THE ACCESSIBILITY OF TRANSLATED ZULU HEALTH TEXTS: AN INVESTIGATION OF TRANSLATION STRATEGIES

by

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DECLARATION

Student number: **706-238-9**

I declare that this thesis, entitled

THE ACCESSIBILITY OF TRANSLATED ZULU HEALTH TEXTS: AN INVESTIGATION OF TRANSLATION STRATEGIES

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

MV Ndlovu **Date**

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Key terms

Accessibility, health texts, self-administered questionnaires, focus groups, semi-structured interviews, reader-focused evaluation methods, face-to-face interviewing, participant observation, cohesion, coherence, corpus, corpus-based methodology, illustrations, readability.

Abstract

In disseminating information about health issues, government health departments and NGOs use, inter alia, written health texts. In a country like South Africa, these texts are generally written by medical experts and thereafter translated into the languages of the people. One of these languages is Zulu, which is spoken by the majority of South Africans. A large percentage of Zulu speakers are illiterate or semi-literate, especially in the rural areas. For this reason, Zulu translators have to use 'simple' language that these readers would understand when translating English texts into Zulu. Translators are expected to use strategies that can deal with non-lexicalized, problematic or other related terms that appear in health texts, as well as geographical and cultural constraints. This study focuses on the strategies used by Zulu translators in an attempt to make translated Zulu health texts accessible to the target readership. The investigation includes the use of self-administered questionnaires for respondents from two of South Africa's nine provinces, where Zulu speakers are found (Gauteng and KwaZulu-Natal), to determine whether the health texts do reach the target readership. Focus groups, semi-structured interviews and other complementary techniques were used to collect data from the selected respondents. Furthermore, a parallel concordance called ParaConc was used to extract and analyse data from the corpus as compiled for the present study, in an attempt to investigate the strategies used to make the translated health texts easier to read. The study uncovers various strategies which are used when translating English health texts into Zulu. These strategies include the use of loan words, paraphrasing, cultural terms and so on. In future, the use of ParaConc can be broadened to investigate newly discovered translation strategies, with the aim of making health texts more accessible to the target readers. Furthermore, this software programme can also be used to study translation strategies as used in other types of texts, for example journalistic texts.

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CHAPTER 1

INTRODUCTION

1.1 Background to and rationale behind the research problem

A large percentage of South Africans make use of traditional medicine. Some use traditional medicine out of choice, while others (especially in poor communities), use it because it is cheaper or more accessible than government health services. The government has also taken steps to recognize the role of traditional health practitioners in our society. The Traditional Health Practitioners Bill, 2003, mentions the following as the purpose of the Act:

> To establish the Interim Traditional Health Practitioners Council of South Africa;
>
> To make provision for control of the registration, training and practices of traditional health practitioners in the Republic of South Africa;
>
> To serve and protect the interests of members of the public who use the services of traditional health practitioners.

Africans make a distinction between diseases that can be fully understood by non-Africans and those that they deem can only be partially understood by non-Africans. This is based on the belief that there is a distinction between natural diseases with somatic symptoms such as the common cold and diseases which result from African concepts such as sorcery, ancestor wrath and pollution.

1.2 The research problem

The activities of the National Department of Health and various non-governmental organisations (NGOs) in disseminating information about health issues include writing texts on themes such as: health education, curative and preventive services and the

elimination of causes of ill health. Doctors, seemingly, are not prepared to be deployed to areas where patients cannot pay fees for medical care. Presently, the brochures and health texts that the Department of Health and the NGOs produce are mainly written in English and distributed for consumption by urban African readers (i.e. if the white population is excluded) at clinics in the townships and public hospitals.

The problem, therefore, that the Department of Health and the NGOs face, is that the health texts do not seem to reach the whole population. The question is of course why this seems to be the case. In general, these texts are written by medical experts - simply translating them into the different African languages does not solve the problem sufficiently, as many Africans are illiterate or semiliterate - especially in the rural areas. People in such areas still rely on, and receive health services from traditional healers. According to figures released in Census 1997, over 60% Africans, 40% Indians and 30% whites utilise traditional methods of healing. Given this situation, and the multilingual situation in our country, it is necessary to investigate the accessibility and the quality of the health texts published for public consumption (by Africans in particular).

Furthermore, the translators have to deal with cultural constraints such as the issue of cultural taboos. For example, explicit sexual expressions should be avoided in material aimed at an African readership. Using English loan words in the translated texts also hampers comprehension as rural readers are not that familiar with English. According to the 2006 estimates from Statistics South Africa (http://www.south-africa.org.za, 2006), English is only the fifth most spoken language in our country.

A complicating issue in such research is the fact that the recipients of health texts at urban clinics and hospitals have access to both Western medicine and African traditional medicine, while the vast majority of the rural population rely mainly on traditional African medicine. This issue, apparently, is not addressed sufficiently in the brochures, and consequently, in translations.

The question that begs to be answered is whether the translated health texts are indeed accessible to a general readership of African speakers. In particular, the problem that will be addressed in this study is how Zulu translations of health texts can be made more

accessible to the Zulu readership? For the purpose of this study the term “accessible” means “available”, “obtainable”, “simple”, understandable”, or “comprehensible” (Tulloch 1992:10).

1.3 Aims of the study

The main aim of the research is to identify the translation strategies used by Zulu translators when translating Zulu health texts, and also to examine their effectiveness in conveying the message to the target reader. The data that was used for this purpose was extracted from the health texts corpus that was compiled for the present study. Hard copies of some of the texts were collected and distributed to the Grade 10 to 12 learners in two of South Africa’s provinces (Gauteng and KwaZulu-Natal) during the first and second phases of the pilot study. In addition, the analysis of the health texts by focusing on components of text communication produced relevant data. Given the type of texts under investigation, the non-verbal information (illustration, pictures or diagrams) also received attention.

Another aim of the study is to receive feedback from the target readers about the distribution of health texts. This was partly the focus of the first phase of the pilot study. Furthermore, the researcher focused on whether dialect markers were used by the Zulu translators in an attempt to reach readers of specific regions.

1.4 The research methodology

In order to achieve the aims stated above the researcher applied the following techniques:

- using a self-administered questionnaire to determine the distribution of the health texts in the areas selected for the present study and also to understand the nature of the problem (for the first phase of the pilot study);
- conducting focus group and semi-structured interviews, together with complimentary techniques, to collect data from the selected respondents (the second phase of the pilot study);
- using a parallel concordancer, called ParaConc, to extract data from the corpus compiled for the present study, which was analyzed to examine the components of

text communication and strategies used to make the translated health texts easier to read (for the main part of the study).

These techniques are briefly discussed below:

1.4.1 The self-administered questionnaire: first phase of the pilot study

The self-administered questionnaire was prepared and used in the first phase of the pilot study for the Grade 10 to 12 learners in selected areas of Gauteng and KwaZulu-Natal. The questionnaire included questions on the distribution of the health texts in the areas as well as some questions which could be used in the second phase of the pilot study.

1.4.2 Techniques for the second phase of the pilot study

As stated above, the focus group and the semi-structured interviews, together with other complementary techniques, were used to collect data from learners selected for the present study. These techniques were used as follows:

1.4.2.1 The focus group interviews

Groups of readers (groups of four to six people) were allowed to discuss all kinds of text characteristics . The text characteristics will receive attention in chapters 3 and 4. Since it may be difficult to keep the groups focused on textual features, focus groups were steered with a semi-structured interview schedule which guided the discussion. Part of the data collected in this way was used when analyzing the texts by using the parallel concordancer.

1.4.2.2 The complementary techniques

The face-to-face interviewing was one of the complementary techniques used to complement the focus groups and the semi-structured interview schedule. The researcher interviewed teachers and health workers to complement the data received from the main respondents (i.e. the Grade 10 – 12 learners). The individual interviews were conducted by the researcher. Since this approach was used to complement the focus groups, the

respondents were selected from the same areas as the main participants.

The researcher wrote the respondents a letter, called them or visited them to arrange for a visit. The interviewee was requested to have the selected health texts in his/her possession ready, especially those which he/she had already read. However, the researcher also brought along with him extracts and texts which would help in obtaining the required data, with the purpose of answering the research questions.

Another complementary technique which was used to obtain information was participant observation. Through participant observation, the researcher learnt from the respondents' actions what they were doing and did not focus on what they said they were doing. Some learners were visited at their homes and schools to determine whether the health materials were read and to what extent they were understood. Some of the health materials were referred to during the focus group sessions with the learners.

The other set of data was extracted from the English-Zulu Health Texts Corpus (EZHTC), which was compiled for the present study. Key concepts in corpus-based translation research are explained briefly in the following paragraphs.

1.4.3 Corpus-based translation research

The use of corpora (singular: corpus) as a research methodology in translation studies is described by Olohan as follows (2004:1):

> The use of corpora … in translation studies has a short history, spanning no more than ten years, but electronic corpora have been used in linguistics for over three decades. While translation studies accepts and adopts the tried and tested corpus methods from its older sister, it also undergoes early teenage angst, seeking to develop its own corpus-related image while coming to terms with other self-centred, existential preoccupations.

The short history of the use of corpora in translation studies entails that contributions have still to be made by translation scholars in this field. In the present study the researcher made use of this opportunity to use corpora as a research methodology to study the accessibility of the translated Zulu health texts to the target readership. The researcher, in using this research methodology, focused on the following: the definition of the term

corpus, the type of corpora that was used in the present study, corpus design, corpus tools and two of the so-called universal features of translation. These aspects are discussed below.

1.4.3.1 The term "corpus"

Olohan (2004:1) defines a corpus as

> a collection of texts, selected and compiled according to specific criteria. The texts are held in electronic format, i.e. as computer files, so that various kinds of corpus tools, i.e. software, can be used to carry out analysis on them.

This term is further discussed in chapter 3 of the present study. In Chapter 4, the texts collected and compiled for the present study are presented. All the texts were stored in electronic format for analysis. The next useful aspect is the type of corpora used in the present study (parallel corpora).

1.4.3.2 Parallel corpus

In translation studies a parallel corpus is "a corpus consisting of a set of texts in one language and their translations in another" (Olohan 2004:24). In the present study a number of health texts written in English, mainly short texts, together with their Zulu versions were collected and compiled. This is the type of corpora that was analyzed in the present study. Other types of corpora, though not used in the present study, are discussed in Chapter 3 of this study. How the corpus of the present study was designed is briefly discussed below.

1.4.3.3 Corpus design

Olohan (2004:45-46) refers to three issues to be considered in designing a corpus: static versus dynamic corpus, representativeness of the data and regional and temporal factors. These issues are discussed in Chapter 3 of the present study and they can, following Olohan's (2008) definitions, be briefly described as follows:

- a static corpus constitutes a collection of texts that were selected according to some specific principles, thus providing a snapshot of aspects of the language at a particular point in time, whereas a dynamic corpus aims to track language as it changes and develops over time;
- in wanting to be able to make generalizations based on their data analysis, researchers have a problem in confirming with any degree of conviction that their data are 'representative' of a particular language or genre;
- with regard to regional and temporal factors; nationality, ethnicity, age, gender, etc. of writer or speaker may also be criteria to consider in the selection of texts.

For the present study, the corpus was compiled in consideration of the fact that the dialects spoken in the two provinces selected for the present study (i.e. Gauteng and KwaZulu-Natal), are not the same. People refer to these dialects as Gauteng Zulu and KwaZulu-Natal Zulu. The latter is considered to be standard Zulu. With regard to the representativeness of the data, the researcher relied only on what was available at the time and therefore cannot claim that the data is representative. The researcher had to choose a corpus tool that would be used in analyzing the data, as discussed below.

1.4.3.4 Corpus tools

After designing and compiling a corpus, extracting data can then be done by using corpus tools. A tool commonly used for the extraction of data is a concordancer. For a parallel corpus, a parallel (bilingual) concordancer is used. This tool can be used to find instances of a word or phrase that the researcher wants to search in the corpus. The display of the result of such a search is demonstrated in Chapter 4 of the present study.

The researcher can also use the bilingual concordancer to produce a list of all the words that occur in a corpus, with the total number of occurrences given for each word, which is called a frequency list, as demonstrated in Chapter 4. In using a bilingual concordancer, it means that there would be a list of all the words that occur in the selected source text and another list of all the words in the target text. In the present study, the researcher compiled all the texts in such a way that a parallel text would be a short source text in English with

its Zulu version, on a particular theme (cf. Chapter 4). A parallel text could also mean all the source texts with their Zulu translations, or source texts with their translations for a selected province, and so on.

The researcher was also able to use the so-called components of text communication to analyze data from the health corpus compiled for the present study, as discussed below.

1.4.4 Components of text communication

The components of text communication, as discussed in Chapters 3 and 4 of the present study, are: cohesion, coherence, intentionality, acceptability, situationality, informativity, intertextuality, efficiency, effectiveness and appropriateness.

For the purpose of the present study two of these components were used, namely, cohesion and coherence. Cohesion includes aspects like reference techniques, lexical cohesion and conjunctives). These aspects were important for the present study as the researcher was interested in finding out how the Zulu translators dealt with them in an attempt to make the translated Zulu health texts easier to read. The parallel concordancer was used in extracting the relevant data.

Coherence was considered in instances that involved implied meanings. In other words, the focus was in those health texts in which the writer assumed that his/her readers already possess a certain amount of knowledge on the topic. If that assumption does not materialize, communication breakdown occurs. Therefore, translators should always be aware of implied meanings.

The researcher decided to consider the concept of accessibility as the eleventh component of textual communication. That was done by adopting Mobley's (1986) aspects of readability as referring to 'accessibility' of the texts (cf. Chapters 3 and 4).

The aspects of readability (accessibility) include the following: legibility, illustrations, organization of information, language aspects, content and conceptual difficulty, clarity of meaning, interest level and text simplification. The aspects which were particularly found

to be useful for the present study were illustrations, language aspects and text simplification. They are briefly discussed below.

- Illustrations

Concordancers are not equipped to analyze illustrations. If accessibility is considered to be one of the components of text communication, like is the case in the present study, the analysis of illustrations in health texts can then be done manually by the researcher. The use of the illustrations in a text such as health texts is discussed in Chapters 3 and 4 of the present study.

- Language aspects

Unfamiliar or unusual vocabulary and complex sentence structures make the text difficult to read. The researcher used the parallel concordancer to extract 'unfamiliar' or 'unusual' or complex sentence structures in order to analyze the way in which they were translated into Zulu.

- Text simplification

In the present study the translators' attempts to simplify the health texts by concentrating on their vocabulary and sentence patterns, received attention. The simplification of the translated Zulu health texts by focusing on the vocabulary and sentence patterns can also be understood by referring to the so-called universal features of translation, one of which is simplification. The rest includes features such as explicitation, normalization and levelling out. In the present study, the focus is on explicitation and simplification. Though they are given attention in Chapters 3 and 4 of the present study, they can be briefly described as universal features of translation.

1.4.5 Universal features of translation

- Explicitation

Explicitation refers to 'an overall tendency to spell things out rather than leave them implicit in translation' (Baker 1996:180). In paragraph 1.4.3.4 it was stated that the researcher considered coherence in instances that involved implied meanings. In other words, if the translator takes a decision to spell things out rather than leave them implicit in

translation he would be employing explicitation strategies. Such strategies (as discussed in Chapters 3, 4 and 5), include the use or overuse of explanatory information and conjunctions.

- Simplification

According to Baker (1993, 1995, 1996) simplification refers to the idea that translators subconsciously simplify the language or message or both. Strategies used to make things easier for the reader include the use of superordinate terms, approximation of the concept expressed in the source text and the use of "common level" or familiar synonyms (cf. Chapter 4).

The two universal features of translation and the strategies in which they manifest themselves can be analyzed from data extracted by the parallel concordancer. That is, data can be extracted from the EZHTC and the strategies used to simplify and explicicate the language, message or both can be analyzed.

The organization of the whole study will now receive attention.

1.5 Organization of the study

Chapter 2 deals with the Zulu health care system (African medicine) and the conventional health care system (biomedicine). The chapter focuses on geographical and cultural constraints under which Zulu translators in the production of the translated Zulu health texts work. Chapter 2 also provides a general background to the whole study.

Chapter 3 focuses, in a detailed manner, on text evaluation methods, components of text evaluation and the use of corpora as a research method in translation studies. As stated in the present chapter, corpus tools were used to analyze data collected from the selected respondents as well as data extracted by the researcher from the EZHTC.

Chapter 4 deals with the analytical framework and the research methodology that was used to achieve the aims of the present study. Since the research methodology comprises a pilot study conducted among Grade 10 t0 12 learners, this chapter begins by giving an overview

of the research done on youth and adolescent health in South Africa in order to place the present study within the field of youth health research. Techniques for the pilot study are also discussed and the results thereof are mainly presented as appendices. The study uses, mainly, corpora as a research method.

Chapter 5 presents results, findings and interpretations of the data.

In chapter 6 the general conclusions of the study and the contribution as well as the possibilities for future research are presented.

The following chapter deals with the two health care systems which co-exist in South Africa.

CHAPTER 2

HEALTH SYSTEMS IN SOUTH AFRICA

2.1 Introduction and objectives

In chapter 1 the problem was contextualised and then the aims and objectives of the study were stated. When formulated in the form of research questions, the problem of the study runs as follows: Taking linguistic, cultural and geographical constraints into consideration, the main research question is:

> How should translators ensure that translated health texts are accessible to as wide a target readership of Africans as possible?

In particular, how can Zulu translations of these texts be made more accessible to a Zulu readership? Given these questions, the study aims to examine the accessibility of these texts to the intended readership in designated areas of Gauteng and KwaZulu-Natal.

In this chapter the two South African health systems are discussed in order to present the cultural and geographic constraints under which health texts are produced and distributed. The discussion is based on principles borrowed from the discipline of medical anthropology. The chapter starts with a brief definition of this discipline and the key principles involved. The section is followed by a discussion of the two health care systems with an attempt to highlight the constraints under which the health texts are produced. For example, some people in the rural areas are illiterate and not familiar with the western health system and would therefore find the health texts 'meaningless', even if they are translated into their native language, as some of the concepts referred to are foreign.

2.2 Medical anthropology

Baer *et al*. (1997:vii) adopt the term 'medical anthropology', though they also note that it is a 'misnomer', which can be used by anthropologists interested in health-related issues, and note that this term is a misnomer that reflects the curative rather than preventive nature

of health care in modern societies. For the purpose of the present study, this term has also been adopted and what is important is the principles involved.

Helman (2001:1) defines medical anthropology as being "about how people in different cultures and social groups explain the causes of ill health, the types of treatment they believe in, and to whom they turn if they do get ill … how these beliefs and practices relate to biological, psychological and social changes in the human organism, in both health and disease". This definition constitutes the key concepts which will be dealt with in this chapter. Baer *et al.* (1997: 4-13) list the following key concepts in the discipline of medical anthropology: health, disease, sufferer experience, medical system, medical pluralism, biomedicine, medicalization and medical hegemony. Though the present chapter concentrates on health care systems, the above-mentioned concepts are discussed for the sake of completeness. They are therefore discussed before discussing the two health care systems which are examined in this chapter: biomedicine (the western health care system) and the indigenous or non-western health care system.

2.2.1 The key concepts

2.2.1.1 Health

The World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO 1978). This definition implies that the WHO views health holistically and incorporates social and economic well-being. By contrast, in Western health systems health is defined as the absence of disease, which entails that the human body is separated from its social context in the provision and maintenance of health.

Since the situation in South Africa is marked by inequalities, it is crucial to consider the definition of health offered by critical medical anthropologists, Baer *et al*. (1997:5 italics by the authors), as

> *access to and control over the basic material and nonmaterial resources that sustain and promote life at a high level of satisfaction.*

This definition is relevant in the South African context when considering the state of poverty in which a large number of citizens find themselves. In fact, "low wages, overcrowding, malnutrition and non-existent social services were [and still are] the root causes of the diseases found throughout South Africa" (De Beer 1984:28). These poor populations, especially the rural populations, do not yet have access and control over basic and nonmaterial resources that sustain and promote life.

