first translation is a general translation given in isiZulu as a target language (presented as TL below) without considering the impact of social communication. The second translation is from the verified content (presented as VT below) and is the socially acceptable version of the first translation. Other samples show how the lack of vocabulary affects the grammatical writing and the overall meaning of the words.

Sample 1: Did you feel any water running down your legs?

TL: *Akhona amanzi owezwe ehla ngemilenze?*

VT: *Seziphumile izikhundla?*

Sample 2: How many children do you have?

TL: *Unezingane ezingaki?*

VT: *Unamasu amangaki?*

In samples 1 and 2, there is a similar translation from English into isiZulu. In a literal translation of sample 1, 'water' is 'amanzi' in isiZulu. During pregnancy, the 'water' (amniotic fluid) that comes out before delivery of the baby is called 'izikhundla' in the clinical isiZulu language. Generally, *izikhundla* refers to people's position in an organisational structure. Similarly, in a literal translation of sample 2, the patient was asked how many children they have would be 'unezingane ezingaki?' in isiZulu. However, in isiZulu clinical language, any pregnancies a

woman experiences are referred to as '*isu/amasu*'. Generally, *amasu* means strategies, plans or tactics.

Sample 3: I need to examine your penis and scrotum with my hands. Is that okay?

TL: *Ngidinga ukuhlola imthondo kanye namasende akho ngesandla sami. Ngabe kulungile?*

VT: *Ngidinga ukuhlola isitho sakho sangasese ngesandla sami. Ngabe kulungile?*

Sample 4: Vagina

TL: *Inhlunu*

VT: *Imomozi/ inkomo/ isitho sangasese*

Samples 3 and 4 refer to male and female human genital organs. These terms are translated using euphemistic terms. Euphemism is used when the language speakers intend to avoid a term because of the status of the term in its social use. The isiZulu language is sensitive to the original terms of human genitals, such as '*umthondo*' in sample 3 and '*inhlunu*' in sample 4. Due to language and cultural sensitivity, the translator uses '*isitho sangasese*', a private part of the human body.

Sample 5a: Labia majora

TL: *Amalebe angaphandle*

VT: *Izindebe zangaphandle*

Sample 5b: Labia minora

TL: *Amalebe angaphakathi*

VT: *Izindebe zangaphakathi*

Sample 5 refers to a specific part of the human genitalia found in a female private part of the body. IsiZulu language speakers avoid this term because of how it has been used in society. Therefore, the original term '*amalebe*' is replaced with a euphemistic term '*izindebe*'. Generally, *izindebe* refers to lips. Therefore, the translator uses the word *izindebe* because the physical appearance of *amalebe* is like lips (NB, the term 'labia' is from Latin meaning lips).

Sample 6: Tell me when you stop hearing this.

TL: *Ungitshela mase ungasezwa lutho.*

VT: *Ungitshela uma ungasezwa lutho.*

Sample 6 shows the use of dialect language. Dialect is a language slightly different from the original language used by certain societies. The translator used the dialect term '*mase*' to mean 'when'. The formal term to use is '*uma*'.

Sample 7: Pulmonary embolism

TL: I-pulmonary embolism

VT: *Ihlule emaphashini*

Sample 7 is an example of medical terminology that lacks equivalences in the isiZulu language. Instead of borrowing (cf. Vinay & Darbelnet, 1995) the word and inserting the prefix 'i-', the condition is translated according to its physical occurrence. '*Ihlule emaphashini*' would refer to blood clots in the lungs.

The samples of translated texts have shown how the isiZulu language differs among different groups and professions. The significance of finding value in different words of the isiZulu language was highlighted in this section. IsiZulu is an indigenous language lacking the vocabulary and information of Western medicine. As a result, isiZulu grammatically interferes with English medical terms and adapts them to the target language. Table 5.1 shows different examples of verified medical content available to be used by medical students during clinical consultations.