John H. Bodley's observation, as quoted by Baer, *et al*. (1997:5), about the reasons why health conditions tend to be favourable in indigenous societies, would also apply to the South African indigenous societies before colonization. The reasons why health conditions are more favourable in traditional societies include the fact that (generally) low population densities and relative social equality of small-scale societies would help ensure equal access to basic subsistence resources, so that everyone could enjoy good nutrition, and that such low population densities and frequent mobility would significantly reduce the occurrence of epidemic diseases, and natural selection - in the absence of the antibiotics, immunizations, surgery, and other forms of medical intervention - would develop high levels of disease resistance.

Herselman (2001:20) notes that the interpretation of health by an indigenous practitioner, in contrast with its conception in biomedical terms, is the notion that is important in medical anthropology, and should also include the concept of ill-health. He further notes that in many of South Africa's indigenous societies, health is regarded as a balanced relationship between people, nature and the supernatural, and that physical or emotional symptoms may develop if this relationship is disturbed. This implies that South African indigenous societies, like the WHO, view health more holistically than is generally the case in the western world.

2.2.1.2 Disease

Kleinman (1980:72) refers to the dichotomy between two aspects of sickness (i.e. disease and illness) and defines the term 'disease' as " a malfunctioning of biological and/or psychological processes, while the term 'illness' refers to the psychological experience and meaning of perceived disease". Viewed from this perspective, illness is the shaping of

disease into behaviour and experience. It is created by personal, social, and cultural reactions to disease. This distinction between disease and illness illustrates that, though in ordinary English the two terms are often used interchangeably, medical anthropologists make a distinction between the two. Given a disease such as measles, illness would refer to the psychological experience and meaning of its perception.

Herselman (2001:19) makes the following observation: "In many 'more traditional' societies illness is not distinguished from other forms of misfortune, which can all be ascribed to similar causes. For instance, illness, crop failure and loss of property may all be attributed to witchcraft". This author further notes the following: "The terms ill-health, sickness or condition are used in a general sense to refer to disease and/or illness" (Herselman 2001:19).

2.2.1.3 Sufferer experience

This concept refers to "the manner in which an ill person manifests his or her disease or distress (Baer *et al.* (1997:7). To illustrate the manner in which people manifest their diseases or distress the authors refer to Scheper-Hughes who, in her book *Death without Weeping: The Violence of Everyday Life in Brazil* (1992), wrote about human suffering in Bom Jesus (da Mata), an abjectly impoverished *favela* or shantytown in north eastern Brazil. Scheper-Hughes (1992) maintains that the desperate and constant struggle for basic necessities in the community induces in many mothers an almost animal-like indifference to the weakest of their offspring. The fact is, the suffering of the mothers, their children, and others in this community is intricately related to the collapse of the sugar plantation, which left many people in the region without even a subsistence income.

2.2.1.4 Medical system

Baer *et al.* (1997:7) describe a 'medical system' as a system that consists of beliefs and practices that are consciously directed at promoting health and alleviating disease and that in simple preindustrial societies medicine it is not clearly differentiated from other institutions such as religion and politics. The crucial point to be noted in the above extract is the inclusion of institutions such as religion and politics in the medicine of preindustrial

societies and the belief that in industrial societies medicine is distinct from such institutions. This issue will be further examined in the discussion of the health systems below, i.e. biomedicine (the western health care system) and the indigenous health care system.

Kleinman (1980:24) explains the concept of health care system as integrating the health-related components of society, which includes patterns of belief about the causes of illness; norms governing choice and evaluation of treatment; socially-legitimated statues, roles, power relationships, interaction settings, and institutions.
The health-related components of society will be discussed in the sections on health care systems which will follow below.

Kleinman (1980:50), in his model which he maintains can be applied to research in developed and developing societies that contain both high-order, literate (or classical) and low-order, oral (or folk) indigenous healing traditions, describes health care as a *local cultural system composed of three overlapping parts: the popular, professional, and folk sectors* (italics by author).

- Popular Sector of Health Care

This is the largest sphere of health care and contains several levels: individual, family, social network, and community beliefs and activities. It is the lay, non-professional, non-specialist, popular cultural arena in which illness is first defined and health care initiated.

Kleinman (1980:51-52) describes the steps followed when a disease is first encountered by an individual:

> perceiving and experiencing symptoms; labelling and valuating the disease; sanctioning a particular kind of sick role (acute, chronic, impaired, medical, or psychiatric, etc.); deciding what to do and engaging in specific health care-seeking behaviour; applying treatment; and evaluating the effect of self-treatment and therapy obtained from other sectors of the health care system.

Kleinman (1980: 52) further notes that “the sick person and his family utilize beliefs and values about illness that are part of the cognitive structure of the popular culture”.

This sector includes different therapies such as special diets, herbs, exercise, baths and massage. Patent medicines, hot blankets and over-the-counter drugs are also part of this sector.

- Professional Sector of Health Care

Kleinman (1980:53) defines this sector as "the professional sector, comprising the organized healing professions. In most societies, this is simply modern scientific medicine ... But in certain societies, e.g. Chinese and Indian societies, there are also professionalized indigenous medical systems: traditional Chinese medicine and Ayurvedic medicine, respectively".

This sector therefore refers to western scientific medicine, but, also, includes professionalised medical systems such as Ayurvedic medicine in South Asia, herbal medicine, and acupuncture in China.

- Folk Sector of Health Care

Kleinman (1980:59) describes this sector as follows:

> The folk (non-professional, non-bureaucratic, specialist) sector shades into the other two sectors of the local health care system. Folk medicine is a mixture of many different components; some are closely related to the professional sector, but most are related to the popular sector. In those societies lacking professionalization, the folk sector and the popular sector constitute the entire health care system. Folk medicine is frequently classified into sacred and secular parts, but this division is often blurred in practise, and the two usually overlap.

The specialists in this sector include indigenous specialists. In this sector, healers function either informally or sometimes in terms of local laws. Examples include herbalists, bone-setters, midwives, and in South Africa, diviners and herbalists. In the western context of medicine they include lay hypnotists, lay homoeopaths, and faith healers (Herselman 2001:27-28).

The description of a medical system which is more relevant in the South African context, is offered by Helman (2001:59-60); as one in which society may see free (or relatively inexpensive) health care as a basic right of citizenship, or the basic right only of the poor or the very old, versus one in which society sees medical care as a commodity to be bought

only by those who can afford it.

In South Africa, the internal organization of the professional sector reflects some of the basic inequalities in the South African societies, in relation to gender, social class, and especially, to ethnic background. Rural societies and those in urban informal settlements find themselves without trained western medical practitioners. These societies still, for a large part, rely on the help of traditional healers.

2.2.1.5 Medical pluralism

Baer *et al.* (1997:9) note that a medical system of a society consists of the totality of medical subsystems that coexist in a cooperative or competitive relationship with one another and that in modern industrial societies one finds, in addition to biomedicine, the dominant medical system, other systems such as chiropractic, naturopathy, Christian Science, evangelical faith healing and various ethnomedical systems.

The dominant medical system in South Africa is biomedicine. However, it appears that the country has adopted a cooperative relationship with the indigenous health system, as suggested by the Traditional Health Practitioners Bill, which was approved in the National Assembly on 9 September 2004. The three overlapping parts of health care put forward by Kleinman (above) also imply medical pluralism.

2.2.1.6 Medicalization and medical hegemony

Baer *et al.* (1997:13-14) describe the process of medicalization as one that "entails the absorption of ever-widening social arenas and behaviours into the jurisdiction of biomedical treatment through a constant extension of pathological terminology to cover new conditions and behaviours". These authors state that health clinics, health maintenance organizations, and other medical providers now offer classes on managing stress, controlling obesity, overcoming sexual impotence, alcoholism, and drug addiction, and promoting smoking cessation. They further note that aspects of the medicalization of birthing include (1) the withholding of information on the disadvantages of obstetrical medication, (2) the expectation that women give birth in a hospital, (3) the elective

induction of labour, (4) the separation of the mother from familial support during labour and birth, (5) the confinement of the labouring woman to bed, (6) professional dependence on technology and pharmacological methods of pain relief, (7) routine electronic foetal monitoring, (8) the chemical stimulation of labour, (9) the delay of birth until the physician's arrival, (10) the requirement that the mother assume a prone position rather than a squatting one, (11) the routine use of regional or general anesthesia, for delivery, and (12) routine episiotomy.

It is apparent that, in South Africa, where medical facilities are still not accessible to many women, childbearing women still rely heavily on home births conducted by lay midwives. Waitzkin (in Baer, *et al.* (1997:14)) notes that medicalization transforms a "problem at the level of social structure - stressful work demands, unsafe working conditions, and poverty - ... into an individual problem under medical control". Westernization, in South Africa, has ensured that medicalization has a major impact on the lives of Africans.

Baer *et al.* (1997:14) define hegemony as the process by which one class exerts control of the cognitive and intellectual life of society by structural means as opposed to coercive ones and note that in a doctor-patient relationship there is a need for the patient to comply with a social superior's or expert's judgment. For example, although a patient may be experiencing job-related stress that may manifest itself in various diffuse symptoms, the physician may prescribe a sedative to calm the patient or help him or her to cope with an onerous work environment rather than challenging the power of an employer or supervisor over employees.

2.2.1.7 Biomedicine

This concept refers to the western health care system as discussed under paragraph 2.3 below.

2.2.2 Summary

Now that the key concepts in the discipline of medical anthropology have been described, the following two sections will discuss the two medical systems which are relevant in the

South African context of medicine: the western or biomedical system of medicine and the indigenous or traditional systems of medicine.

2.3 The medical systems of South Africa

2.3.1 The western or biomedical system of medicine

In South Africa, like in many countries of the world, patients are exposed to Western medicine. Herselman (2001:29) describes "Western" or "Biomedicine" as the scientific, empirical medical tradition usually associated with First World societies in which biomedical practitioners symptomatically treat physiological disorders, identified as diseases, on the basis of physical and biochemical criteria, which include weight, blood pressure, body temperature, and heart and respiratory rates. Patients are therefore treated as individuals with little or no regard for their interpersonal relations or socio-cultural orientation.

This description of 'biomedicine' entails that in Western medicine the concept of health is never viewed holistically; western medical practitioners only treat physiological disorders. By contrast, the WHO as well as traditional practitioners include interpersonal relations or socio-cultural factors in their definition of health (cf. WHO's definition of health in par. 1 above). The new South African government follows the view of the WHO in addressing the health problems of the citizens of this country. Its main problem is to redress the legacy of the past.

Apartheid policies, as developed by the government of the day, put into place a health care system which was based on race and the creation of political statutory institutions ensured that health care professions and facilities were under the control of the apartheid government. The main aim of that government was to sustain racial segregation. Discrimination in health care meant that the non-white section of the population did not receive the same type of health care received by whites.

Given the fact that the apartheid government's health system was biased towards curative

care and the private sector, the majority of the South African population did not receive health services at all or found themselves receiving services of poor quality. The African population, the rural communities in particular, depended and many still depend on the services of traditional healers.

The 1994 democratic government therefore faced challenges of redressing social and economic injustices, eradicating poverty and promoting greater control by communities and individuals over all aspects of their lives. There should therefore be complete transformation of the national health care delivery system and all relevant institutions. This entails that all legislation, organisations and institutions related to health have to be geared towards transformation. The activities of the new government show that politicians are attempting to do something to address these challenges.

The South African health care system may be described by using Kleinman's (1980:24) definition of a health care system: "In every culture, illness, the responses to it, individuals experiencing it and treating it, and the social institutions relating to it are all systematically interconnected. The totality of these interrelationships is the health care system". The South African biomedical system will be examined in terms of this definition in this chapter. This will be done by considering the South African context as a whole and thereafter describing the situation in the areas selected for the purpose of this study.

The description of the South African biomedical health care system is based on the District Health System model which the National Department of Health has adopted to drive the delivery of Primary Health Care (PHC) services – the basic health care services at first level of the health system, usually by clinics, community health centres and district hospitals. A clinic, the first step in the provision of health care, would refer a patient to a Community Health Centre (CHC), if it cannot help the patient. Though a CHC is the second step in the provision of health care, it can also be used for first contact care. In addition to similar services provided by a clinic, a CHC offers a 24 hour maternity service, emergency care and casualty and a short stay ward. A CHC would refer a patient to a district hospital when necessary (www.doh.gov.za/search/index.html.

The provision of district health services requires that staff from local authorities and the

province work together to establish and strengthen joint structures to provide comprehensive care to communities. The district Health System (DHS) therefore complies with the stipulation of the constitution of the Republic of South Africa (Act 108 of 1996), which assigns the responsibility for health services to the provinces and the responsibility for municipality health services to the local government (Schedules 4 & 5).

The health texts examined in this study form part of the primary health care services rendered by a health district. Such services involve the publication of informative material of a preventive nature, informing the public on how to avoid or protect themselves from an illness. These texts are usually published by the national or provincial health departments, private hospitals and clinics, the WHO, community health services, or any organisation working in the field of health. Most of the health texts examined in this study have been collected from clinics.

The South African biomedical health care system which upholds the district health system model, is further discussed below by, first considering the country as a whole and thereafter the provinces and the areas of the health districts selected for the present study, on the basis of Kleinman's (1980:24) definition of a health care system as given above.

2.3.1.1 The country's profile

The South African government's website (accessed on 12 December 2006) - provides useful information on the country's disease profile and the way the government responds to disease and ill-health. A summary of this information is given below.

The most common communicable diseases in South Africa are HIV/AIDS, TB, malaria, measles and sexually transmitted infections. In South Africa the Expanded Programme on Immunisation is implemented to reduce death and disability from vaccine-preventable diseases by making immunisation accessible to all children. The government recommends that children under the age of five be immunised against the most common childhood diseases. These immunisations are given to prevent polio, TB, diphtheria, pertussis, tetanus, haemophilus influenza type B, hepatitis B and measles.

The government instituted a programme called the Integrated Management of Childhood Illnesses (IMCI) as part of the Department of Health's policy on the National Health System for Universal Primary Care. According to government, nurses and doctors are well trained to treat all diseases by means of the IMCI strategy which implies that diseases such as pneumonia, malaria, meningitis, diarrhoea and malnutrition are easily managed. In this country, the IMCI strategy was adapted to include assessment and classification of HIV.

Polio and measles

According to the government, there had been no confirmed measles deaths since 2000 because of the Measles Elimination Strategy. The Department of Health observed the National Polio Eradication Week from 4 to 10 April 2005 as part of the Health Month Campaign that focused specifically on maternal and child health. The aim of the campaign was to complement the 2005 WHO World Health Day Campaign slogan "Make Every Mother and Child Count", which was in line with the millennium development goals agreed on by the international community in 2000 to reduce maternal deaths by three quarters and child mortality by two-thirds by 2015.

Malaria

In South Africa, malaria occurs in the low altitude areas of Limpopo, Mpumalanga and north-eastern KwaZulu-Natal. The national government holds that it has decreased the prevalence levels of this disease owing to the success of in-door residual spraying, using the insecticide Dichloro-Diphenyl-Dichloromethan (DDT), and its partnership with Mozambique and Swaziland.

The government reports that the Medical Research Council's South African Traditional Medicines Research Group is investigating plants used by traditional healers for the treatment of malaria. Two plants that are effective against malaria parasites in vitro have been identified and the active compounds in one of the plants have already been identified and isolated.

Tuberculosis (TB)

The government admits that despite improvements in the TB Control Programme – such as an electronic register, decreased waiting time for test results and high coverage with the

Directly Observed Treatment Short Course (DOTS) – both cure and completion rates are suboptimal. The Department of Health is implementing DOTS, advocated by the International Union Against TB and the WHO. The treatment is made accessible to patients by administering it free of charge at all public clinics and hospitals in South Africa.

HIV and AIDS

The government instituted the Comprehensive Plan for the Management, Care and Treatment of HIV and AIDS to prevent the spread of HIV infection and to improve the health system to enable the Department of Health to provide a series of interventions aimed at improving the lives of those infected and affected by HIV and AIDS. The programme is also aimed at providing Anti-retroviral treatment (ART) in the public health sector as part of government's comprehensive strategy.

The South African National AIDS Council serves as a forum for strengthening and integrating programmes within government, as well as between government and civil society.

Preventing mother-to-child transmission (PMTCT) of HIV

The government also instituted the Preventing mother-to-child transmission programme (PMTCT) to protect unborn babies against the disease.

Rape survivors

In April 2002 cabinet took a decision to offer anti-retrovirals (ARVs) to victims of sexual assault as part of a comprehensive package of support.

Reproductive health

To help women and men in making their reproductive choices, the South African government has a number of programmes such as the Family Planning Programme which provides for counselling, a range of choices of family-planning methods such as contraceptives, access to legal termination of pregnancy and sterilisation under specific conditions, as well as education on sexuality and healthy lifestyles which are provided free of charge at PHC facilities.

Environmental health

In terms of the National Health Act (No. 61 of 2003), environmental health services are vested with local government, thus shifting the responsibility for rendering environmental health services to metropolitan and district councils from 1 July 2004.

Traditional medicine

In August 2003, South Africa launched the National Reference Centre for African Traditional Medicines to research African herbs and evaluate their medicinal value as part of government's campaign to fight HIV, AIDS, TB and other debilitating and chronic diseases and conditions.

The launch of the centre was the result of a research programme initiated by the Department of Health and the Medical Research Council (MRC). It aims to test the effectiveness, safety and quality of traditional medicines, as well as to protect people from unscrupulous conduct and unproven medical claims within the traditional healing sector.

To protect the intellectual property rights of traditional people, the MRC conducts biomedical research on medicinal plants. Traditional claims will also be channelled through this centre.

The WHO estimates that up to 80% of Africa's people use traditional medicines. In sub-Saharan Africa, the ratio of traditional health practitioners to the population is about 1:500, while the ratio of medical doctors is 1:40 000.

The government accepts that traditional health practitioners have an important role to play in the lives of African people and have the potential to serve as a critical component of a comprehensive healthcare strategy. In South Africa alone, there are an estimated 200 000 traditional health practitioners. They are the first healthcare providers to be consulted in up to 80% of cases, especially in rural areas, and are deeply interwoven into the fabric of cultural and spiritual life.

Research also indicates that in many developing countries, a large proportion of the population relies heavily on traditional health practitioners and medicinal plants to meet

PHC needs. Although modern medicine may be available in these countries, traditional medicines remain popular for historical and cultural reasons. The MRC conducts tests to evaluate such medicines, develop substances that could be used for chronic conditions, including immune boosters, and provide information on these medicines to the general public.

Tobacco-related diseases

The government estimates that 25 000 South Africans die each year from tobacco-related diseases. The Tobacco Products Control Amendment Act (Act 12 of 1999) has regulations which are aimed at controlling tobacco smoking.

The Act is in line with the provisions of the WHO's International Framework Convention on Tobacco Control (FCTC) and makes it more effective by closing loopholes and increasing fines.

Alcohol and substance abuse

Foetal Alcohol Syndrome (FAS) is one of South Africa's most common birth defects. It is caused by a mother's consumption of alcohol during pregnancy. A report by the MRC's Alcohol and Drug Abuse Research Group, released in October 2003, states that alcohol remains the dominant substance abused in South Africa.

The use of cannabis (dagga) and mandrax (methaqualone) alone or in combination (white pipes) continues to be high. The abuse of over-the-counter and prescription medicines such as slimming tablets, analgesics and benzodiazepines (e.g. diazepam and flunitrazipam) continues. Inhalant/solvent use among young people continues to be an issue of concern.

An alcoholic beverage is any drink for human consumption with an ethyl alcohol content of above 1%. The regulations propose a number of messages that should be printed in black and white, covering at least 12,5% of the container label or promotional material of an alcohol product. The health message can be in any of the South African official languages, but must be in the same language as that of the container label or promotional material. The regulations prohibit any claims of health benefits that may be derived from

consuming alcoholic beverages. Contravention of these regulations can lead to a fine or imprisonment of up to five years, or both.

Violence against women and children

The Department of Health has implemented a series of concrete measures to eliminate violence against women and children. To raise awareness of this grave social problem, the "16 Days of Activism on No Violence Against Women and Children Campaign" is held every year.

The Domestic Violence Act (Act 116 of 1998), was enacted in December 1999, and mass campaigns have been held to create community awareness of the Act. The MRC, through the South African Gender-Based Violence and Health Initiative (SAGBVHI), assisted the Department of Health to compile and adopt sexual assault policy and clinical management guidelines for the management of sexual assault cases. These were distributed to provinces for implementation.

Violence prevention

In order to assist in the prevention of violence campaign PHC professionals are being trained in victim empowerment and trauma support and violence prevention programmes in schools are also running in some provinces.

The Crime, Violence and Injury Lead Programme, co-directed by the MRC and the University of South Africa's Institute for Social and Health Sciences, aims to improve the population's health status, safety and quality of life.

Birth defects

It is estimated that 150 000 children born annually in South Africa are affected by a significant birth defect or genetic disorder.

The Department of Health's four priority conditions are albinism, Down's syndrome, Foetal Alcoholic Syndrome (FAS) and neural tube defects. The government hopes that implementation of policy guidelines for the management and prevention of genetic

disorders, birth defects and disabilities will reduce morbidity and mortality resulting from these conditions.

South Africa, through the Birth Defects Surveillance System, is a member of the International Clearing House for Birth Defects Monitoring Systems.

The Department of Health participates in regular meetings with NGOs to discuss collaborative issues.

Oral health

In 2005, the National Health Council approved the National Oral Health Strategy.

The strategy aims to improve the oral health of the South African population by appropriately preventing, treating, monitoring and evaluating oral diseases.

The Department of Health is also engaged in a process of amending the regulations on fluoridating water supplies to implement water fluoridation to prevent dental decay.

Chronic diseases, disabilities and geriatrics

The Department of Health identified the fight against chronic diseases such as cancer, hypertension, diabetes and osteoporosis as a priority area. The five-year plan was premised on the development of meaningful strategies for preventing diseases such as cancer with special emphasis on healthy lifestyles including physical activity. The department has embarked on an outreach promotion programme – Healthy Lifestyles – that advocate good diet, responsible alcohol consumption, regular exercise and avoiding tobacco use.

Healthcare professionals from each province have been trained in the management of asthma, hypertension, diabetes and eye health. This includes training in a health-compliance model to improve patient compliance. The department aims to reduce avoidable blindness by increasing the cataract-surgery rate.

Government introduced free health services for people with disabilities in July 2003. Beneficiaries include people with permanent, moderate or severe disabilities, as well as

those who have been diagnosed with chronic irreversible psychiatric disabilities. Frail older people and long-term institutionalised state-subsidised patients also qualify for these free services. People with temporary disabilities or a chronic illness that does not cause a substantial loss of functional ability, and people with disabilities who are employed and/or covered by relevant health insurance, are not entitled to these free services. Beneficiaries receive all in- and outpatient hospital services free of charge. Specialist medical interventions for the prevention, cure, correction or rehabilitation of a disability are provided, subject to motivation from the treating specialist and approval by a committee appointed by the Minister of Health.

All assistive devices for the prevention of complications and cure or rehabilitation of a disability are provided. These include orthotics and prosthetics, wheelchairs and walking aids, hearing aids, spectacles and intra-ocular lenses. The Department of Health is also responsible for maintaining and replacing these devices.

Occupational health

The introduction of legislation such as the Occupational Health and Safety Act (Act 181 of 1993), and the Mines Health and Safety Act (Act 29 of 1996), has done much to focus the attention of employers and employees on the prevention of work-related accidents and diseases. The Compensation for Occupational Injuries and Diseases Act (Act 30 of 1993) places the onus on medical practitioners who diagnose conditions that they suspect might be a result of workplace exposure, to report these to the employer and relevant authority.

The Medical Bureau for Occupational Diseases has a statutory function to monitor former mineworkers and evaluate present miners for possible compensational occupational lung diseases until they either die or are compensated maximally. The Compensation Commissioner for Occupational Diseases is responsible for the payment of benefits to miners and ex-miners who have been certified to be suffering from lung-related diseases contracted as a result of working conditions.

Mental illness

The promotion of mental health is one of the cornerstones of South Africa's health policy. The Mental Health Care Act (No. 17 of 2002) provides for the care, treatment,

rehabilitation and administration of mentally ill persons. It also sets out the different procedures to be followed in the admission of such persons to mental institutions.

There are 18 state institutions with some 10 000 beds. Private psychiatric hospitals and clinics cater for patients requiring hospitalisation for less severe psychiatric illnesses. General hospitals have some psychiatric beds. A further 7 000 beds are hired from the private sector for treatment of long-term chronic psychiatric and severely intellectually challenged patients.

In keeping with government policy of promoting care of the severely intellectually challenged within the community, these persons receive care-dependency grants to reimburse their families for personal expenses. Such grants allow persons to remain with their families in the community and are administered by the Department of Social Development. In recent years, the focus of treatment has shifted from medication only, except where necessary, to patient rehabilitation.

A comprehensive psychiatric community service is managed by health authorities countrywide. Where possible, consultations are undertaken by multidisciplinary teams comprising psychiatrists, psychiatric nurse practitioners, psychologists, pharmacists, social workers and occupational therapists.

According to the Mental Health Care Act (No. 17 of 2002), mental health is a health issue like any other. The purpose is to bring community services closer to mentally ill patients instead of simply placing them in institutions.

The Act focuses on a strong human-rights approach to mental health. It also makes the process of certifying a person more complex, and introduces a 72-hour assessment period before a person can be certified. Previous legislation relied on psychiatrists and doctors to make the decision, but the new Act recognises that there are not enough psychiatrists, especially in rural areas. According to the Act, a mental-healthcare practitioner may make such a decision. It also introduces a review board, comprising a mental-healthcare practitioner, a legal expert and a community representative to examine the certified

patient's case. The patient and the family will be able to appeal to the board, and all certified cases will be reviewed at least once a year.

The Mental Health Information Centre (MHIC) is situated at the Health Sciences Faculty of the University of Stellenbosch and has been in operation since 1995. It forms part of the MRC's Unit on Anxiety and Stress Disorders and aims to promote mental health in South Africa.

The MHIC is also actively involved in research, and conducts academic and clinical research trials for conditions such as obsessive-compulsive, panic, post-traumatic stress and generalised anxiety disorders. Research is also undertaken on mood, psychotic and dementia disorders, as well as other major psychiatric disorders. A key focus area is mental health literacy. The MHIC regularly conducts mental health attitude and stigma surveys among various populations and professional groups.

As part of a national campaign to educate and inform the public on mental illness, Mental Health Awareness Month was held in July 2005. Special attention was paid to encouraging healthy practices through education and training programmes, as well as to the development and maintenance of working conditions that support and contribute to the wellbeing of employees with mental problems.

Quarantinable diseases

The Port Health Service is responsible for the prevention of quarantinable diseases in the country. These services are rendered at sanitary airports (Johannesburg, Cape Town and Durban international airports) and approved ports. An aircraft entering South Africa from an epidemic yellow-fever area must make its first landing at a sanitary airport. Passengers travelling from such areas must be in possession of valid yellow-fever vaccination certificates. Every aircraft or ship on an international voyage must also obtain a pratique (authorisation) from a port health officer upon entering South Africa.

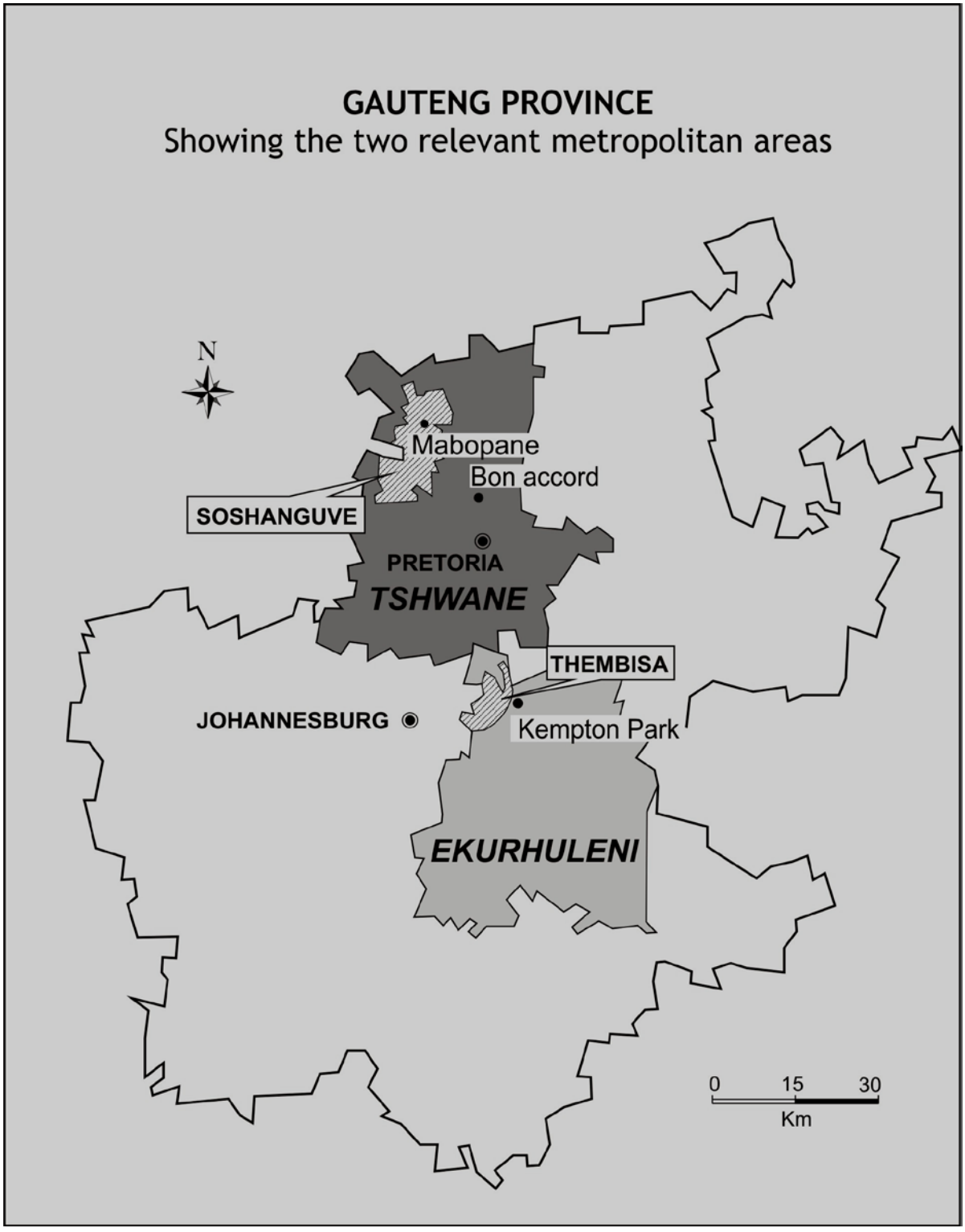
Now that the situation in the country as a whole has been described, an overview of practices in the two provinces in which the areas selected for the present study are located is required.

- The Gauteng Province

This province is the economic powerhouse of the country and highly urbanised. Though it is the smallest province in the country it is the most densely populated, with three metropolitan municipalities. The province had approximately 8.8 million people in 2001 (Census 2001). In terms of gender composition, there are more men than women in Gauteng, particularly in the 20 to 44 year age group. This can be explained by the perception that it is easier to find a job in Gauteng, which attracts males in this age group. Approximately 332,000 (3.8%) of Gauteng's population is disabled.

The largest metropolitan municipality in the province is Johannesburg, with a population of 3.2 million (3 255 810). The city of Tshwane's population was recorded as 1.9 million (1 985 984), while Ekurhuleni's population was 2.4 million (2 480 282). The province has witnessed significant population growth. In 1991 the population of the province (based on the old PWV boundaries) stood at roughly 6,36 million, growing to about 8,8 million in 2001.

In Gauteng, Thembisa and Soshanguve were selected to examine the health care services provided in this province. The following map shows the Gauteng health districts and the location of these areas:



The two Gauteng municipalities which are relevant for the present study are the City of Tshwane and Ekurhuleni Metropolitan Municipalities. Soshanguve is the northern sub-health district of the City of Tshwane and Thembisa is the northern division of Ekurhuleni

health district. The language statistics of these areas give an indication of the language in which health texts should be produced.

	Thembisa	Soshanguve	Total
Afrikaans	1333	680	2013
English	736	430	1166
IsiNdebele	8465	22391	30856
IsiXhosa	27679	6115	33794
IsiZulu	87323	43572	130894
Sepedi	120402	102503	222906
Sesotho	25117	18334	43451
Setswana	16652	47849	64501
Siswati	8054	9744	17798
Tshivenda	9326	7133	16459
Xitsonga	42014	52724	94738
Other	1585	456	2041
TOTAL	348687	311931	660619

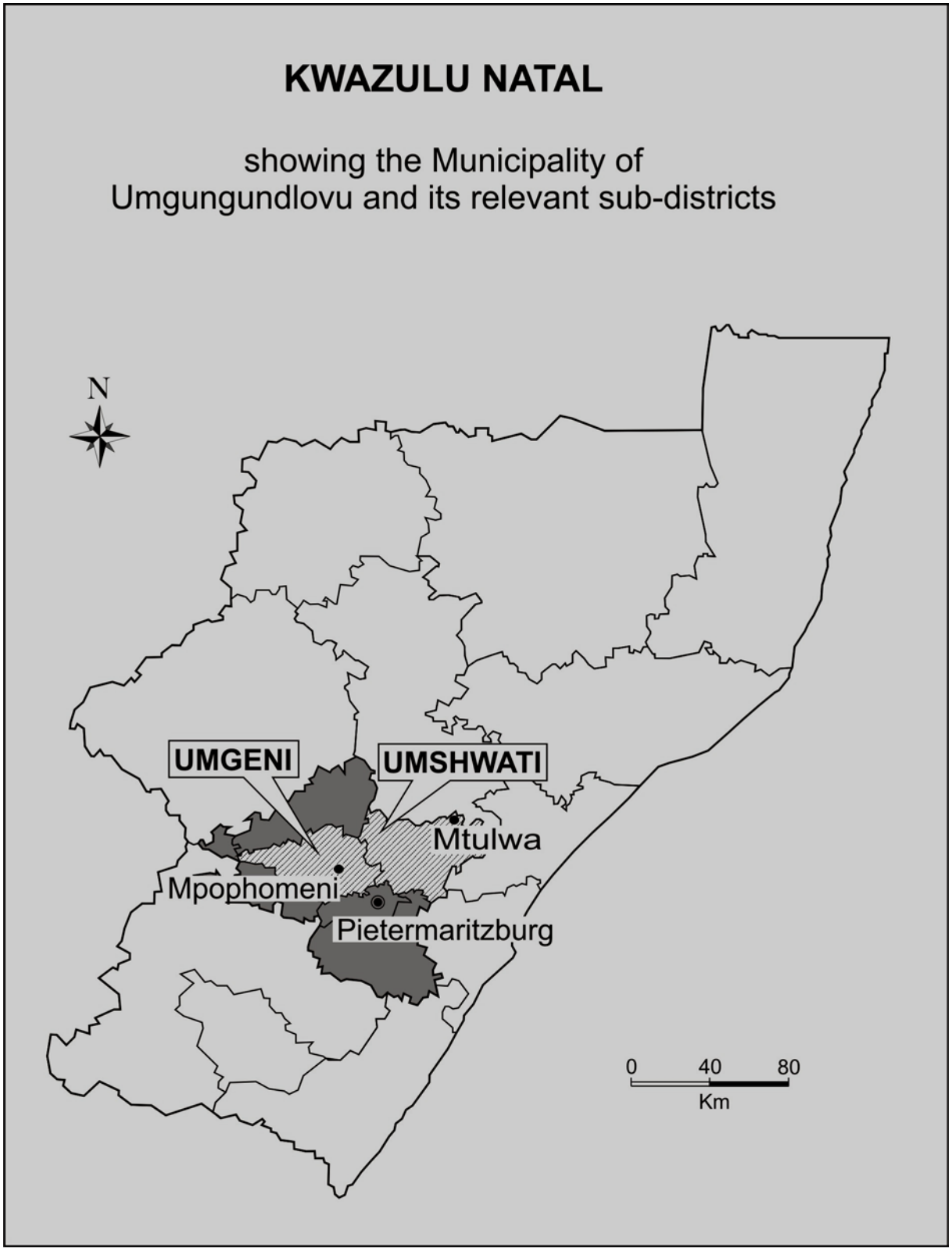
Language by geography for person weighted
(http://www.statssa.gov.za/extract.htm, as retrieved on 09 January 2007)

- KwaZulu-Natal Province

KwaZulu-Natal has more than 9,4 million people living on 92 100 km^2 of land. A total of 21, 9% of the province's population aged 20 and above have received no form of education (Census 2001). The principal language spoken is Zulu, followed by English and Afrikaans, which suggests that the language in which the health texts are produced, should portray the demography of the province.

The key strength of this province's economy is its trade and transport infrastructure and in 2003 it was the second-highest contributor to the South African economy, at 16, 5% of GDP.

The following map indicates the health districts of the province and the areas relevant for the present study: Mtulwa and Mpophomeni. The two areas are located in the uMshwathi and uMngeni health sub-districtcs of the uMgungundlovu Health District respectively.



The language statistics of the two areas are as follows:

	Mpophomeni	Mtulwa	Total
Afrikaans	5	0	5
English	133	10	143
IsiNdebele	22	3	25
IsiXhosa	112	0	112
IsiZulu	20722	1199	21921
Sepedi	28	0	28
Sesotho	89	0	89
Setswana	11	0	11
Siswati	7	3	10
Tshivenda	0	0	0
Xitsonga	0	0	0
Other	0	0	0
TOTAL	21131	1215	22345

Language by geography for person weighted
(http://www.statssa.gov.za/extract.htm, as retrieved on 09 January 2007)

2.3.1.2 Summary

In the preceding paragraph (2.3.1), "Western" or "Biomedicine" is defined as the scientific, empirical medical tradition usually associated with First World societies. Western doctors treat their patients on the basis of criteria such as weight, blood pressure, body temperature, and heart and respiratory rates. In other words the patients' cultural beliefs and behaviour are, as a rule, not considered. The National government's website provides useful information on this country's disease profile and the way the government responds to disease and ill-health.

Furthermore, an overview of the South African biomedical health care system which is based on the District Health System model allows us to examine health texts produced and distributed for specific areas of the country and thereby evaluate their effectiveness, given

the linguistic, cultural and geographical constraints. The graphs on language by geography as given above, show that Zulu speakers in Thembisa, Soshanguve, Mpophomeni and Mtulwa comprise 25%, 14%, 98% and 99% respectively. This entails that health texts produced in 'pure' language may be more acceptable in Mpophomeni and Mtulwa than in Thembisa and Soshanguve given the fact that the latter's Zulu may be influenced by the other languages spoken in the areas. The discussion of the traditional health care system follows below.

2.3.2 The traditional health care system

2.3.2.1 A review of the literature

Herselman (2001:29) states that non-western medicine refers to the system of health care of so-called "traditional" or indigenous societies in which the experience of a disorder or the sociocultural meaning of health and illness is emphasized; that unlike the disease-oriented approach of biomedicine, patients are

> not treated as individuals, but holistically, firstly as members of a specific kin-group, and secondly, as members of a larger community.

Though the South African National Health System is PHC-driven, it is still different from the traditional health care system, which treats patients as both social and cultural products. The former is still based on Western medicine while the latter takes into consideration the health beliefs and behaviour of patients. However, regarding traditional medicine as unscientific has its own problems, as noted by Bryant (1966:7): by stating that "it is by no means an exaggeration to affirm that comparatively the average Zulu can boast of a larger share of pure scientific knowledge than the average European".

When such a statement is made by a man whose culture is different from the Zulu culture, it is, indeed not an exaggeration. In the pages of his *Zulu-English Dictionary*, Bryant registered some 777 different plants, and in the case of 225 of these (apart from the charms) some medicinal use or property is indicated. Bryant (1966:84) further says that the native doctor, though still indeed groping in the darkness of profound ignorance, is nevertheless groping along quite in the right direction.

It is therefore apparent that traditional healers do contribute to the health of the South African population. Though one of the traditional health care system's basic principles is that knowledge about issues of health, ill health and treatment is often secret and the exclusive 'property' of the indigenous healers, there are concepts and principles which can be made known to the public.