Step 4: Audio recordings of content (Figure 5.1)

The last step of the process involves recording the translated medical content so that medical students can learn the pronunciations. IsiZulu is a language that is attentive to tone when speaking certain words aloud. This is because isiZulu has many heteronyms, implying that words are spelt the same but pronounced differently and may not mean the same thing. As a result, the translations are recorded for medical students so they may not assume how a phrase is pronounced but listen and practise from the audio. For instance, the interrogative elements -ni and -phi are pronounced in a high tone (cf. Cope 1984). Other pronunciation challenges may include vowel pitch. For instance, '*uhlalaphi?*' may mean '*where do you live?*' (2nd person) and it may mean, '*where does she live?*' (3rd person) depending on the pitch used on *u-*.

These steps are significant in this study because the translator used them as a guide in translating medical content from English into isiZulu. Additionally, they provide insight into handling the challenges and knowledge applied to produce good isiZulu translations. This

process prioritised non-isiZulu-speaking medical students to the extent that the translation bridges the gap between the English disjunctive background and the agglutinative writing of isiZulu in the learning process.

5.4 Research Question 3: How do social aspects influence the translation process of medical content?

Language is an essential part of social interaction and is used as a communication tool. Language is attached to people's daily lives and involves their lifestyle, changes in time, cultural norms and values. People use language in different ways and different contexts. Additionally, changes in people's lives affect how language is used (cf. Gqaleni *et al.*, 2010). The language reference on social use affects how specific words are viewed in society. As a result of the aforementioned, the translators encounter challenges because they are expected to be attentive to the word choice during the isiZulu translation of medical content. This section comprehensively discusses the social aspects influencing the isiZulu translation of medical content.

5.4.1 Regional IsiZulu language

The province of KwaZulu-Natal is the seventh largest province in South Africa. However, it is the second most populated, with a population of over 12,4 million, most of which are isiZulu first language speakers (cf. Stats SA, 2022). KwaZulu-Natal may be divided into several locations, such as the South Coast, North Coast, and non-coastal regions, which range from urban to rural areas. The rural and urban areas are different in terms of development and do not receive the same level of service delivery. For instance, rural areas continue to experience educational challenges and low literacy levels. Many people are monolingual and cannot speak, read or write English. Considering the monolingualism of people in the province, the non-isiZulu-speaking medical students are taught isiZulu to improve their clinical communication with AmaZulu patients. However, the isiZulu language in KwaZulu-Natal is complex because isiZulu differs according to regions (cf. Gopaul, 2018). IsiZulu spoken by people in the North of KwaZulu-Natal differs from those in the South of KwaZulu-Natal.

Furthermore, people residing in the Gauteng province speak a different isiZulu language influenced by SeSotho-Tswana compared to KwaZulu-Natal. This mixing of the isiZulu language becomes complicated because people learn incorrect and unstandardised isiZulu words from the regional language or dialect during socialisation. Dialect is a language used by

people of a specific region. However, a dialect is a different version of the isiZulu language as it may differ in grammatical writing, pronunciation and vocabulary. In addition, a dialect may be tricky to understand because it may have language references but has no writing rules. Translators are challenged and may translate using dialect or teaching medical students isiZulu, which may not be understood by all AmaZulu, considering that others rely more on dialects.

Example R1:

- a. Tell me **when** you stop hearing this.
- b. *Ungitshela **mase** ungezwa lutho.*
- c. *Ungitshela **uma** ungasezwa lutho.*

Example R1 shows a translation error where the translator used a dialect phrase '*mase*' in example 1b instead of '*uma*' in example 1c.