Firstly, the training and education of traditional practitioners is not a secret. There is a clear distinction between two kinds of Zulu doctors: a medicine-man (*inyanga*) and a diviner (*isanusi/isangoma*). Krige (1965:298-303) adds a third category - the sky-herd, or heaven-doctor, who protects people from thunder, lightning and hail. He then describes an *inyanga* as the ordinary herbalist, who can treat disease owing to his knowledge of roots and herbs, who claims no special relation to the spirits, but simply dispenses his drugs without ceremony; the *isanusi* as a term that denotes that such a man is able to smell out or unravel things, while that of *isangoma* is derived from the fact that, when about to become doctors, they wander about the mountains and live on roots, etc; and that the heaven-doctor differs from other doctors in that he receives his power, not from the spirits, but by the aid of magic, by means of which he is able to control the heavens, preventing hail from destroying the crops and warding off lightning from the villages.

Bryant (1966:13) correctly notes that the medicine-man and the diviner "are commonly called an *inyanga*, though the medicine-man is sometimes distinguished as the *inyanga yokwelapha* (the doctor for curing), and the witch-doctor [the diviner] as the *inyanga yokubhula* (the doctor for divining)". Ngubane (1977:102) describes the training of an *inyanga* as follows:

> A man who wants to be an *inyanga* ("doctor") gets himself apprenticed to a practising *inyanga* for a period of not less than a year. At the end of his training he pays his master a cow or its equivalent in money, usually not less than R20. Sometimes a doctor passes on his skill to one of his sons who shows interest in medicine.

The diviner is one who has been called by the ancestors to train as a doctor of illness. According to Krige (1965:299),

> the profession of diviner is not hereditary; the spirits simply possess anyone whom they

> wish to be a doctor, and he becomes ill until he has undergone a lengthy initiation under the guidance of some or other doctor, usually pointed out by the spirits possessing him.

As regards the training of heaven-herds, Krige (1965:311) notes that "anyone who wishes to, may become a heaven-herd, and many people decide to take up the profession when they believe that they are specially favoured by the heavens, especially when they have had several narrow escapes from being struck by lightning.

According to Krige 1965:280), religion is part of the traditional healing system, as "there is hardly an aspect of Zulu life in which religion does not play its part, in warfare, in first-fruit ceremonies, in the different crises in the life of the individual, everywhere the ancestors are looked to for help and guidance and propitiated with offerings ... *UNkulunkulu*, [another alternative form being *uMvelingqangi*], then, is the First Cause and the creator of all things. Not only this, but he instituted the present order, gave men *Amathongo* or spirits of ancestors, doctors for treating disease, and diviners".

Thus, the Zulu health care system can only be understood by taking the religion of this nation into account. The source of ill-health, from the point of view of the Zulu people, is in line with beliefs held in non-western medical systems: illness often interpreted as being wilfully caused by some agency such as a god, spirit or another supernatural being, or by witches or sorcerers. Indeed, even in western societies there are people who believe that God punishes them by inflicting them with diseases. Some people believe that AIDS is a disease from God for promiscuous people. From the point of view of the Zulu, when the ancestors are believed to be the source of an illness, their intention is to punish a person for something he has done or failed to do. The ancestors may have felt neglected or wronged in some way.

According to Krige (1965:321) the *umthakathi* or wizard "uses his power for evil and against the welfare of society; he injures people's health, destroys life, prevents rain, occasions lightning, makes the cows become dry, and is the cause of all manner of misfortune". It is, therefore not surprising that even to date, there are people in South Africa who are killed by community members when accused of witchcraft. It should also be noted that beliefs concerning witchcraft and sorcery are common throughout Africa.

Three works written in Zulu were reviewed for the present study, namely Nyembezi & Nxumalo's *Inqolobane Yesizwe* (1966), Msimang's *Kusadliwa Ngoludala* (1975) and Ntuli's work (2006) on the biography of the well-known traditional healer, Sosobala Mbatha, entitled *NginguSosobala Mbatha* ('I am Sosobala Mbatha'). These works refer to health issues. The latter consists of spoken texts by Sosobala Mbatha himself. These works should be compared with Dr A. Bryant's *Zulu Medicine and Medicine-men* (1966) because the latter, though written in English, is not only about medicines used by Zulu people, but also give valuable information about the amount of medicine to be taken by a patient suffering from a disease or health problem.

To start with, some health issues as raised in *Inqolobane Yesizwe* are considered. The authors deal with these issues under the heading of culture by considering the stages of human life: before birth, birth stage, puberty, adulthood and death. It is noted that the authors use past tense in their discussion of how the Zulu people deal with health issues. The reason for this position may be derived from the following statement:

> Khona kuliqiniso ukuthi kukhona amasiko okuthi ngokuhamba kwesikhathi angabe esaba mahle, noma angabe esafeza injongo leyo ayemiselwe yona (Nyembezi & Nxumalo 1966:100)
>
> (Indeed it is true that there are those customs which, with the passage of times, become bad, or fail to fulfil the purpose they were meant for).

The implication is that the authors believe that some of the ways used by Zulu people in dealing with health problems are now obsolete.

Some of the health issues as raised by the authors are discussed in the present study. However, the position adopted in this study is that these health practices are still followed by the Zulu people, though it requires another research project to determine which cultural practices are now obsolete. Traditional medicine can also be regarded as still relevant in the lives of Zulu people because the majority of the South African population consult traditional healers. The health practices discussed in this study, as dealt with by the authors of *Inqolobane Yesizwe*, are summarized and described below.

Since children are valuable to the Zulu, a married woman who cannot conceive is given

medication. After conception, it is ensured that the baby becomes beautiful and calm, for example, by not allowing the woman to wake up early, because by doing so she may, inter alia, cross the tracks of witches.

Just before giving birth to her child she is given medication called *isihlambezo* to facilitate delivery, or procure it when delayed. *Isolezwe* (the Zulu daily newspaper) had an article in its June 12 2007 issue on research on the use of *izihlambezo* (plural of *isihlambezo*) conducted by the Arkansas University of America. This research was conducted in Uganda, South Africa and Malawi and was led by Prof Foote Gerald from 1999. Since this research focused on pregnant women with HIV, the results thereof were presented at the World Aids Conference at the International Convention Centre in Durban in June 2007. Prof Gerald is reported to have said that if an HIV-positive pregnant woman on *izihlambezo* also uses antiretrovirals (ARVs) or medication to prevent passing the virus to her unborn child, the latter is made ineffective by *izihlambezo*. She reports that *izihlambezo* examined contained strong ingredients which are aimed at making the baby active when it is about to be given birth to. This, according to the professor, interferes with the effect of the ARVs aimed at reducing the chances of passing the virus to the unborn child. She also acknowledges that *izihlambezo* are aimed at preventing problems encountered by women during child birth, by softening the muscles of the birth canal.

The Zulu also administers medication to determine the sex of the unborn. To do so, the woman is given a concoction containing the root of the beautiful orange lily (*intebe*). This plant has some roots resembling the shape of the female reproductive organ, while others exhibit that of the male. If a baby boy is sought, a concoction of the roots resembling a male organ is taken by the wife before coition.

Although children are valuable to the Zulu, too many are unwanted. In that case an animal would be slaughtered to thank the ancestors for the gift of the children. The widely held belief is that the ancestors do respond and the woman would no longer have other babies.

One practice which is relevant to the present study, is breastfeeding. The authors of *Inqolobane yesizwe* state that a mother should stop breastfeeding her baby when it is 18 months old. If she smears aloe over the breast, the baby stops suckling because of the

bitter taste.

These authors state that in a Zulu home, just before bed-time, protective medicines are sprinkled to chase away evil things and to catch witches. Such protective medicines, prepared by an *inyanga*, include *imfingo* (a small Cycadacea, or precipice fern with large red pineapple-like fruit, *uphindamshaye* (species of wild granadilla), Adenia gummifera and *intolwane* (species of veld shrub, Elephantorhiza Burchellii, also producing a light-brown dye).

The *inyanga* also provides resistance to members of a Zulu home so as not to contract diseases easily. Amongst others, the *inyanga* sometimes applies *ukugquma* to such patients. This practice refers to the boiling of certain medicines in a pot, over which the patient sits, covered by blankets, until he is thoroughly steamed out.

It is also a tradition for a Zulu to take *ubulawu* (love potion) and administer it as an emetic in the morning. Young men would use the roots of *umaguqu* (small bush, Maesa) to improve their appearance and *ingwavuma* (species of bushveld tree, Pseudocassine) for popularity among girls. The *inyanga* also uses an emetic for patients who are sick, those who have been poisoned, and those with chest complaints and problems related to impotency and infertility.

Furthermore, the *inyanga* prepares *izigqabo* to be smeared on the forehead in order to be feared or to look attractive. These medicines are prepared with parts of fearful animals together with those of attractive animals.

These health practices indicate that the Zulus know how to deal with health issues experienced before the child is born until adulthood. The problem with this information is that it is not produced and distributed like in the case of the health texts produced and distributed by the departments of health and NGOs. In fact, the works referred to in this chapter are for academic purposes; they are not written for the general public. Their value lies in the fact that they contain information held by traditional healers which the patients access through direct contact with the healers. It is important, in the present study, to note that patients who read the texts produced and distributed by the government departments

and NGOs, also have access to the information about how to deal with health issues in a traditional setting.

The next work to be considered is that of Prof CT Msimang (*Kusadliwa Ngoludala*). Msimang (1975) emphasises the process of *ukubethela* (driving in or setting up a medicated stake) which has a threefold function: to ward off lightning, evil spirits or diseases. Msimang mentions that the difference between these types of *ukubethela* lies in the types of medicines used. In the present study *ukubethela* for lightning and evil spirits is not described in detail because the corpus of texts analysed in chapter 5 does not include texts on lightning and on evil spirits. However, it is mentioned here in an attempt to achieve completeness. Therefore, this study focuses on *ukubethela* used for diseases.

Ukubethela for disease means that an *inyanga* uses medicines for *umbhulelo* (a certain poison or injurious concoction placed in a kraal or on a path by a witch, in order to cause fatal disease or sudden death to those who step on or over it or come in contact with it), *isichitho* (a charm used to cause estrangement) and *ilumbo* (a disease which men get from a spell or charm put on women against men). To ward off *umbhulelo,* the *inyanga* must know the ingredients of its concoction. The *inyanga* must also know how to cure *ilumbo* and to remove *isichitho*.

Msimang (1975) goes further to discuss three types of medicines used by Zulu people: *ubulawu* (which he defines as a strong medicine taken as an emetic for cleaning the blood, removing slimy saliva from the chest, which also removes bile and unpopularity from a person and thereby turns the blood of the person pleasant to make him attractive and popular), *imbiza* (a stomach medicine administered as an enema) and *intelezi* (a medicine which is sprinkled to protect the home from *amalumbo* (plural of *ilumbo*), *imibhulelo* (plural of *umbhulelo*) and medicines of witches. The three medicines – *ubulawu*, *imbiza* and *intelezi* – are prepared with barks, roots, leaves or bulbs of plants.

The author then gives a list of these types of medicines and their usage. Furthermore, he gives other medicines which help in curing *imbo* (malaria) and removing bile. The removal of bile is important because, as noted by Bryant (1966: 52):

With the natives the bile is held to be the cause, not only of the stomach and bowel disorders, but even of the chest inflammations and cough. The doctor's attack is therefore vigorously directed against this feature, and for the purpose he uses emetics, enemas and purgatives.

Bryant (1966) equates the view of the Zulu medicine man on the treatment of disease with that of the immortal Hippocrates, who held that the blood, phlegm and bile were the primary seats of disease and that treatment should therefore be aimed at removing from the system whatever is abnormal in these bodily fluids. Though Bryant (1966:7) maintains that "the Zulu native is sadly lacking in the equipment requisite for the civilised life", he admits that some of the Zulu medicines are effective. These include bulbs of the plant *injobo* (species of swamp lily) for round worms, *inkomankoma* (species of Nephrodium) for expelling tape-worms, *umondi* (Chlorocondon whitei) for indigestion, *umathunga* (Cyrtanthus obliquus) and *ungwaleni* (Cluytia pulchella) for healing fractured bones, snake antidotes of the Zulu medicine man and vermin-killers.

Msimang's work adds to the body of knowledge available about the medicines used by the Zulu people. Such knowledge is important in this study in order to understand the effectiveness of the health texts produced by the government and NGOs because it may shed light on why certain texts may be rejected by target readers or why certain patients would consult traditional healers before going to doctors trained in western methods. For example, if a patient believes that he/she has stepped over *umbhulelo,* the person would not be expected to be rushed to hospital, where health practitioners are not trained to remove *umbhulelo*.

Msimang (1975:24-25) also notes the importance of the head of the family in dealing with family problems. He states:

> *Abambisene nabo inkosana yozalo, abafowabo noyisekazi, unina uma esaphila, kanye nesithembu sakwakhe. Uma amadodana akhe esethethe, nawo anezwi ezindabeni zokuphathwa komuzi. Nokho bonke laba abanqumi, umanqamulajuqu ngusokhaya. ... Uhlonishwa nje naye kuningi alindelwe ukuba akufeze. Kufuneka athethe amacala alamule imibango eyethulwa kuye ngabomuzi wakhe.*

> (Those with whom the head of the family collaborates are the eldest son of the descendents of a common ancestor, his brothers and aunts, his mother if she is still alive, and his wives. If his sons are already married, they also have a say in the affairs of the family. But all these people do not take decisions; the final decision is his… Though he is respected, he also has to do many things. He must give judgement on cases and make peace when there are disputes brought to him by members of his family).

This implies a conflict resolution mechanism in a Zulu family setting. This is important, because modern problems such as domestic violence could be dealt with in this manner by Zulu families.

Lastly, Ntuli's biography of the well-known Zulu *inyanga*, Sosobala Mbatha, is significant because in this publication we find an *inyanga* himself telling us about what he does as a healer. A full chapter is dedicated to medicines which this healer claims can be used to cure certain diseases which do not require any medical skills. He mentions health problems such as *umkhuhlane* (a general term for all sicknesses which are accompanied by fever or coughing, such as the cold, a cough, influenza, pneumonia, pleurisy, malaria), epilepsy, lung diseases such as TB, AIDS, *ishashazi* (a blister under the tongue of a baby), *inyoni* (disease of small babies) and confinement of pregnant women.

With regard to *umkhuhlane,* Mbatha refers only to that which he says is caused by an aloe and how it is cured. It is noted that mention is also made of diseases which are a serious challenge to the government such as TB and AIDS. What is crucial is the fact that the late Mbatha, who represents this country's traditional healers, would refer his patients to doctors trained in western methods. Mbatha, therefore, did not have a problem in collaborating with health practitioners trained in western methods. He argues as follows:

> *Kulesi sikhathi esikuso sesinezifo eziningi. Sengathi umntwana uma engaphatheki kahle ngingasheshe ngitholane naye, ngizombona ukuthi akaphathekile nje kahle kwenzenjani: uphethwe yinyoni noma yipuleyiti yini. Uma njalo kungokwesilungu, kubonakale ukuthi uqubukile njengemikhuhlane le emikhulu, uma esefike kimi ngimbone ukuthi useyashisa kakhulu sekumngene kakhulu, angingabazi, futhi ngiyeka phansi ezami ngimthathe ngimphuthumise esibhedlela, bamhlabe ngenalidi bamtholise le mithi yabo eluhlaza omaphanado aphuze kwehle ukushisa kuphele ukuqubuka (ibid.:87)*

> (These days we have many diseases. I wish to have contact with a baby who is not feeling well immediately, to see why s/he does not feel well: is it *inyoni*. If it is the disease of the west, and when it appears to be a rash such as *umkhuhlane*, I do not hesitate, and I drop everything and take it to the hospital, where they will inject it and give it the blue/green medicine (Panado) to drink to reduce the high temperature and get rid of the rash).

It appears that the traditional healer is aware of his competence – he knows where he is effective and when he should refer his patients to those who know better. This is important because health care providers would be willing to co-operate with others if they knew their capabilities and shortcomings. The following section focuses on the possibility of a co-operation between western health practitioners and traditional healers.

2.3.2.2 Co-operation between western health practitioners and traditional healers

The co-operation between traditional healers and doctors trained in western methods seems to be taken seriously by the present government. In the daily Zulu newspaper (*Isolezwe*, 23th October 2003), traditional healers and doctors trained in western methods were said to have signed a co-operation agreement at the Nelson Mandela School of Medicine in Durban. This is a challenge because of the different perceptions the public have of traditional methods of healing. For example, in an article in *Ilanga Langesonto* (the Zulu Sunday newspaper) on 19 August 2007, the public is said to have criticized such co-operation by saying that traditional healers are dirty and that they include human organs in their medicines. The public expressed this opinion when given an opportunity to comment on the Traditional Health Practitioner Bill in the Legislature in Pietermaritzburg.

In response to this accusation, the President of traditional healers in KwaZulu-Natal, Sazi Mhlongo, said:

> *Asazi ukuthi yini indaba basibize ngamanuku ngoba thina uma simba umuthi entabeni siyawugeza ngaphambi kokuwupheka noma ukuwusebenzisa, angazi ukuthi bakhuluma ngabuphi ubunuku. Sithanda ukuthi bangalokhu bethi abelaphi bendabuko bathaka amakhambi ngezitho zabantu, kufanele bakwazi ukuhlukanisa thina nabathakathi*

> (We do not know why they say we are dirty because when we dig up medicines in the mountains we wash them before we cook or use them. I do not know which untidiness they are referring to. We would want them not to continue to say traditional healers mix medicines with human organs. They must know the difference between witches and traditional healers).

In an issue of *Isolezwe* (9th June 2005), there was an article which quoted Professor Anthony Mbewu of the Medical Research Council as having revealed that traditional medicines would be recorded in the books which control the provision of medical care in this country. Traditional healers would also have their official shops where they will sell their medicines. On researching traditional medicines the Professor stated:

> *"Ukucwaninga le mithi yendabuko akusho ukuthi asinaso isiqiniseko sokuthi iyasebenza, kodwa sizama ukuthi lo makhakha wezokwelapha ube nendlela ehloniphekile okusetshenzwa ngayo".*
>
> (Doing research on these traditional medicines does not mean that we are not sure of their effectiveness. Instead we are trying to make this system of medical care provision work in a respectable way).

An article in the same paper (*Isolezwe* 03-09-2007) referred to an announcement by the KwaZulu-Natal Health MEC, Mrs Peggy Nkonyeni, who said that traditional healers would be taught to write. This, she said, would enable traditional healers to keep patients' files. On the traditional healers' admission that no one is an expert in curing all diseases, the MEC said this would make it easier to co-operate and help in the implementation of the referral system.

2.3.2.3 Summary

As argued in paragraph 2.3.2.1 above, indigenous medicine is the system of health care of so-called "traditional" societies in which the experience of a disorder or the socio-cultural meaning of health and illness is emphasized. In this system a more holistic approach is followed that considers health beliefs and behaviour in the treatment of patients. Furthermore, cultural history or tradition provides a significant means for coping with contemporary situations.

Scholars, as discussed in paragraph 2.3.2.1 above, acknowledge the services of traditional healers. It is also noted that the government recognizes the services of traditional healers and shows this by advocating co-operation between western doctors and traditional healers. This apparent co-operation between the traditional medical and the western medical systems suggested that the latter system should not be seen as discriminating against the traditional methods of healing. It also implied that the health texts produced by the government and NGOs had to reflect this new approach to the provision of health services.

2.4 Conclusion

In this chapter "Western" or "Biomedicine" was discussed and it was noted that Western doctors treat their patients on the basis of criteria such as weight, blood pressure, body temperature, and heart and respiratory rates. In other words the patients' cultural beliefs and behaviour are seldom considered. By contrast, the traditional health system takes into account the beliefs and behaviour of patients, which entails constraints in trying to make the health texts, as produced by the government and NGOs, accessible to the target (African) readers. Furthermore, the distribution of the South African population in different geographic regions may lead to further linguistic constraints.

The next chapter deals with the linguistic constraints in trying to make health texts accessible to the target readership.

CHAPTER 3

TEXT-LINGUISTIC AND TRANSLATION-THEORETICAL PERSPECTIVES

3.1 Introduction and objectives

In chapter 2 an overview of the western and traditional health care systems coexisting in South Africa was presented. In that discussion an attempt was made to show that the translated Zulu health texts in the corpus compiled for this study are produced under cultural and geographical constraints, which may lead to inaccessibility. This chapter deals with linguistic constraints by considering an overview of those linguistic aspects which make a text accessible. Text typology will also receive attention in an attempt to show that the translation of health texts or public information material may require certain methods and strategies to ensure accessibility.