5.4.2 Culture and language

IsiZulu is a dominant language in KwaZulu-Natal because of the large number of AmaZulu in the province. AmaZulu people have positioned the isiZulu language as their identity and value as black people. IsiZulu is probably the only language used to standardise idioms and proverbs that are derived from the historical lives or the lifestyle of the AmaZulu people. Examples are: *sobohla manyosi* (the stomach will subside), *uphakathi komhlane nembeleko* (s/he is between the back and the sack), *enethunga ayisengeli phansi* (he who has a milking-pail should not be obliged to milk on the ground). Being a Zulu person means that cultural norms and beliefs are involved. Thus, most Zulu people would say '*baphila isintu*', a cultural guide on how people should carry themselves. In language use, isiZulu is culturally sensitive, implying that certain isiZulu words may not be spoken freely in public. This influences the translation process of medical content, where certain words must be avoided because of their social status (cf. Gqaleni *et al.*, 2010). For instance, the translation of words for body parts or genital organs is challenging because words for these human body parts are regarded as vulgar when translated into isiZulu. This implies that culture overlooks the importance of using scientific terms when translating medical content. Still, it is important to be attentive to the socially acceptable terms that medical students must be taught so they can communicate with AmaZulu patients. Since isiZulu culture dictates words semantically, the translator utilises euphemistic language to avoid the sensitive isiZulu words.

Example C1:

- a. Vagina – Penis
- b. *Inhlunu – umthondo*
- c. *Isitho sangasese*

Example C1 shows the translation of the words for the genital organs in isiZulu. Due to the cultural sensitivity of these terms, isiZulu uses a euphemistic phrase, '*isitho sangasese*' that is not biased to gender. (cf. Gqaleni *et al.*, 2010, the translation of a vagina or penis is *ubuntu besilisa/ ubuntu besifazane*). The euphemistic translation used means 'private organ'.

Example C2:

- a. Did he/she mess themselves with urine or stools?
- b. *Ngabe uzimoshele izingubo?*

Example C2 is the translation where the translator uses terms that sound better in isiZulu than they were in the source text.

The discussion on social aspects is significant because it identifies culture and society's influences on language. The discussion above highlighted that language is used and controlled by people. Thus, translators must consider the language users when translating medical content because translators may use socially unacceptable terms. Translators must understand how cultural references control how people use the isiZulu language, especially in translation.

5.5 Summary of findings

The outcomes of this chapter have provided insight into the process of isiZulu translation from a compilation of the source text to the receiver of the target language. The study outcomes indicate that translation is not a straightforward process solely based on language, and being a translator requires more than just multilingualism or fluency in specific languages. However, translation is a process based on a particular task, a role to be played, and the knowledge and competencies of the person regarded as a translator. The translation process has shown that language exists within a particular group of people, and translators should always consider the different social factors attached to language. This chapter highlights how social factors impact language use in different social contexts. It emphasises that translators should produce a target text that meets the social standards of AmaZulu societies.

5.6 Conclusion

This chapter discussed the two research questions related to the translation process. The study's findings were compared to the existing information previously reviewed and the translation theories in chapters two and three, respectively. The first section of the chapter provided the translation process according to Nord's analysis of the functionalist theory (1992). The translation process and the different steps used by the translator were discussed. The translation process entailed the analysis of the nature of writing in isiZulu and English languages. Thus, different grammatical rules were briefly discussed in this chapter. The second section is a comprehensive discussion on the social aspects that impact the use of isiZulu and how these aspects challenge translators during isiZulu translation.

CHAPTER 6: CONCLUSION

6.1 Introduction

This chapter summarises the study on the process of isiZulu translation of medical content. The study intended to explore the translation process from English into isiZulu to help non-isiZulu-speaking medical students enhance their isiZulu language proficiency. The first section, 6.2 of the chapter, summarises the study and provides an overview of the dissertation chapters. Section 6.3 identifies the limitations of the study, followed by the contributions of the study in section 6.4. Subsequently, in section 6.5, recommendations for future research on translation in health sciences are provided.

6.2 Summary of the study

The study explored the translation process of medical content from English into isiZulu. Using Nord's functionalist theory of translation (1992), different factors involved in the translation were identified and discussed. The researcher described that the purpose of the study was to contribute to teaching communication competency to non-isiZulu-speaking medical students at the University of KwaZulu-Natal and ensure that translated medical content is available for students to learn. This study highlighted the different role players in the overall translation process of isiZulu medical content. Figure 6.1 illustrates the key role players in the translation process.

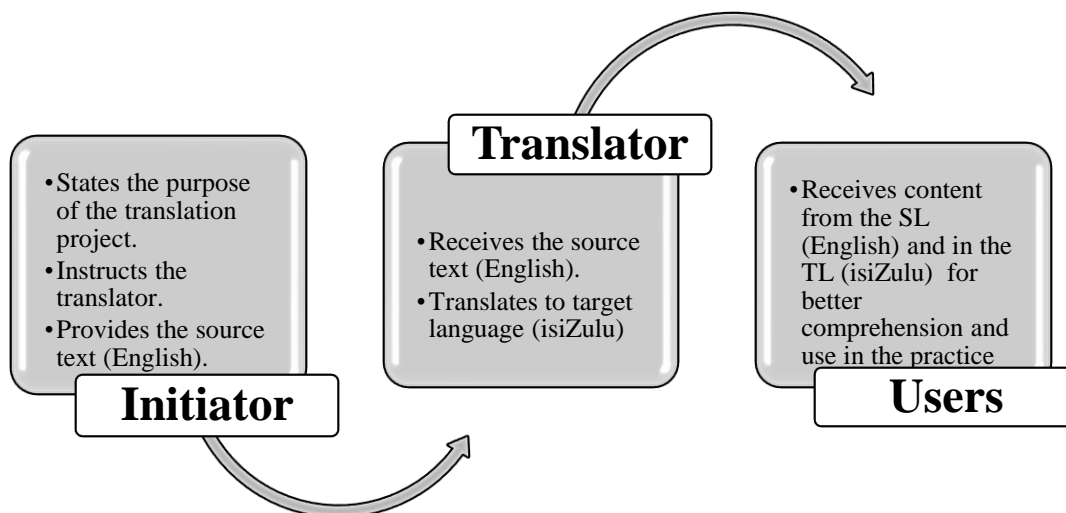


Figure 6.1 Summary of the role players in the translation process.

The study focused on the duties linked with being a competent translator and producing a desired translation product. Based on the translation work undertaken for the MediZulu website project, a competent translator must understand the language, culture and context. Considering that this translation is for communication purposes, the researcher as a translator of the content ensured that the translation product met the pragmatics expectation of the isiZulu language.

The analysis of the source text was identified as the most significant part of the translation because the translator was required to comprehend the source text and find suitable translations in the target language. The analysis of the source text entailed understanding the agglutinative nature of writing isiZulu and following all the grammatical rules of isiZulu, which do not exist in English grammar. This further implied that the researcher when translating medical content had to consider that the target audience has an English language background, which may challenge learning isiZulu as a second language.

The researcher has emphasised that isiZulu translation is a process that requires special knowledge of how isiZulu is used in society. Beyond the analysis of the grammar and syntax in the text, the translation focused on the cultural influences on the use of the isiZulu language. Moreover, this implied that the translator had a responsibility to look into the social meaning of the words because of how the word used affects the word choice during translation.

This study has highlighted that translation differs with functions and the target audience. In the context of communication, translation was attentive to culture and cultural references used by AmaZulu when speaking the isiZulu language. The summary of the dissertation chapters is provided below:

Chapter One: Introduction

This chapter presented an introduction to the study on the isiZulu translation process. The chapter began by stating the rationale and background of the study. The researcher's experience and background information on challenges encountered by non-isiZulu speaking medical students during doctor-patient communication in KwaZulu-Natal led to the problem statement. Translation is used to fill the gap identified as the problem in this study. Thus, the study aimed to analyse the isiZulu translation process of medical content used in the MediZulu website project. The study's objectives were based on reviewing the language policies and evaluating the use of isiZulu in a medical context. Objectives were also based on the translation process

of medical content from English into isiZulu, and the influences of social aspects were demonstrated in the isiZulu translation process of medical content.