The chapter begins by, first discussing text evaluation methods which were relevant for the pilot study, followed by an overview of components of textual communication and translation, including the additional concept of accessibility, which are applicable to this study. Accessibility is discussed as an umbrella term for aspects of readability. The last section deals with corpus-based methodology in translation studies, with a focus on corpus tools which were used in the analysis of data relevant for the present study.

3.2 Text evaluation methods

Schriver (1989:238) distinguishes three general classes of tests for evaluating text quality: (i) text-focused, (ii) expert-judgement-focused, and (iii) reader-focused methods. These methods can be used before final production of a text to determine whether or not the text will realise its intended goal(s) and what improvements should be made to a text to achieve these goals. In this case they are referred to as *pretest* methods. However, they can also be used if a text is to be revised after the produced text has been used for some time. That is, *summative* evaluation of the texts.

A brief discussion of these methods follows below.

- Text-focused evaluation methods

These are methods "which operate by asking a person (or sometimes a computer) to examine a text, attend to a set of text features, and assess text quality by applying principles or guidelines that have been developed from ideas (and sometimes from research) about how readers at a certain level and background will probably respond" (Schriver 1989:241). The methods include readability formulas and checklists. In the present study these methods are described for the sake of completeness; they were not used by the researcher.

- Expert-judgement-focused evaluation methods

These are methods where individuals with high knowledge about the text, its audience, or the writer are asked to evaluate the text. Expert-judgement evaluation includes peer reviews and editorial reviews (Schriver (1989:244). Any evaluation received from experts on the health texts would be considered to be an evaluation provided by using this method.

- Reader-focused evaluation methods

These "are procedures which rely on feedback from the intended audience" (Schriver 1989:247). The methods, as listed by De Jong and Schellens (1997), are: portfolio method (originally developed as a tool for pre-testing advertisements), target-plan method (for pre-testing audiovisual advertising material, though it can be used for persuasive texts), reading behaviour registration (a variety of methods), close test (for assessing comprehensibility of texts), comprehension test (questions used to measure the degree of text comprehension by readers), performance test (measures the accomplishment of real-world tasks by participants who use the document), user protocols (adaptation of the think-aloud technique), text evaluation questionnaire (may be focused on any type of text characteristic), focus groups (useful for texts aimed at persuasion), attitude questionnaire (determines whether the text succeeds in influencing readers' beliefs, attitudes, and behavioural intentions), motivated-choice technique (may be used when two or more versions of a text are available, which requires choosing between the two), plus-minus method (can be used for all sorts of texts), single stopping technique (reveals various kinds

of problems, particularly related to stopping behaviour), and the reader protocols (another adaptation of the think-aloud technique).

De Jong and Schellens's (1997) model (the focused evaluation methods) was used in collecting data from the respondents for the present study (cf. Chapter 4).

3.2.1 De Jong and Schellens's model

In De Jong and Schellens' (1997) model, the document characteristics which can be evaluated are first given. Then the possible functions of evaluations are considered, followed by methods appropriate for evaluating various document characteristics. These authors mention six text characteristics which can be evaluated to determine its quality: selection, comprehension, application, acceptance, appreciation and relevance and completeness. A summary of the characteristics described by De Jong & Schellens (1997) follows below.

- Selection

Firstly, target readers must get acquainted with the information in the text. The authors hold that there are two levels at which questions about the selective behaviour of readers can be asked. The first concerns the text as a whole: Is it sufficiently attractive and interesting ─ both in general appearance and expected content ─ to be selected by target readers to read? The second level concerns the reading behaviour. "In documents that are primarily informative or instructive or that are for a strongly segmented audience, the main question is whether the readers can easily find the information they are looking for" (De Jong and Schellens 1997:409-410).

This document characteristic is important for the present study because the Zulu target readers have to choose between reading the health texts in their home language or in English. The pilot study uncovered the language preferences of the target readers, as presented in chapter 4.

- Comprehension

De Jong and Schellens (1997:410) argue that there are several options for testing the

readers' comprehension of a text. These authors state that one option is to try to obtain an overall judgement about a document's comprehensibility by using a method called 'cloze test', which produces a cloze score that indicates only how comprehensible the text is. This method does not point out specific comprehension problems that need to be resolved. Another option, argue these authors, is to use a comprehension test to determine whether the essential information comes across.

Though these methods were not used to collect data in this study, the target readers of the Zulu translated health texts are expected to understand the information given. The discussion on readability below presents some aspects which may make texts easy or difficult to read.

- Application

De Jong and Schellnes (1997:411) state that "if a text is intended to help the readers perform some task, application of the information will be an essential topic for evaluation". In the case of instructional texts, such as user manuals, target readers must be able to apply the information given. In the present study, instructions given in the health texts require students to be able to apply information in their daily lives.

- Acceptance

This is different from acceptability as discussed under components of communication below. It relates to the fact that "the intended readers should find the statements in the text as acceptable and credible as possible. Behavioural advice must be seen to be relevant and realistic; factual statements must be considered true" (De Jong & Schellens 1997:404).

This is important for the present study since the Zulu target readers have their own health care systems (cf. Chapter 2) which can lead to the rejection of certain texts when their contents are in conflict with the Zulu beliefs.

- Appreciation

This refers to the requirement that the information should be presented in a way that should be appreciated by the readers. According to De Jong and Schellens (1997:411)

questions about the acceptance, the appreciation, and the relevance/completeness of information require methods using verbal self-reports. Besides the nonspecific methods … an obvious method is a text evaluation questionnaire, in which readers can be asked to evaluate a wide variety of text features.

This text evaluation method was used in the present study, as discussed in the next chapter. The health texts are expected to be appreciated by the target readers. In this study it includes readers' assessment of figures, illustrations, and layout. The aspect of illustrations is also covered under aspects of readability below. Furthermore, the readers' appreciation of the terms or expressions as used in the health texts need attention.

- Relevance and completeness

This entails that a text must contain the right information for its intended readers. Such information must be new and relevant to the readers. Furthermore, it should be complete ─ no question should remain unanswered.

Questions on characteristics are aimed at achieving certain goals. De Jong and Schellens (1997:405) mention three goals for evaluating these texts characteristics: (i) verifying the quality of a document, (ii) troubleshooting and (iii) facilitating a choice between alternatives. The goals are briefly described below.

- Verifying the quality of a document

By using a technique such as a cloze test, the goal can be to "support a 'go/no go' decision about a text (Is it good enough to put into circulation?). Another reason may be to check whether certain doubts about the quality of the document are justified (De Jong and Schellens 1997:406).

This evaluation function was not relevant for the present study because the study dealt with texts which had been in circulation for some time.

- Troubleshooting

This is "aimed at locating and diagnosing the problems that readers have with the text … is primarily intended to facilitate the revision of a document" (De Jong & Schellens

1997:407). The examination of components of textual communication (as discussed below) and the aspects of readability together with the interviews the researcher had with the respondents (Chapter 4), are aimed at troubleshooting.

- Choice supporting

This is "aimed at identifying the pros and cons of alternative forms of presentation … is only useful if a choice has to be made between two or more equivalent ways of presenting information, such as choices between styles" (De Jong and Schellens 1997:407). In the present study, the target readers had a choice between the health text as presented in their home language or in English.

The methods adopted for evaluating the selected health texts for the present study are given in Chapter 4. They are used to evaluate the texts by focusing on the text characteristics as presented above.

3.2.2 Summary

The discussion in this section dealt with De Jong and Schellens's (1997) model of text evaluation: a reader-focused text evaluation method. This model was used in the evaluation of the texts selected for the present study during the pilot study.

The following section deals with components of textual communication and translation.

3.3 Components of text communication and translation

De Beaugrande and Dressler (1981:3) mention seven "standards of textuality" or "constitutive principles of textual communication" which, when they are not satisfied, make a text non-communicative: cohesion, coherence, informativity, intentionality, acceptability, situationality and intertextuality. These authors (1981: 11) further mention three "REGULATIVE PRINCIPLES … that control textual communication rather than define it", namely efficiency, effectiveness and appropriateness.

Hubbard (1989:88) maintains that all ten of these principles should be regarded as

components of textual communication "because of problems with De Beaugrande and Dressler's application of the concept of 'constitutive principle'". Hubbard (1989:89) justifies his position by criticising De Beaugrande and Dressler's (1981:3) constitutive definition of a text, for example, by stating that texts need not be cohesive and that the other standards, for example, intertextuality, do not necessarily apply to all texts.

Being convinced that in the real world almost all writing is communicative, Hubbard (1989:90) prefers to talk of "texts that communicate with varying degrees of success and the relevant question … (should therefore be): 'What distinguishes the more communicative from the less communicative text'?

This is also the position adopted in the present study: that the translated Zulu texts communicate with varying degrees of success. That is, De Beaugrande and Dressler's seven constitutive as well as three regulative principles should be regarded as ten components of textual communication. Both De Beaugrande and Dressler (1981) and Hubbard (1989) dealt with these principles from a purely text-linguistic perspective. Kruger (2000) applied these ten text-linguistic principles to the analysis of translated drama texts and therefore her input in this regard is acknowledged. Furthermore, in this study an eleventh principle of communication is added: accessibility. That is, translation scholars/translators should take eleven principles of communication in mind.

The first principle to receive attention is cohesion.

3.3.1 Cohesion

De Beaugrande and Dressler (1981:3) define cohesion as the "ways in which the components of the SURFACE TEXT, i.e. the actual words we hear or see, are mutually connected within a sequence". Baker (1992:180) defines cohesion as "the network of lexical, grammatical and other relations which provide links between various parts of a text … is a surface relation; it connects together the actual words and expressions that we can see or hear". In other words, as a grammatical and lexical relationship within a text or sentence, cohesion refers to the links that hold a text together and give it meaning.

Baker (1992:180-212) explains the relevance of Halliday and Hasan's (1976) five main cohesive devices in English (reference, substitution, ellipsis, conjunction, and lexical cohesion), in detail.

- Reference

Baker (1992:181) says that reference is "traditionally used in semantics for the relationship which holds between a word and what it points to in the real world". That is, in a text, like in the present study, reference refers to the relationship between a word or linguistic expression and the object or idea it refers to.

Baker (1992) further states that pronouns are the most everyday reference items in English as well as in other languages. In Zulu, the third-person pronouns (he/she) are expressed by the concord *u-*. In a Zulu sentence the relationship of words to the governing noun is shown by prefixes, which bring about agreement (concordance) in the sentence. The relationship between the subject and the verb is termed subject concord. The plural is expressed by the concord *ba-* as shown in the following examples:

U*phuza umuthi*. (**He**/**She** drinks medicine)
Ba*phuza umuthi*. (They drink medicine)
U*funda incwajana yezempilo*. (**He**/**She** reads a health booklet)
Ba*funda incwajana yezempilo*. (**They** read a health booklet)

It should also be noted that in a Zulu sentence gender differentiation for the third person is not expressed by the subject concords. These concords (*u-* and *ba-*) are used to refer back to a third person or third persons which has/have already been introduced (or is/are about to be introduced) into the discourse.

Like in English, items such as *this* and *that* may be used as cohesive devices in Zulu. The following example is taken from a parallel text entitled Sexually Transmitted Infections (STIs)/*Izifo ezithathelwana ngocansi* (STIs):

Zulu:
Kungaba noketshezi (oluphuzi, oluluhlaza okotshani oluningi), izilonda, izinsumpa

namashashazi ezithweni zangasese. ***Lokhu*** *kungaba buhlungu noma kungabi buhlungu.*

English translation:
Sometimes there is an abnormal discharge (yellow, green, profuse) and sores, warts or blisters around the sex organs. **These** can be painful or painless.

The use of the demonstratives in the Zulu text is regarded as poetic. The article *the,* which may be used as a cohesive device in English, is not found in Zulu. In Zulu a noun has no device to differentiate between the articles "the" and "a" as used in English. In a text the noun *umlimi* can be "a farmer" or "the farmer", depending on the context in which it is used.

Baker (1992:182) also refers to "another type of reference relation which is not strictly textual", namely co-reference. Baker (1992:182) gives an example of a chain of co-referential items: *Mrs Thatcher → The Prime Minister → The Iron Lady → Maggie*. This device is commonly used in written texts. In Zulu: *UMengameli wezwe → uMnu Thabo Mbeki → uZizi* (Lit. The President of the country→ Mr Thabo Mbeki → *Zizi* (praise name))

- Substitution and ellipsis

The use of substitution as a cohesive device includes substitutes like *do, one* and *the same* (Baker 1992:187). Baker's (1992:187) English examples of these items and their Zulu version show that they are not common in the latter. The Zulu versions below do not imply that the English sentences would be translated in the same way by all translators.

(a). English: You think Joan already knows? ─ I think everybody *does*.
Zulu: *Ucabanga ukuthi uJoan useyazi?─ Ngithi wonke umuntu use(yazi)?* (Lit. You think Joan already knows? ─ I think everybody already *knows*).

(b). English: My axe is too blunt. I must get a sharper *one*.
Zulu: *Imbazo yami ibuthuntu kakhulu. Kufanele ngithole ebukhali.* (Lit. My axe is too blunt. I must get *one which is* sharp.

(c). English: A: I'll have two poached eggs on toast, please
B: I'll have the same.
Zulu: A: *Ngicela amaqanda amabili aphekwe ngamanzi kuthosi.*
B: *Nami futhi.*
(Lit. A: I ask for two poached eggs on toast.
B: Me too.)

These examples show the unique devices Zulu uses for the English *do*, *one* and *the same*. Example (a) shows that repetition is preferred, in example (b) a relative is employed and example (c) implies avoidance of repetition, given the context.

Baker (1992:187) describes ellipsis as a device that involves the omission of an item, which entails leaving something unsaid with the expectation that it would be understood. Again, the Zulu version of Baker's (1992:187) English examples will be aimed at showing the way Zulu employs ellipsis. Other Zulu translators may have their own version, but the difference between the use of ellipsis in English and Zulu will become clear.

(a). English: Joan brought some carnations, and Catherine some sweet peas. (Ellipted item: *brought* in second clause).

Zulu: *UJoan ulethe izimbali ezinephunga elimnandi, kanti uCatherine ulethe uphizi onuka kamnandi.* (Lit. Joan brought carnations, and Catherine brought sweet peas. Note that *brought* in the second clause not is ellipted).

(b). English: Here are thirteen cards. Take any. Now give me any three. (Ellipted items: *card* after *any* in second clause and *cards* after *any three* in third clause).

Zulu: *Nanka amakhadi ayishumi nantathu. Thatha elilodwa. Mina nginikeze amathathu.* (As in English, the ellipted items are *card* and *cards*). (Lit. Here are thirteen cards. Take any. I (for emphasis) give me any three).

(c). English: Have you been swimming? ─ Yes, I have. (Ellipted items: been swimming in

second clause).

Zulu: *Ububhukuda?* ─ *Yebo*. (Have you been swimming?─ Yes.). (Ellipted items: the whole phrase 'I have been swimming' in the second clause).

The first example shows the preference for repetition in the Zulu version; the second example shows that in Zulu, as in English, ellipsis can be employed; and, the third example indicates that in Zulu, a positive response to a question implies accepting everything that has been said. In the end, Baker (1992:187) admits that

since substitution and ellipsis are purely grammatical relations which hold between linguistic forms rather than between linguistic forms and their meanings, the details are highly language-specific.

- Conjunction

Baker (1992:190-191) describes conjunction as a device which "involves the use of formal markers to relate sentences, clauses and paragraphs to each other". There are many issues which Baker (1992:192) raises in connection with conjunction. But, what is relevant for the present study is that a language gives preference to the type of conjunction it uses as well as the frequency with which it uses such items. Since conjunction is a device for signalling relations between chunks of information, conjunction is naturally bound up with both the chunking of information, how much to say in one go, and how the relations between such chunks of information are perceived and signalled.

Doke (1930: 271) observes that in Zulu "most conjunctives have an intimate connection with the form of the verb which follows them; and that the verb is placed in the subjunctive mood, after certain conjunctives, and in the participial mood after others". The subjunctive mood as used to express **want**, **desire**, **purpose** and **commands** are introduced by the conjunctions *ukuthi*, *ukuba*, *ukuze*, which are translated by "that/in order that/so that" (Taljaard & Bosch 1988: 132). The examples as given by Doke (1930:274-275) are the following:

(a). *Ngithanda ukuthi uhlale lapha*. (Lit. I like that you stay here.)
(b). *Sifuna ukuba bazilethe*. (Lit. We want in order that they bring them.)
(c). *Uhlabe inkomo ukuze badle*. (Lit. He slaughtered a beast so that they eat.)

Taljaard & Bosch (1988: 127) note the following with regard to the participial mood in Zulu: "usually denotes a subordinate clause where the action takes place simultaneously with another action. Therefore … is always dependent upon some other verb or clause, and can never form the main predicate of a sentence". The mood is used after conjunctions like *uma* (when/if), *lapho* (when/at the time/as), *nxa* (if/when), *ngokuba/ngoba* (because) and *ngesikhathi* (when/at the time). Examples are:

(a). *Uma ehleka uyakhala*. (Lit. When he laughs he cries.)
(b). *Lapho bengena esontweni baqala ukuhlabelela*. (Lit. When they were entering at the church, they started to sing.)
(c). *Nxa befika, sizokhuluma*. (Lit. If they come, we shall speak)
(d). *Sizobabona ngesikhathi beqhamuka*. (Lit. We shall see them when they appear.)
(e). *Uthanda izingane ngoba azinagqubu*. (Lit. She likes children because they have no grudge.)

According to Doke (1930:271) some conjunctions are primitive in form and include the following: *futhi* (moreover/further), *kanti* (whereas/after all), *kepha* (but), *kodwa* (but), *ngakho-ke* (therefore), and *nokho* (nevertheless). Examples are:
(f). Bayafunda futhi banesikhathi esiningi. (Lit. They are studying/reading, moreover they have too much time.)
(g). Awuphumelelanga, kanti uya njalo esikoleni? (Lit. You did not pass, and you always go to school?)
(h). Akalambile kepha uyadla. (Lit. He is not hungry but he eats.)
(i). Ngakho-ke kufanele sihambe. (Lit. Therefore it is proper that we go.)
(k). Le ndoda iyakwazi ukuhlamba, kodwa nokho ayithandi ukuya ebhishi. (This man knows how to swim, but nevertheless he does not like to go to the beach.)

The examples serve to show that Zulu gives preference to a type of conjunction as a device for signalling relations between chunks of information. The purpose of the translation and

the freedom the translator feels entitled to in rechunking information and/or altering signals of relations between chunks, will determine whether a translation conforms to source-text patterns of cohesion. However, the translator is made aware of ending up with a 'foreign' translation if he (she) deviates from the typical target-language patterns of chunking information and signalling relations (Baker 1992:201-202). The literal translations of the above examples suggest the Zulu patterns which are peculiar to this language.

- Lexical cohesion

Baker (1992:202-203) defines this device as "the role played by the selection of vocabulary in organising relations within a text … (and) that lexical cohesion covers any instance in which the use of a lexical item recalls the sense of an earlier one". The categories of lexical cohesion in Halliday and Hasan's model as referred to by Baker (1992) are **reiteration** and **collocation**. The former refers to the repetition of lexical items which includes a repetition of an earlier item, a synonym or near-synonym, a superordinate or a general word. For example: A **domestic animal** may refer to **animals** such as a **dog**, **donkey**, **horse, cat** and a **goat**.

Domestic animal is the superordinate of **dog**, **donkey**, **horse**, **cat** and **goat**. **Dog** is a **hyponym** of **domestic animal** and all these animals (**dog**, **donkey**, **horse**, **cat** and **goat**) are **co-hyponyms**. The **superordinate** ('domestic animal') can be used to prevent a direct repetition of a dog, donkey, cat or goat if mentioned earlier in a text. Furthermore, a **general superordinate** (a general word) such as **creature** can also be used instead of animal.

The difference between **reiteration** and **reference** is that, in the case of 'reiteration', in a text on 'my neighbour's dog', for example, the word 'dog' may be used in the same text to refer to dogs in general instead. For example there may be a sentence like "For this reason, I cannot buy a dog", when the writer feels keeping a dog creates problems.