Chapter Two: Literature Review

This chapter provided relevant literature related to translation in medicine and clinical communication. The chapter began by stating the significance and role played by language communication in different fields, particularly medicine. Different scholars described the importance of clinical communication in achieving efficient healthcare services. Furthermore, the literature showed the challenges related to language comprehension during clinical communication between doctors and patients and described how miscomprehension affected the effectiveness of healthcare services. The reviewed literature highlighted the different barriers resulting in the previously mentioned challenges. The barriers are based on language as a communication tool and the culture that exists within the language.

Considering the lack of language proficiency being an issue preventing non-isiZulu speaking doctors from understanding isiZulu speaking patients, the study highlighted the significance of ensuring that medical students and doctors learn the language used by their patients to comprehend given information. The South African Constitution assures the equal use of all official languages and promotes different rights attached to the use of languages in South Africa. Different language policies in the health department also promote the rights of patients and the importance of communicating with them in the language they understand. In compliance with UKZN's language policy, students from the medical school are taught isiZulu.

The literature indicated that translation is a bridge towards understanding the different languages people use during communication. The study described the use of translation as a way of contributing to the teaching of isiZulu to medical students and the acquisition of language competence for use in practice. Numerous studies have been done on translating medical content and terminology, and different learning tools have been developed. The international studies on translation include Arabic, Indonesian, Swedish, Chinese and German. Translations in African indigenous languages include isiNdebele, isiZulu, Xitsonga, Shona and isiXhosa. More studies are being conducted on translating medical content to help with communication challenges while empowering the use of African indigenous languages.

Chapter Three: Theoretical Framework

The study utilised Nord's functionalist theory of translation (1992) and the Vinay and Darbelnet (1995) approach commonly used in translation studies. The functionalist theory focuses on the translation task's purpose and overall significance. The theory identifies different roles played by the initiator of the translation task and the roles of the translator. In addition, the theory provides the translator with different aspects to look into during the translation process. These could be the translator's competencies, the source text's analysis and translation to the target language. The Vinay and Darbelnet approach introduced different strategies and techniques used to solve different translation problems.

Chapter Four: Research Method

This chapter presented a textual analysis of the translated medical content and the research method employed in the study. Textual analysis was used to examine and interpret medical content after translating it from English into isiZulu in different contexts. The researcher provided samples of the translated text extracted from the UKZN MediZulu website.

Chapter Five: Discussion

This chapter provided a discussion based on the research questions identified in this study. The first question discussed the reviewed language policies in accordance with the use of official languages as a human right. The review focused mainly on using isiZulu at UKZN NRMSM to improve the students' isiZulu communication skills with AmaZulu patients. The second question examined the steps followed in the isiZulu translation of medical content. Furthermore, the steps used by the translator were analysed using the key aspects identified by Nord's (1992) functionalist theory of translation. These aspects included the translator's deep understanding of the translation purposes and the competencies needed, making the appointed translator suitable for the role. Using some of these competencies, the researcher discussed the grammatical nature of writing in the isiZulu language compared with English. The third question discussed the influences of social aspects when translating medical content from English into isiZulu. The study highlighted that, unlike other languages, isiZulu dictates semantically how certain words must be used socially. The isiZulu language is indeed affected by the geographical location and cultures of Zulu people. This chapter confirmed that the isiZulu language is not just a spoken language but also identifies and represents a specific social group.

6.3 Limitations to the study

The study was limited in terms of the field and the languages involved in the translation process. The limitations of the study include the following:

- 6.3.1 Literature on the translation of medical content and terminology was limited due to the origin of medical terminology.
- 6.3.2 Medical content translated from English into isiZulu was limited. The researcher had challenges reviewing texts from different sources because these were unavailable.
- 6.3.3 The isiZulu language lacks medical terminology and overall vocabulary, which challenges the translator when English terms have to be translated. Some terms will be longer, not make sense, or not mean exactly what the source text states.
- 6.3.4 The source of gathering text for analysis was only the MediZulu website project, which limited the researcher who is also the translator in the project in terms of reading and analyzing other medical texts.
- 6.3.5 During the translation process, there was a lack of tools or methods available to assist with translation challenges. For instance, Google Translate is not a reliable source for translation. There is no authoritative isiZulu website on which to consult for medical terminology.

6.4 Contributions of the study

Translation is one of the significant tools in the field of language and communication. However, as a tool, it has not been used sufficiently to develop comprehensive medical content in African languages. This study promoted isiZulu as a South African official language and the most used African indigenous language in KwaZulu-Natal and highlighted how to utilise the isiZulu language when communicating with people in different contexts. The study focused on the significance of understanding culture as linked to language in its social use - communication. Furthermore, the study argued how socio-cultural factors shape isiZulu terms semantically.

The study has demonstrated the usefulness of the functionalist theory in a communicative analysis. Using the theory, the study could differentiate isiZulu translation terms when used in science and for communication purposes. This was achieved by looking into the socio-cultural status of the terms. Therefore, the researcher in a translator role provided terms and explained

their functions in the isiZulu language. In addition, this study has contributed to the knowledge of different approaches used in translation.

This is a unique contribution to the isiZulu language development and translation field. This study focused on the isiZulu translated medical content to add to the body of knowledge on enhancing non-isiZulu speaking medical students' isiZulu clinical communication skills. Unlike other translation studies in medicine, this study translated full sentences and questions used by the doctor to interrogate patients during consultations. This will assist student doctors to acquire isiZulu language communication skills to their fullest potential. This study has contributed to the curriculum of teaching the communicator role and competency.

6.5 Recommendations

Reviewing literature allows the researcher to identify existing and current study limitations easily. There is a lack of research conducted on isiZulu translation in the field of medicine. This implies that more language research must be done under the themes of medical communication and health care services. Since health is crucial and relies heavily on communication, the UKZN's College of Health Sciences should work closely with African language departments to teach appropriate and improved communication methods with patients at the clinics and hospitals.

The shortage of translated products means that more work must be conducted to promote the use of African indigenous languages. Scholars must produce more bilingual dictionaries and glossaries for these languages.

IsiZulu is a sensitive language based on cultural references. The cultural references challenge the development of the isiZulu language because using euphemistic terms may imply that people should forget or may not be taught the correct isiZulu scientific term because they may carry a derogatory status. There is a need to develop isiZulu medical terminology while ensuring that the isiZulu language is preserved during translation.

6.6 Conclusion

This chapter provided the discussion and concluding remarks on the study conducted based on the isiZulu translation of medical content. This study has highlighted the process of translating medical content for the purpose of communication. There is shared knowledge on how

AmaZulu value certain terms when communicating with people. This study has attempted to illustrate the difference between the isiZulu language in both the semantic and grammatical approaches. This chapter provides a summary of the study and an overview of the dissertation chapters. Furthermore, it has described the limitations and contributions of the study. Lastly, there are recommendations for future research in the development of African indigenous languages in the field of medicine.

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APPENDICES

Appendix 1: Ethical Approval



Miss Sinethemba Dlamini (216010196)
School Of Arts
Howard College

Dear Miss Sinethemba Dlamini,

Original application number: 00025130

Project title: Exploring the isiZulu translation process of medical content at UKZN Medical School.

Exemption from Ethics Review

In response to your application received on 15/03/2024, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW**.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.


In case you have further queries, please quote the above reference number.

PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,


Prof Nicola Jane Jones
Academic Leader Research
School Of Arts

UKZN Research Ethics Office
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

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