Collocation is a cohesion device which has not been dealt with by text-linguistic scholars, including Halliday and Hasan (1976:284), who admit that it is problematic, and De Beaugrande (1997).

The implications for translation include problems such as the impossibility of reproducing equivalent networks of lexical cohesion in a target text, which are similar to those of a source text.

3.3.2 Coherence

Hoey (1991:12) describes cohesion as objective, capable in principle of automatic recognition, while coherence is subjective and judgements concerning it may vary from reader to reader. That is, coherence refers to what makes a text semantically meaningful to a reader. Baker (1992:219) describes the influence of text being perceived as coherent or incoherent as follows:

The coherence of a text is a result of the interaction between knowledge presented in the text and the reader's own knowledge and experience of the world, the latter being influenced by a variety of factors such as age, sex, race, nationality, education, occupation, and political and religious affiliations.

An example is taken from a parallel text entitled *How to prevent iodine deficiency disorders (DD)/Ngabe zivikelwa kanjani izimpawu ezibangwa ukuntuleka kwe-ayodini emzimbeni (IDD)*, to show that translators sometimes add information to make a text semantically meaningful to the target reader or to avoid ambiguity.

English:
What happens if a person is allergic to iodine?

Zulu:
Kwenzekani uma umzimba womuntu ungezwani ne-ayodini emva kokuyidla?

Back translation:
What happens if the body of a person is allergic to iodine after having eaten it?

The back translation demonstrates that the translator did not only paraphrase the sentence, but also added the phrase *after having eaten it* to ensure that the sentence is meaningful to

the reader. The translator does not assume that the target reader knows that to be allergic to iodine means that a reaction will occur in the body after the allergic person has eaten iodine. He/she makes this explicit. The implication for translation is that if the translator is aware of the implied meanings of a text, there would not be mistranslations. In order to make implied meanings explicit to the reader, the translator would adopt strategies like adding information or paraphrasing.

3.3.3 Intentionality

This principle refers to "the text **producer**'s attitude that the set of occurrences should constitute a cohesive and coherent text instrumental in fulfilling the producer's intentions, e.g. to distribute knowledge or to attain a GOAL specified in a PLAN" (De Beaugrande and Dressler 1981:7). The intention of the producers of the health texts which are examined in the present study includes informing the public on how to avoid or protect themselves from diseases. If the receiver of such texts is taken into consideration, some of the Zulu translated texts may be aimed at specific target readers. For example, there may be a project of translating and distributing an English text on cholera to urban readers. If such a text addresses issues like boiling water or purifying it with bleach before drinking it, it can be regarded as a text distributed to the wrong kind of readership because urban readers usually have access to running (sanitized) water. This can be avoided when the translator is given a translation brief which spells out the purpose of the translation.

3.3.4 Acceptability

This is about "the text receiver's attitude that the set of occurrences should constitute a cohesive and coherent text having some use or relevance for the receiver, e.g. to acquire knowledge or provide co-operation in a plan" (De Beaugrande and Dressler 1981:7). Neubert and Shreve (1992:73), when commenting on the relationship between intentionality and acceptability, note that "the receiver must be able to determine what kind of text the sender intended to send, and what was to be achieved", in order to recognize and accept it as a text. Health texts are normally written in the form of leaflets with everyday expressions that are accompanied by pictures or/and diagrams so that the general public can understand and accept the message they convey. In other words, everyday

expressions, pictures or/and diagrams are used by health text authors in an attempt to make the texts accessible to the target readers. In this study, 'accessibility' is discussed as the eleventh principle of communication which is taken into account by translation scholars or translators.

3.3.5 Situationality

This principle refers to "the factors which make a text RELEVANT to a SITUATION of occurrence" (De Beaugrande and Dressler 1981:9). The social and pragmatic context which should be taken into account by the translator is highlighted by Neubert and Shreve (1992:85) when they state that "the translator might also want to know something about the social, political, and economic conditions of the receptive speech community".

Kruger (2000:98) follows Carstens (1997) who prefers the term 'contextuality' to situationality and discusses the aspect of 'contextuality' as follows:

How exactly then does context/contextuality determine the meaning of a text? In other words, which external factors affect the linguistic choices that a speaker or writer makes and should take into account when a text is analysed? The answer to this question has to do with variations in language which are dictated by the interaction between language user and language use … Choices which function as indicators of the physical, temporal and social provenance of the user are termed *dialect features* and markers of the language use are termed *register features*.

Kruger (2000:98) refers to two main kinds of dialects which are distinguished by Ferguson (1994): geographic dialects (varieties associated with speakers living in a particular location, e.g. Gauteng Zulu) and social dialects (varieties associated with speakers belonging to a given demographic group (e.g. mine workers or township language). Kruger (2000) then examines the definitions of *register* and related concepts and starts by stating that "there does not seem to be general consensus in the literature as regards the use of the concept of *register*".

This study is primarily concerned with health texts produced and distributed in two

different provinces of the country and markers associated with language user are therefore relevant. That is, the study describes the choices of words or expressions as used by the Zulu translators in taking into account dialect features.

3.3.6 Informativity

This principle concerns the "extent to which the occurrences of the presented text are expected vs. unexpected or known vs. unknown/certain" (De Beaugrande and Dressler 1981:9). Neubert and Shreve (1992:89) add that: "a communication situation is a context where information transfer occurs. We say that texts are informative if they provide a knowledge or understanding which did not exist before. If a text tells us nothing new, its information content is low".

The implication for translation is that informativity is a measure of the information load that a translation provides to a target language reader about the source language events, states, processes, objects, individuals, places and institutions (Neubert and Dressler 1992:89). In other words, informativity is determined by the critical balance between old and new information (theme and rheme).

3.3.7 Intertextuality

This principle refers to "the factors which make the utilization of one text dependent upon knowledge of one or more previously encountered texts" (De Beaugrande and Dressler 1981:10). Neubert and Shreve (1992:117) note that the "impression that a translation 'sounds wrong' comes from violations of a reader's textual expectations". In the present study the respondents were expected to be in a position to see the relationship between the selected texts and those that they had already encountered in prior experience.

The following three "regulative principles", according to De Beaugrande and Dressler (1981), now receive attention. In the present study they are regarded as principles of communication.

3.3.8 Efficiency

According to De Beaugrande and Dressler (1981:11) efficiency of the text "depends on its use in communicating with a minimum of expenditure of effort by the participants". That is, the target readers should find it easy to understand the text. Therefore, the translator of a health text is expected to make it easier for the target reader by, for example, using everyday language as well as pictures. Such a text is then regarded as efficient to read.

3.3.9 Effectiveness

According to De Beaugrande and Dressler (1981:11) an effective text should leave a strong impression and create favourable conditions for attaining a goal. Furthermore, it differs from efficiency in that it promotes "processing depth", whereas efficiency promotes "processing ease" (Hubbard 1989:106). That is, the efficiency of a translation implies that the target reader finds the text easy to read and understand whereas its effectiveness would mean that the reader will remember and use its message. Therefore, effectiveness attains the goal of (good) communication by leaving a strong impression on the reader.

3.3.10 Appropriateness

De Beaugrande and Dressler (1981:11) define the appropriateness of a text as "the agreement between its setting and the ways in which the standards of textuality are upheld". Hubbard (1989:109) comments as follows:

This concept comes into clearer focus when they indicate how it relates to efficiency and effectiveness. Noting that efficiency tends to work in the direction of easy processing but trite content, while effectiveness tends to go with powerful content but can lead to text that is duly difficult to process, … 'appropriateness must mediate between these opposed factors to indicate the proper balance between the conventional and the unconventional in each situation'.

Since what is relevant with respect to the communicative value of health texts is the message (content), it is indeed a balance between efficiency and effectiveness which is

required – in order to reach the type of readers selected for the present study (Grade 10 to 12 learners).

3.3.11 Accessibility

In the present study the accessibility of texts is considered to mean Mobley's (1986) readability, Kruger (2010) supports Hubbard (in Sanderson, 2005:55) by stating that the "term 'accessibility' is understood in essentially the same way as broad conceptions of readability". Furthermore, it is suggested, in the present study, that this should be the 11th component of textual communication that text composers and/or translators should take into consideration when compiling texts. The concept (accessibility) is discussed in detail below.

3.3.11.1 The aspects of readability/accessibility

Mobley's (1986) concern is 'reading to learn' at school. She foregrounds the problem of reading abilities of primary and secondary school pupils. In her discussion of aspects of readability, she consistently refers to two categories of learners: the young (or less able readers) and older (more fluent readers). Mobley's (1986) work is relevant for the present study, since the selected respondents (learners selected to respond to questionnaires and semi-structured interview schedules, as presented in chapter 4), are secondary school learners ─ who are considered to be the 'older, fluent readers'. In other words, the discussion of aspects of readability/accessibility, in the present study, focuses on this category of learners. Furthermore, unlike Mobley (1986) who deals with school material, the present study focuses on aspects of readability to describe data from the selected health texts.

Mobley (1986:6) describes readability as

> every aspect of a text which makes it either easy or difficult to read. These aspects include its visual impact (e.g. the clarity of the typeface, the positioning of diagrams and illustrations); its stylistic features (e.g. the use of familiar words and structures); the organization of the information (e.g. the contents table, index and headings); its conceptual level; and ─ perhaps the most important ─ the amount of interest aroused in the reader by the text. Books which are unattractive to work with, where the print is too small and lines are too long, and where pages have no stopping places or

illustrations, can discourage the pupil before he even begins to read.

In the present study, all these aspects are relevant and the respondents were asked to comment on some of these aspects. Mobley's (1986) discussion includes different aspects of readability (accessibility) which she applies to school material: legibility, illustrations, organization of information, language aspects, content and conceptual difficulty, clarity of meaning, interest level and text simplification. A brief summary of Mobley's (1986) discussion of the aspects follows below, with an elaboration of those that are relevant for the present study.

- **Legibility**

Legibility is affected by (i) upper and lower-case letters, (ii) design of type-face, (iii) size of type, line length and interlinear spacing, (iv) margins and justified type-setting, (v) quality and texture of paper, (vi) colour and (vii) print variations for emphasis (Mobley 1986:11).

In the present study, all of these aspects influence the ease with which readers who are semi-literate will read a health brochure.

- **Illustrations**

Mobley (1986:17-18) notes that illustrations have two main functions in written material: to develop motivation and to provide information. Illustrations make the reading material attractive and pictures can encourage a poor reader to persevere. Information is provided by using illustrations of all kinds, which helps by adding to, or explaining information in the text.

What is relevant is that illustrations are expected to "motivate the reluctant learner, and for a pupil struggling with a difficult text, they can make the difference between efficient and inefficient reading" (Mobley 1986:9).

Mobley (1986:18-20) notes that illustrations can distract a learner from the learning process in the following ways: if they are badly placed (instead of being as close as possible to the information to which they refer); if the learner cannot recognize the content or concept in the picture; if they distract attention from the ideas in the text (by

emphasizing factual detail and concrete objects); if the illustrations contain too much information; if the focus of the illustration is not clear; if the print and the illustration are merged.

In the present study, most of the health texts employ illustrations such as pictures, sketches and graphs. The respondents were expected to respond to the use of illustrations in the selected health texts. Unfortunately, illustrations cannot be analysed by concordancers such as ParaConc. Instead, they had to be analysed manually by both respondents and the researcher.

- **Organization of information**

Mobley (1986:21) refers to the following features, which affect the organization of the text: (i) logical and conceptual structure, (ii) advanced organizers, (iii) questions, (iv) format variations and (v) non-verbal information.

By following Mobley (1986:22-25), these features are summarised as follows:

- Logical and conceptual structure

Mobley (1986:21) describes this feature as "a clear relationship between the logical and conceptual structure of a text, and the ability of the reader to recall the information in it. That is, if the text is well structured, the reader is able to follow the message and remember what it conveys.

- Advance organizers

An 'advanced organiser' refers to an introductory paragraph which summarises the content to follow, or which outlines the concept to be developed in a passage.

- Questions

The use of questions is common in school text books. In this case, Mobley (1986:22-23) sees the use of questions as

an integral part of the text organization (questions which require the reader to do something) (that) can have a marked effect on both understanding and recall.

Sometimes translators may include a question or change a heading into a question in a translation so as to "get" the attention of the reader.

- Formation variations

In a text with a contents table, index, glossary, chapter headings, subheadings and tabulation, a reader is able to find and absorb information quickly. That is, accessibility is increased.

- Non-verbal illustrations

It was pointed out in 3.4.2 above that illustrations should be placed as close as possible to the information to which they refer. For the present study, it is important to take note of Mobley's (1986:26) warning regarding the organization of information – the danger that reading material which is very well organised can promote uncritical and passive learning and that inexperienced readers will not see the purpose of the writer's organizational strategies. They need a great deal of guidance and training in order to develop this ability.

This aspect was important during the first phase of the study since the respondents had to respond to hard copies of the health texts. The respondents had an opportunity to comment on the pictures as well as on how the texts were organised.

- Language aspects

According to Mobley (1986:26), a fluent reader needs to be able to identify words and meanings at speed, and he can only do this by *anticipating* what is coming next. If the vocabulary and syntax are unfamiliar, this ability to predict is impaired; reading speed is reduced, and there is a consequent loss of comprehension. Vocabulary is the single most important aspect of readability. Words outside the knowledge of the reader cause a breakdown in communication. Sentence structure is another major aspect of readability. Complex or unfamiliar sentence patterns cause the reader to lose the thread of meaning, especially if the punctuation is inadequate.

- Relevance for the present study

The primary method used to analyze data in the present study is corpus-based

methodology, as discussed under 3.4 below. In her English-Xhosa corpus Moropa (2005) discusses a number of strategies which are used by Xhosa translators. She categorises the strategies as follows: *simplification* (using a superordinate or more general word, using a general word with extended meaning, using more familiar or common synonyms, translation by paraphrase, breaking up of sentences and using fewer words); and *explicitation* (overuse of lexical repetition, adding explanatory information using a demonstrative and using an ideophone). Though some of these strategies might not be applicable to the present study, the researcher regards them as strategies that can be used to make health texts easier to read.

Various scholars have been investigating *explicitation* and *simplification* as universal features of translation. A brief discussion of these features is required as they are relevant to the present study.

Baker (1996:180-181) defines explicitation as "an overall tendency to spell things out rather than leave them implicit in translation". It should be mentioned that with regard to text length it is easier to automatically find out as to whether there has been an increase in the number of words in a translation vs. the original if the structure of the two languages is the same. For example, Baker (1996: 180-181) refers to Stig Johansson, who, by working with Norwegian and English corpora at the University of Oslo, reported (1995:23) that he found an average increase of about 10% in the number of words in English translations vs. Norwegian originals, as well as a slight average increase in the other direction (Norwegian translations compared to English originals). This type of research is not straightforward in the present study, where the structure of Zulu is not the same as that of English. Zulu is an agglutinating language whereas English is analytical. It is interesting to observe that the Zulu version of a text is expected to have shorter sentences than the English version, even if the translator decides to spell out things. The reason for this is that a sentence of three words in English can be translated with one word in Zulu. For example, *I like him* > *Ngiyamthanda*.

At the syntactic level, both Baker (1996) and Laviosa-Braithwaite (1996), by comparing original and translated texts, found that the optional *that* in reported speech is spelled out more often in translation than in original English text. Lexically, we may consider the

addition of certain items in the translation, which may be redundant, as an example of explicitness. Baker (1992) discusses examples where the translator inserts in the translation additional background information in order to fill in a cultural gap.

Papai (2004:145) defines explicitation, in terms of process, as a "technique of resolving ambiguity, improving and increasing cohesiveness of the ST and also of adding linguistic and extra-linguistic information". Given the fact that I will be analysing a parallel corpus, it is obvious that my investigation will be in terms of process, where I will mainly be examining translator behaviour.

Baker (1996: 181) defines simplification as a strategy that "involves making things easier for the reader (but not necessarily more explicit)".Blum-Kulka & Levenston (1983), refer to lexical simplification as the "process and/or result of making do with less words". The evidence provided by their own research with learners of Hebrew and research in other fields, shows an analysis of a number of strategies which are specific to lexical simplification and common to a variety of linguistic contexts, including translation. The strategies are: use of superordinate terms, approximation of the concept expressed in the source text, use of "common level" or familiar synonyms, transfer of all the functions of a SL lexical item into its TL translation equivalent, circumlocutions and paraphrase.

Ndlovu's (1997:87-88) categorisation of translation strategies, though focused on translating a novel, can be used to examine the translation strategies as used in the Zulu health translations. Ndlovu's (1997:87-88) list of translation strategies was based on the categorisation of translation strategies by Delabastita (1993), Newmark (1988), Williams (1990) and Baker (1993):

(a) **Transference**: The process of transferring an SL word to a TL text unchanged; the SL word then becomes a loan word in the TL, e.g. 'insulin' – *i-insulin*.

(b) **Indigenisation**/ domestication: This strategy is very similar to **transference** but is used when an item is adopted from the SL with slight modification to remove some of the 'foreignness', e.g. 'cereal' - *amasiriyeli*.

(c) **Cultural substitution**: This strategy involves replacing a culture-specific item (or expression) with a TL item which does not have the same propositional

meaning but is likely to have a similar impact on the target reader: According to Baker (1993: 31), “the main advantage of using this strategy is that it gives the reader a concept with which he can identify, something familiar and appealing”, e.g. the Zulu word for ‘womb’ is *isisu* (lit. ‘stomach’; in other words a general word is used for a specific term).

(d) **Functional equivalent**: The use of a culturally neutral term, a less expressive word or even a more general word to define the SL culture-specific term, e.g. *uketshezi* (fluid) as a Zulu version for ‘semen’.

(e) **Paraphrase**: This strategy tends to be used when the concept expressed by the ST item is not lexicalised in the TL, e.g. ‘diabetes’ – *isifo sikashukela* (lit. ‘a disease of sugar’). It is either used to amplify or to reduce the meaning of a segment of the text.

(f) **Translation couplet**: In this category two of the above strategies can be combined, e.g. ‘tuberculosis’ - *isifo sofuba, i-TB* (Lit. a disease of the chest)(explanation plus loan word).

(g) **Transposition**: A translation strategy involving a change in the grammar from SL to TL, e.g. ’You are kind’ - *Umusa wakho uyamangalisa* (Lit. Your kindness is wonderful).

(h) **Negative for positive/positive for negative**: ‘It must be done’ - *Awunakwenza ngokunye* (Lit. You cannot do otherwise).

(i) **Omission:** Depending on the degree of leeway given to the translator, the translator may decide to **omit** certain cultural items. According to Baker (1993: 40), “if the meaning conveyed by a particular item or expression is not vital enough to the development of the text to justify distracting the reader with lengthy explanations, translators can and often do simply omit translating the word or expression in question”.

(j) **Addition:** The translator may also decide to **add** a certain cultural item to the target text in order to make his translation more accessible to the new readership.

The translation strategies as used in an attempt to make the health texts accessible to the Zulu readers are considered in chapter 5 of the present study.

- Content and conceptual difficulty

According to Mobley (1986:10) this aspect refers to the fact that the reader would have difficulty in absorbing information if too much knowledge is introduced at once; if the key concepts are imbedded in irrelevancies; and, if the relationship between ideas is ambiguous. That is, concepts should be presented as simply as possible. In the present study, the problem of too much new information will be examined in both the pilot study and during the analyses of the texts by means of corpus tools.

- Clarity of meaning

According to Mobley (1986:10),

> material which contains ambiguities (perhaps because of vague wording, illogical sequencing or bad punctuation) causes the reader to backtrack in a search for meaning; if he is constantly required to read 'between the lines' or to interpret loosely-worded statements, he is likely to make some false assumptions. In addition, digressions which are long, or which are only loosely connected to the main line of argument have the effect of obscuring, rather than clarifying meaning.

The problem of misinterpretations because of implied meanings was discussed under coherence above (cf. par. 3.3.2). The translator should ensure that ambiguities are resolved in order to make his translation accessible to the target readers.

- Interest level

This aspect refers to the fact that for school pupils, since they lack the intrinsic motivation to read, "interest must be sparked initially by the extrinsic features of the bo~~o~~k by its appearance, illustrations and lay-out" (Mobley 1986:10).

As already mentioned, in the present study, the respondents were asked to comment on appearance and illustrations of the health texts.

- Text simplification

Mobley (1986:39) notes that "attempts to simplify texts generally concentrate on their vocabulary and sentence structure". However, she warns that "merely replacing long words and sentences with shorter ones will not necessarily make texts more readable" (Mobley 1986:39).

Various scholars in corpus translation studies, including Moropa (2005) as referred to above, have been investigating simplification as a universal feature of translation. As mentioned above some of the simplification strategies which were identified by Moropa (2005) are relevant for the present study.

3.3.12 Summary

In this section De Beaugrande and Dressler's (1981:3) seven "standards of textualitty" or "constitutive principles of textual communication" and three "REGULATIVE PRINCIPLES … that control textual communication rather than define it", are discussed. For the purpose of this study, these are regarded as ten components of text communication, as advocated by Hubbard (1989) and explored and applied by Kruger (2000) to translation. These components of text communication are described and contextualised with the aim of highlighting their relevance to translation and the health texts selected for the present study. Aspects of readability as outlined by Mobley (1986) were also reviewed. Their relevance to the present study was presented and it was pointed out that readability is broadly viewed to mean accessibility, as done by Hubbard in Sanderson (2005:55) and adapted by Kruger (2010). Furthermore, it is suggested that the concept of accessibility of texts should be the 11th component of textual communication which writers and/or translators should take into consideration when compiling texts. These eleven components are relevant in describing the data as discussed in the next chapter.

The following section deals with corpus-based methodology which formed part of the research framework designed for the present study.

3.4 Theoretical perspectives on corpus-based translation studies

The following discussion will be based mainly on Olohan's (2004) work on corpus-based methodology. Olohan (2004:3) argues that "it is more fruitful to view the use of corpora as a research methodology, with its own strengths and limitations, than to see it as a paradigm occupying one or other pole". Olohan (2004:16) further notes that if the aims, aspirations and applications of corpus linguistics are transferred to translation studies, a number of points can be formulated that can be posited as non-prescriptive orientations and

underlying assumptions for research in translation studies using corpus methodology, namely:

- an interest in the descriptive study of translations as they exist;
- an interest in language as it is used in the translation product, as opposed to the study of language in contrastive linguistic, i.e. system-oriented, sense;
- an interest in uncovering what is probable and typical in translation, and through this, in interpreting what is unusual;
- a combining of quantitative corpus-based analysis in the description, which can focus on (a combination of) lexis, syntax and discoursal features;
- application of the methodology to different types of translation, i.e. translation in different socio-cultural settings, modes, etc.

For the purpose of this study the first point is relevant since the study concentrates on the descriptive study of the Zulu health translated texts within a given period. Olohan (2004:17) notes the applicability of corpus methodology within the broad framework of DTS by stating that "it provides a method for the description of language use in translation, whether this concerns the target text only, or both source and target texts in parallel".

In this study the focus is on describing language use in translation in both source and target texts in parallel. But, parallel corpus suggests the existence of different types of corpus, which requires the definition of the term corpus itself. Baker (1995:226) uses the word *corpus* to mean "... any collection of running texts (as opposed to examples/sentences), held in electronic form and analysable automatically or semi-automatically (rather than manually)". However, she notes that, with the growth of corpus linguistics, the definition of the term corpus changed in the following ways: (i) corpus now means primarily a collection of texts held in machine-readable form and capable of being analysed automatically or semi-automatically in a variety of ways; (ii) a corpus is no longer restricted to writings, but includes spoken as well as written text, and (iii) a corpus may include a large number of texts from a variety of sources, by many writers and speakers and on a multitude of topics (Baker 1995:225). For the present study, health texts were collected from two provinces (Gauteng and KwaZulu-Natal) and were stored in machine-readable form by the researcher.

There are three types of corpora which can be designed and compiled: parallel corpora, comparable corpora and multilingual corpora. They are defined below before focusing on parallel corpus, which is relevant for the present study.

For the purpose of the present study a parallel corpus refers to "a corpus consisting of a set of texts in one language and their translations in another language" (Olohan 2004: 24). Like Laviosa (1997), Olohan (2004: 24) notes the inconsistency in the use of the term 'parallel corpus'. Some theorists use the term for bilingual sets of texts that are comparable even if they are not translations.

Baker (1995) uses comparable corpora to mean two separate collections of texts in the same language: one consists of original texts in the language in question and the other consists of translations in that language from a given source language or languages. For example, a collection of Zulu original texts as well as a collection of translations in Zulu from English and other languages is comparable corpora.

Baker (1995:232) uses the term 'multilingual corpora' to refer to "sets of two or more monolingual corpora in different languages, built up in the same or different institutions on the basis of similar design criteria, which enable us to study items and linguistic features in their home environment, rather than as used in translated text".

On designing a corpus, Moropa (2005) discusses Laviosa's English Comparable Corpus (ECC), Oksefjell's English-Norwegian Parallel Corpus (ENPC) and Kenny's German-English Parallel Corpus (GEPCOLT). Moropa's (2005) English-Xhosa Parallel Corpus is composed of the following:

- The 1997 Annual Report of the Department of Arts, Culture, Science and Technology (DACST) as published in 1998;
- A Short Guide to the White Paper on Local Government (1998);
- The 2001/2002 Pan South African Language Board (PanSALB) Annual Report; and
- Three manuals of the Promotion of Access to Information Act (2003).

There are some factors which influence the design and compilation of a corpus, as outlined by Olohan (2004). These factors are discussed below.

3.4.1 Text availability

Olohan (2004:25) states that "the ease or difficulty of compiling and using a parallel corpus depends to a large extent on availability of texts and their translations". For the present study, it was not easy to find the relevant health texts, as discussed in Chapter 4.

3.4.2 Alignment

The alignment of texts, in the present study, simply means placing or arranging the source text so as to be parallel to the target text. Olohan (2004:25-26) discusses this factor as follows:

Users of parallel corpora are often interested in retrieving instances of lexis or grammatical constructions in the source language together with their translations. These data are usually produced by what is known as concordancing software; the corpus is searched for a word or phrase, and all instances, or a selection of instances, of that word are displayed on a line with its surrounding text. Before this kind of data can be extracted, it is usually necessary for the texts in languages A and B (assuming it is a bilingual parallel corpus) to have been aligned. Put simply, alignment means linking a unit of text in one language with a unit of text in another language.

For the present study, each English health text (which was generally short) was aligned with its Zulu translation. The ParaConc software was used to align the collected health texts. The following subsections deal with corpus design issues which are relevant for the present study.

3.4.3 General corpus design issues

Olohan (2004) refers to three issues pinpointed by Kenny (1998) in corpus design and

compilation: static versus dynamic corpus, representativeness and regional and temporal factors. A summary of these issues, as discussed by Olohan (2004), follows below.

A ‘static corpus’ includes a collection of texts that were chosen according to some specific principles. It therefore provides a snapshot of aspects of the language at a particular point in time. By contrast, a ‘dynamic corpus’ constitutes an enormous collection of texts that is constantly being added to and that is studied mainly for its ability to reflect language change and to provide data on words that do not occur often. A static corpus was compiled for the present study and it constitutes a collection of texts used between 1994 and 2007.

The second issue is ‘representativeness’ and the argument is whether the researcher’s data are representative of a particular language or genre. It implies the size of the corpus which Olohan (2004:46) discusses by referring to Kenny’s (1998) argument that a bigger corpus will not necessarily be more useful than as a smaller one. She illustrates this point by stating that when studying high-frequency words, in particular, there is a limit to the amount of data a researcher can analyse. For the present study, the researcher is of the opinion that the corpus he compiled is adequate for solving the research problem. Furthermore, the size of the corpus depended on availability of suitable texts.

The last issue to be considered in the design and compilation of a corpus is regional and temporal factors. That is, criteria such as nationality, ethnicity, age, gender and so on, may be considered in the selection of texts, depending on their relevance for the research questions that are to be investigated using the corpus data. The texts selected for the present study were based on the ethnicity and age of the respondents. That is, Zulu speakers who can read and write isiZulu – Grades 10 to 12 learners.

The following subsection deals with practical aspects of corpus compilation.

3.4.4 Practical aspects of corpus compilation

As discussed by Olohan (2004:48-56) practical aspects of corpus compilation include practical tasks and considerations which follow decisions on the criteria for selection of texts to be included in a corpus and the identification of specific texts. They encompass

mainly the following.

3.4.4.1 Funding a corpus compilation project

Given the fact that many corpus projects are designed to produce a bigger resource over a longer period of time, funding is required. Even so, a researcher working on a small project, can compile a corpus single-handedly for his research project without financial assistance.

3.4.4.2 Making texts machine readable

The importance of this consideration lies in the fact that a parallel concordancer such as ParaConc can only analyse texts that are saved as files on a computer. That is, all texts which are not in electronic form have to be scanned first in order to be used as a corpus in corpus-based translation studies. Since elements such as graphs, pictures, footnotes and endnotes can cause problems for the corpus later, Olohan (2004:50) states that

one way of proceeding is to save texts initially in rich text format (RTF) as this preserves some text and character formatting. Once any formatting has been noted, and integrated into tags if required, the files can be converted to plain text format, which is the format required by most concordancing and corpus-processing software.

This implies that the ParaConc software can only extract information from a plain text format. Graphs, pictures, footnotes and endnotes should therefore be removed from a text.

3.4.4.3 Obtaining copyright permissions

In corpus-based translation studies copyright permissions would be required for holding texts electronically and Olohan (2004:51) explains that the problems the researcher faces when asking for permissions to use texts, is to stress that they will be used for research purposes only, and to specify what other researchers will have access to. If the researcher does not have copyright permissions for the texts he has collected it would entail an unlawful use of those texts. That is, the researcher should recognise the laws of a country

with regard to copyright.

3.4.4.4 Tagging and annotating a corpus

Olohan (2004:51) states that the simplest case is one in which corpus tools are used for texts in plain ASCII text format. That is, in that format the texts would be devoid of, for example, font formatting (bold, italic, different fonts) and other types of formatting such as text alignment, line spacing and columns. This brings back the issue of annotated versus unannotated text files. If the research problem requires the use of annotated text files, the researcher has to compile them for that purpose. But, if the research question can be answered without use of tagging or annotation, the
plain text format would be enough.

3.4.4.5 Aligning a parallel corpus

It is essential to check the alignment of segments of a text in the target text as the translation of segments in the source texts, since "automatic alignment may have difficulty coping with instances in which one sentence in one language maps onto two or more in the other language or in which a text has been restructured in translation, e.g. if chunks of the translated text have been moved relative to the rest of the text" (Olohan 2004:55). If there are mismatches, the alignment has to be rectified manually.

This author also notes that "once a parallel corpus is aligned, a parallel concordancer can be used to produce instances of occurrence of a word or structure in the source text and its equivalents in translation, or vice versa" (Olohan 2004:55). In other words, it is not a requirement to always start from the source text when retrieving data from the corpus. When working from the target text, instances of occurrence of a word or structure in that language would produce its equivalents in the source language.

3.4.4.6 Corpus tools and data analysis

Olohan (2004) deals with common types of tools that can be used to extract data from corpora and uses examples to illustrate some strengths and limitations of the tools. The

tools are concordances, frequency lists, collocational clusters and keyword measures. In the present study the first two will be dealt with at length since they are relevant for the present study and the other two will just be briefly described.

3.4.4.7 Concordancing tools

Olohan (2004:63) describes the concordancer as a common tool used for extracting data and enable the researcher to display the corpus excerpts in 'keyword in context' format. The concordance also incorporates functions to study collocations and words occurring in clusters.

Olohan (2004) then discusses activities such as 'keyword in context' which can be done by using a monolingual concordancer. Since the 'keyword in context' works almost in a similar manner in both a monolingual and a bilingual concordancer, Olohan's (2004:63) statement with regard to its use in a monolingual concordancer is important:

> Using the (monolingual) concordancer, the user enters a search word or phrase and the software finds all instances of that word or phrase in the corpus. The search word may also be referred to as a node or keyword, and each instance is displayed with its immediate co-text. This display of search word with a small amount of co-text is called a concordance line. The search word is usually highlighted and centred, and the length of the co-text displayed can be modified but is most conveniently viewed if it is limited to one line, or approximately 80 characters. This concordance lines are termed 'keyword in context'.

With a parallel corpus, like in the present study, searching would almost be done in the same way as described above, except that in a bilingual concordancer "instances of that search word or phrase are found and displayed in a concordance line, together with the segments of parallel text that correspond to the segments found in the language searched" (Olohan 2004:75). That is, a bilingual concordancer allows the researcher to study how specific elements in one language have been translated into another. The retrieval of the information searched in this way displays the search word highlighted by the concordancer and the user needs to read the segments of the other language to find out how the search word has been dealt with.

Moropa (2005) refers to a number of scholars who are doing research in African languages, using parallel corpora. She mentions Madiba (2004) who uses the Special Language Corpora for African languages (SPeLCAL) to illustrate how parallel corpora can be used as tools for developing the indigenous languages of South Africa. She also refers to Gauton and De Schryver (2004) who demonstrate how special-purpose multilingual and parallel corpora can be used as a translator's tool in finding suitable term equivalents when translating technical texts from English into Zulu.

The next tool to receive attention in the present study is frequency lists.

3.4.4.8 Frequency lists

Olohan (2004:77) describes this tool as follows:
In its simplest form, a frequency list is a list of all the words that occur in a corpus, with the total number of occurrences given for each word. The list can usually be ordered by frequency or alphabetically and can be used to identify common lexis in a particular corpus, or to isolate unusual or creative items.

This can be used to identify words or terms as used in the corpus. If used together with the concordancing tool it can give the researcher the words or expressions that can be searched in the whole corpus. That is, if the researcher wants to know which words or terms can be searched for in a corpus, he can start by producing a list of all the words in that corpus. From there, he can display the selected word or term in context by using the 'keyword in context'.

3.4.4.9 Summary

The section dealt with the use of corpora as a research method, which was used as such in the present study. In the discussion the term 'corpus' was defined and it was indicated that in the present study the focus is on a parallel corpus. Some factors which have a bearing on the design and compilation of a corpus are discussed, practical aspects of corpus compilation are outlined and the corpus tools used for data analysis and which are relevant for the present study are explained.

3.5 Conclusion

The chapter began with a discussion of text evaluation methods, and the focus was on reader-focused methods, as these were relevant in the pilot project of the present study. The pilot study gave the respondents an opportunity to evaluate the health texts and the results were valuable in giving the researcher an idea of what the target readers think about the health texts as produced and distributed in certain areas of the country.

This was followed by a discussion on components of text communication. For the present study this was important, because such a discussion provided the researcher with aspects to refer to in describing the data as retrieved from the corpus compiled for the present study. The last section dealt with the use of corpora as a research method. This is the main research method of the present study. The study focuses on the English-Zulu health parallel corpus as designed and compiled for research purposes. There are two corpus tools which were used by the researcher to analyse data: concordancing and frequency lists.

The next chapter deals with the analytical framework and research methodology which are used in the present study.

CHAPTER 4

ANALYTICAL FRAMEWORK AND RESEARCH METHODOLOGY

4.1 Introduction and objectives

In Chapter 2 the two health systems coexisting in South Africa were overviewed. The aim was partly to give a general background for the present study. Issues such as key concepts in the field of medical anthropology were discussed in that chapter, so as to examine the relevance of the health texts selected for the study. Chapter 3 focused on text evaluation methods and the components of text communication. The components of text communication are used in describing the data from the health corpus compiled for the present study. The use of corpora in conducting research received attention and the corpus tools as used in the present study were described.

In this chapter the analytical framework and research methodology as used in the present study are discussed. As already mentioned in Chapter 1, paragraph 1.5, an overview of the research done on youth and adolescent health in South Africa is first presented, in order to position the present study within the field of youth health research. The overview is followed by a discussion on the two phases of the pilot study done among the Grade 10 to 12 learners and the main research method used for the present study: the use of corpora as a research method.

An overview of studies on youth and adolescent now follows.

4.2 An overview of studies on youth and adolescent health

In 2002 the Medical Research Council was commissioned by the Department of Health and the Department of Education to conduct a survey on youth risk behaviour. This survey was known as the South African Youth Risk Behaviour survey, and "was adapted from the youth risk behaviour system (YRBSS) which was developed by the Centres for Disease Control and Prevention (CDC) in the United States in 1990" (Department of Health

2003:11). The survey was the first of its kind to be conducted in this country.

In a foreword to this survey, the then National Health Minister, Dr Manto Tshabalala-Msimang, states that "existing data suggests that a high percentage of school pupils in South Africa use alcohol, tobacco and drugs; engage in unprotected sex and are both perpetrators and victims of violence" (Department of Health 2003:8). However, she dismisses these studies because they "were not broadly based, and as a result, their applicability to young people in South Africa generally was questionable" (Department of Health 2003:8). The 1st South African National Youth Risk Behaviour Survey, which was conducted by the Medical Research Council, was then presented as the type of survey which was considered to be broad-based by the government.

The objective of the South African YRBSS was "to establish the prevalence of key risk behaviours, namely: intentional and unintentional injuries, violence and traffic safety, suicide-related behaviours, behaviours related to substance abuse (tobacco, alcohol and other drugs), sexual behaviour, nutrition and dietary behaviours, physical activity and hygiene related behaviours" (Department of Health 2003:11). It was also based on the health priorities of the Policy Guidelines for Youth and Adolescent Health (Department of Health 2001) – sexual and reproductive health, mental health, substance abuse, violence, unintentional injuries, birth defects and inherited disorders, nutrition and oral health.

The results of the survey, as presented in the report, indicated the following:

> With regard to behaviours related to intentional and unintentional injuries, over 17% of learners carried weapons and 41% had been bullied in the past month, 14% belonged to gangs during the past six months, and 10% had been forced to have sex. On school property during the past month 9% of learners carried weapons, 15% were threatened or injured and 19% were injured in physical fights, while a third (32%) felt unsafe at school.

Over one-third of learners (35%) had on occasion been driven by someone who had been drinking, while 8% indicated that they have on occasion driven after drinking.

Substance abuse investigation showed that alcohol consumption ranged from 49% for ever having used it, 32% for drinking in the past month, and 23% had engaged in binge drinking in the past month.

In the past six months, a quarter of learners (25%) had experienced feelings of sadness or hopelessness, 19% had considered suicide and 17% had attempted suicide; 28% of those who attempted suicide required treatment.

With regard to smoking, 31% had ever smoked. Among current smokers, 84% had been exposed to passive smoking in the past week and 84% of them had a parent or guardian that smoked. Among never smokers, 56% had been exposed to passive smoking in the past week, and 30% of them had a parent or guardian that smoked. Drug consumption varied from 13% for ever having using dagga, 12% for heroin, 11% for inhalants and 6% for mandrax.

With regard to sexual behaviour, 41% of learners had had sex, and the age of initiation of sexual activity was under 14 years for 14% of them. Among the learners that had sex, 54% had more than one past sexual partner, 70% had had sex in the past three months, 14% had had sex after consuming alcohol or drugs, only 29% practised consistent condom usage, 16% had been pregnant, and overall 72% had received education regarding HIV and AIDS.

Anthropometric analysis of nutritional status with respect to undernutrition revealed stunting (low height for age) in 11% of learners, while 9% were underweight (low weight for age), and 4% had wasting (low weight for age height). With regard to overnutrition, the prevalence of being overweight was 17% and the prevalence of obesity was 4%.

With regard to physical activity, 29% had no physical education classes in schools and 25% watched TV for over three hours per day. With regard to hygienic practices among learners, 89% brushed their teeth daily, 89% had their own toothbrushes and 76% washed their hands after going to the toilet.

This survey is important for the present study in that almost all the themes it focuses on are covered by the corpus compiled for the present study. However, instead of focusing on the

health risk behaviours of the youth, the present study focuses on how accessible the health texts are to the youth, and the target readers in general.

The pilot study was divided in two phases. The aim of the first phase was to determine the type of questions which could be posed to the respondents in an attempt to collect data. The aim of the second phase was to focus more on the collection of data that would be used in the study of the health corpus compiled for the present study.

The following section focuses on the first phase of the pilot study.

4.3 Pilot study: Phase 1 (the questionnaires)

The first phase of the pilot study was conducted in 2003 among Grade 10 to 12 learners in five secondary schools─ two from Gauteng and three from KwaZulu -Natal. The schools in KwaZulu-Natal were situated in a rural area (Loteni), in a semi-rural area (Impendle) and in a township, respectively. The learners in these schools were Zulu learners in Zulu-speaking communities. The situation was different in the two Gauteng schools. At Soshanguve (where one of the schools was situated) only 14% of the populace speak Zulu, according to Stastistics SA (as retrieved in January 2007). The Thembisa secondary school is situated in an area where Zulu speakers form 25% of the community. Each school was represented by 50 learners. The 250 respondents enabled the researcher to test the self-administered questionnaire as well as to get more information about what is relevant to the research topic. The researcher visited the schools personally to respond to any question the learners might have about the study. He had samples of health texts in English and Zulu which he had obtained from the distribution centers of the Department of Health and NGOs (Soul City), to show to the respondents.

4.3.1 Consent

The researcher phoned the school principals first and asked for permission to visit the schools. The principals agreed and the researcher promised that the research would take place after school hours. Furthermore, consent was also obtained from the learners on the day of the study. The learners were generally very excited to participate in the study.

With regard to confidentiality, the researcher emphasised that the learners would remain anonymous and he requested them not to write their names on the questionnaires.

4.3.2 Administering the survey

After making sure that the learners understood all the procedures, each learner was provided with a pencil and the questionnaire to complete. The questionnaires were completed without any disturbances. The respondents had an hour to complete the questionnaire (Cf. Appendix A). This gave the learners enough time to ask questions concerning the study, before or during responding to the questions. Questions from the respondents were mainly about the meaning of certain words used in the questions. The researcher took note of the problematic expressions which would need to be rephrased or replaced with simpler ones in the second phase of the pilot study. In this initial phase of the study, the researcher was worried about the fact that the learners seemed to be uncritical about the reading material.

4.3.3 The type of questions asked

The questions were mainly close-ended with response options to choose from. The researcher avoided to include many questions in order to encourage the learners to respond without any great effort. The questionnaire was first developed in English and then translated into Zulu. The reason for adopting this procedure was to enable non-Zulu supervisors to make improvements where necessary. The principals were requested to ask only Zulu learners to participate in the study. In the multilingual settings, such as Thembisa, the researcher explained why only Zulu speakers were needed. The questionnaires were thus all in Zulu.

4.3.4 Some comments on the first phase of the pilot study

The initial phase of the pilot study guided the researcher in shaping the final questions used in the questionnaire. Many learners chose not to answer certain questions and this gave the researcher an indication which questions to ask in the second phase of the pilot study.

4.3.5 Summary

The section above reported on the first phase of the pilot study which was conducted in 2003 in the form of a self-administered questionnaire on health texts. The results helped the researcher in designing the next research project – the second phase of the pilot study, which constituted primarily the use of a semi-structured interview combined with focus groups.

4.4 Pilot study: Phase 2 (Evaluation of translated Zulu health texts)

Phase 2 of the pilot study began in 2003 and culminated in the semi-structured interviews which were conducted between April and August 2007. The researcher visited four secondary schools, each representing the four areas in the two provinces selected for the present study. The Gauteng schools were Memezela Secondary School (at Soshanguve) and Thembisa High School (at Thembisa). The KwaZulu-Natal schools were Muzikawuthandwa Secondary School (at Mtulwa) and Mpophomeni High School (at Mpophomeni).

It was pointed out in Chapter 3 that De Jong and Schellens's (1997) model was used to evaluate the translated Zulu health texts during the second phase of the pilot study. In other words, the six document characteristics as presented by these authors were employed in the evaluation of the health texts selected for the present study.

For the purpose of gathering data from the respondents, the researcher used De Jong and Schellens's model (1997), as described below.

4.4.1 De Jong and Schellens's reader-focused evaluation methods

In Chapter 3 the reader-focused text evaluation methods were defined and listed; that is, procedures which rely on feedback from the intended audience. De Jong and Schellens (1997:409-427) match the six text characteristics to be evaluated with specific methods. They also identify those methods which can be used to evaluate all six document features.

Furthermore, they identify methods which are non-specific to the text features/characteristics. In other words, this refers to a method which can be used to evaluate any of the text features. In the present study the non-specific methods are regarded to be the same as those which can be used to test all the text characteristics, since all of them are non-specific.

According to De Jong and Schellens (1997) "these conditions [the document features/characteristics/topics] suggest the broad spectrum of questions one can ask about a text". A summary of each document topic, the matching methods, an account of the procedure, and the implications for the present study follow below. Though the methods that are relevant for the present study are clearly indicated, the other methods are discussed for the sake of completeness.

4.4.1.1 Selection evaluation

With regard to the selective behavior of the readers, questions may be asked at two levels. The first level relates to the text as a whole: Is it sufficiently attractive and interesting both in general appearance and in expected content ─ to be selected by the target audience? The question is relevant for all texts that need to attract the readers' attention rather than fulfil a need for information, such as health education leaflets in doctors' waiting rooms. The methods which can be used and the procedure to be followed are:

(1) The methods and procedures ─ at the first level

- The portfolio method

It was initially developed as a tool for pretesting advertisements. With this method participants are provided with a combination of texts of the same kind (e.g. competing advertisements) and then allowed to read and browse through whatever they want. After a short break or an intervening task, they are asked about the texts they have seen, the messages they recall, and their preferences.

- A text evaluation questionnaire

With this method participants are asked to comment on the title, front page, and general appearance of a single document. This is one of those methods which are said to be suitable to any text feature and is therefore regarded as non-specific in the present study.

(2) The methods and procedures – at the second level

At this level "the selection issue relates to reading behavior within the document. In documents that are primarily informative or instructive or that are for a strongly segmented audience, the main question is whether the readers can easily find the information they are looking for" (De Jong and Schellens 1997:409-410). With regard to persuasive texts, "the main concern is whether the readers read what the writer wants them to" (De Jong and Schellens 1997:410). The methods are:

- Target-Plan method

This method was developed for pretesting audiovisual advertisements material, but can also be used to evaluate persuasive texts that need to attract and keep the readers' attention. This method consists of three phases. Firstly, the front page of a document is shown for a short while (i.e. 10-30 seconds), and participants are subsequently asked about their first impressions of the document and the information they expect to find in it. Secondly, the participants are allowed to read or browse through the text for one or two minutes. They are subsequently questioned about the information they gathered, the parts they read and skipped, and their appreciation of the text. The last phase requires them to read the whole document, followed by being asked about the relevance of the information and other text features.

- User protocols

This is one method of addressing the question on informative or instructive texts, which is an adaptation of the think-aloud technique. Participants are provided with a task, which they have to complete by selecting information. During the process, they are required to read aloud and constantly verbalize what they think while searching the document. Their task performance is recorded on video. Thereafter, they are interviewed about unclear or unforeseen steps in the process.

- Performance test

This is less time-consuming than the user protocol and can only be used for instructional texts. The researcher measures the degree the participants perform a task successfully and the time it takes to complete it by selecting information in a document.

- Reading behaviour registration

This relates to observation and registration of the actual reading process of the participants by means of technical devices such as the eye-movement procedures.

- Focus groups

This is again one of those methods which can be used to evaluate all text features. De Jong and Schellens (1997:423) observe that "one drawback of using focus groups for a troubleshooting text evaluation is the difficulty of keeping the focus on textual features rather than on the topic involved". In the present study an attempt was made to overcome that difficulty by combining that method with a text evaluation questionnaire in the form of a semi-structured interview.

After reading the text individually, participants are asked to discuss their reading experiences in groups of four to six people. In the present study, a semi-structured interview schedule was used to guide the discussion by the respondents on their reading experiences. The researcher was present to monitor developments in the group session.

(3) Relevance for the study

De Jong and Shellens (1997:404) point out that they (in their article) "restrict ourselves to reader-focused methods (or pretests) only". This is not the case in the present study. The methods are used to evaluate texts which have been in circulation for some time and are therefore due for revision and improvement. Furthermore, the researcher chose only the text evaluation questionnaire and focus group methods to evaluate the document characteristics of the selected texts.

4.4.1.2 Comprehension evaluation

There are options to choose from in addressing the readers' text comprehension: (1) obtain an overall judgement about a document's comprehensibility; (2) use a comprehension test to determine whether the essential information comes across; or (3) select an outright troubleshooting technique (one nonspecific method) to ask readers to note their own comprehension problems. However, there are serious objections to readers monitoring their own comprehension, as it often results in readers searching for problems to satisfy the researcher. This problem did emerge during the course of the present study. At one of the schools, for example, when the researcher insisted that a critical approach was needed when evaluating the health texts, the learners started to say anything that came to mind, which had nothing to do with the questions asked.

(1) The methods and procedures

- The cloze test: a verifying method

This is used to obtain an overall judgement about a document's comprehensibility. It can only be used to test written discourse without illustrations and supporting layout. This method is not suitable for evaluating health texts since these text make use of illustrations.

Readers are provided with a text in which every fifth word has been deleted and replaced by an underlining or interspace. The readers are required to fill in the open spaces and the percentage of correct cloze items (the cloze score) can be interpreted by using the following guidelines: (i) 57% and more = a comprehensible text; (ii) between 44% and 57% = comprehensible for highly motivated readers or with instructional help, and 44% or less = incomprehensible text for the target readers.

- A comprehension test - a verifying or troubleshooting method

This is a collective term for various types of questions used to measure the degree of text comprehension by readers, such as summarising essential information given on a certain topic, open or multiple-choice questions. After having read the document, participants are provided with a (written or oral) questionnaire on the text. They are required to respond to the questions with or without the text.

- The non-specific methods (troubleshooting and qualitative)

    - The plus-minus method

This method consists of two phases. During the first phase, while reading, participants are required to indicate the document aspects to which they react positively or negatively by writing pluses or minuses, respectively, next to the specific aspect. They choose the text aspects to which they want to respond to, such as words, chapters, illustrations or layout. In the present study, readers were asked to comment on the translated words (cf. Appendix F) in the semi-structured interview and, for that reason, it is regarded as a partial plus-minus method: the learners were expected to comment only on the translated words in Zulu.

During the second phase, readers were interviewed individually to establish their reasons for assigning plus-minus marks. In the present study the learners were given an opportunity to comment on their responses. They were told that a mark without a reason would not be considered.

    - The signalled stopping technique

Like the plus-minus method, it consists of two phases. During the first phase, participants are required to indicate where the flow of reading is disrupted, by putting a slash (/). The reason(s) for those disruptions (the signalled stopping technique) are given by using a code. During the second phase readers are interviewed individually to give reasons for reading disruptions.

    - Reader protocols

De Jong and Schellens (1997:412-413) observe that “reader protocols may result in a less natural reading process because they require participants to simultaneously read aloud and verbalize positive and negative reactions to text elements”.

The authors, De Jong & Schellens, also maintain that “a non-specific method may serve as a single pretest instrument, but it can be used in combination with one or more specific

methods" (1997:413).

(2) Relevance for the study

It was pointed out above that only the text evaluation questionnaire and the focus group methods were chosen for the present study. However, it also emerged in the discussion on comprehension evaluation above that participants made use of a technique partially similar to the plus-minus method, when they were asked to put a plus or a minus sign against translated words in Zulu.

4.4.1.3 Application evaluation

De Jong and Schellens (1997:411) point out that

> if a text is intended to help readers perform some task, application of the information will be an essential topic for evaluation. In the case of instructional documents, such as user manuals the tasks may be physical. In the case of informative texts the tasks my also be verbal (e.g. decision-fascilitating leaflets or instructions for completing forms). An important evaluation question will be whether the text effectively helps readers in carrying out relevant tasks. For verifying pretests, a performance test may be used, with partcipants using the document to carry out certain assignments.

This method was described in the evaluation of the selection behavior of the readers. Another method, which can also be applied in the evaluation of the application of information is the user protocols. Like the performance test, it is described in the evaluation of the selective behavior of readers, in this chapter.

4.4.1.4 Evaluation of acceptance, appreciation and relevance/completeness of information

De Jong and Schellens (1997:411) hold that to evaluate these features "require methods using verbal self-reports". Such methods include a text evaluation questionnaire and focus groups (both non-specific methods), the attitude questionnaire and the motivated-choice technique.

The first two methods have already been discussed in the preceding paragraphs, but, an elaboration on their use in evaluating these features is important. For example, in a text

evaluation questionnaire

> readers can be asked to evaluate a wide variety of text features. Questionnaires may be used for both verification and troubleshooting. In the former case, the overall answers to the questions are of primary interest; in the latter, the answers may serve to trigger a search for specific problems in the document. As a verifying pretest, the questionnaire may be administered in both written and oral form. For a troubleshooting pretest, however, it needs to be administered in a semi-structured interview (De Jong and Schellens 1997:411-412)

In the present study, the main focus was on troubleshooting, since the texts which are the object of the study have been in circulation for some time. For this reason, the verifying function falls away. The researcher therefore chose a semi-structured interview instead of a self-administered questionnaire. A semi-structured interview may be used for troubleshooting.

Focus groups can also be used like a semi-structured interview ─ for troubleshooting. De Jong and Schellens state:

> "Essentially, this means that a text is discussed by groups of readers. Although focus groups can be used to discuss all kinds of document characteristics, the tendency is to discuss acceptance rather than comprehension and application problems" (1997:412.).

In the present study, a combination of the semi-structured interview and focus groups were used to evaluate all document characteristics. That is, learners, in groups of six, sat around a table and used a semi-structured interview schedule to evaluate all document characteristics, under the guidance of the researcher.

For the purpose of the present study, the format of the interview schedule was as follows:

- ***The format of the interview schedule***

While every interview requires a somewhat different structure, certain conventional principles and techniques were considered in structuring the interviews designed for phase 2 of the pilot study. The interview schedule had the following three parts: (1) the opening; (2) the body; (3) the closing.

The opening was aimed at making the respondent/interviewee feel welcomed and relaxed.

In addition, the opening indicated the objectives of the interview and made it clear what topic areas would be addressed. The interviewer provided some information to motivate the respondent to answer the questions. Motivating the respondent involved an explanation of how and why the data would be valuable to the research project. Finally, the opening indicated the expected length of the interview.

The body of the interview schedule listed the topics to be covered and potential questions. The interviews conducted in this study are semi-structured interviews. In other words, they are not so-called nonscheduled interviews. In nonscheduled interviews the number of questions and the exact wording of the questions are usually not considered - only the topics and subtopics listed. Nonscheduled interviews generally leaves out potential probing questions to allow the interviewer to adapt to the interaction that unfolds. It, however, requires a highly skilled interviewer, provides no means of recording answers and is difficult to manage, especially when it comes to controlling the time factor.

In contrast, the semi-structured interview used in this study contained major questions and possible probing questions. This schedule still allowed some freedom to probe into answers and adapt to the situation. An interview schedule helps the researcher to record answers online and is relatively easy to conduct. Responses were recorded during the interview sessions.

The closing maintained the tone set throughout the interview and was brief but not abrupt. The researcher summarized the main issues discussed during the interview, discussed the next course of action to be taken, and thanked the respondent for his or her time.

The focus groups, facilitated by the use of the semi-structured interview schedules, went as follows.

During the focus group interview, readers (groups of four to six people) discussed all kinds of text characteristics. The main focus of the discussion was whether the text was acceptable. To keep the groups focused on textual features rather than on the topic involved, the focus groups were steered with a semi-structured interview schedule. The researcher monitored developments in the group session. The structure of the focus group

interviews is given below.

- ***Preparing for a session***

Identify the major objective of the meeting

The main objective of the session was to examine the accessibility of the selected health texts to the Grade 10 to 12 pupils.

Use a semi-structured interview schedule as a guide

In order to keep the groups focused on textual features rather than on the topic involved, the researcher used a semi-structured interview schedule to ask the participants specific questions in order to guide the discussion. The researcher monitored developments in the group session. The session lasted one to 1.5 hours.

The information gathered during the session formed the basis of examining the accessibility of the health texts to the target readers. Since focus groups are basically multiple interviews, many of the guidelines for conducting focus group interviews were similar to those for conducting face-to-face interviews.

- **Planning the session**

Scheduling - Meetings were one to 1.5 hours long. The sessions took place in the afternoon after school hours.

Setting and refreshments – Sessions were held in the classrooms. Pupils were asked to bring along with them all the health texts, posters and so on, in their possession, especially those that they had already read. The researcher brought his own text extracts and other relevant texts to distribute to the participants. In each session there were 24 pupils divided into four groups with six participants in each. Chairs were configured so that all members could see each other. The groups were allowed to discuss each question for some time. However, each participant was allowed to write down the answer he/she believed was correct, even if it was an answer he/she arrived at because of being influenced by others. Each group had multiple responses to each question since the responses were a product of a discussion by a group of not less than six participants. Refreshments were provided.

Ground rules – Since the session was a once-off occurrence, there were a few useful ground rules to sustain participation. The following three ground rules were considered: (a) keep focused, (b) maintain momentum and (c) get closure on questions.

Agenda – The following agenda was considered: welcome, review of agenda, review of goal of the meeting, review of ground rules, introductions, questions and answers, wrap up.

Participants - Participants were selected with the help of teachers.

Planning to record the responses – The researcher, on the basis of the results of the first phase of the pilot study and interviews, identified potential responses to the open-ended questions asked in the interview schedule. These responses were therefore precoded before the focus group session. Different participants had different views on the same question. The researcher first recorded the different responses of each group by ticking existing code categories and coding new unexpected responses. Thereafter, the researcher recorded responses of all the groups participating for the area visited.

Inviting participants to the meeting

The teachers who helped choose the participants were called and informed of the proposed agenda and the session time. About three days before the session, the teachers were reminded of the planned session.

- **Facilitating the session**

The main goal of the session was to collect useful information to meet the goals of the meeting.

The researcher introduced himself.

He explained the method of recording the session. He carried out the agenda. He carefully read each question before that question was addressed by the group. He allowed the group a few minutes to carefully record their answers. Each participant had to submit a completed interview schedule. The researcher recorded the responses of all the

groups in an interview schedule. The new unexpected responses were coded after the session. Even participation was ensured.

In case one or two people dominated the meeting, others were asked to participate. A round-table approach was used, including going in one direction around the table, giving each person a minute to answer the question. In cases where domination by an individual persisted, the group was made aware of this and the rest of the group was encouraged to come up with ideas on how their participation could be increased.

Closing the session - Members were told that their responses were valuable to the research project, they were thanked for coming and the meeting was adjourned.

- **Immediately after session**

The researcher wrote down any observations made during the session. For example, where did the session occur and when, what was the nature of participation in the group? Were there any surprises during the session?

The interview schedules as used in the present study are supplied as appendices D and E. Other complementary techniques were the face-to-face interviewing and participant observation, which will be described below.

4.4.2 The complementary techniques

The complementary techniques are described in the following paragraphs.

4.4.2.1 Face-to-face interviewing

Weisberg et al. (1996) provide the following guidelines to help get candid answers from a respondent:

- asking the questions: questions should be read using the same wording and in the same order as they appear in the questionnaire;
- not giving opinions: interviewers should not express their opinions to the

respondent; they should merely ask the questions;

- probing: in order to get clear, complete, and relevant answers to questions, interviewers must probe, to allow the respondent to clarify his or her answer. The techniques used in probing include open-ended probes (Anything else?, Any others?, Any other reasons?); general remarks like 'Let me repeat the question', 'Let me repeat the choices', and so on.
- dealing with a refusal: try to get the answer;
- interviewing elites: to interview elites requires special techniques like asking them questions in whatever order the conversation follows and avoiding writing down the respondent's answers during an interview but, instead, record a few key phrases during the interview to aid memory and then transcribe the interview immediately afterward, while the experience is still fresh in memory;
- providing benefits to the respondent: the researcher will try to make the experience to be a pleasant break in the respondent's daily routine.

These were the guidelines that were considered by the researcher in interviewing the respondents. Since this approach was used to complement the focus groups, the respondents had to be a health worker or a teacher in the relevant community. Health workers and teachers have a role to play in the distribution of the health texts, particularly to the respondents selected for the present study (Grade 10 to 12 learners). The researcher wrote them a letter, called them or visited them to arrange for a visit. The interviewee was requested to have all the health texts in his/her possession, especially those which he/she had already read. However, the researcher also took along extracts and texts which would help in obtaining the necessary data.

The researcher is known by many people in three of the areas which were visited: Soshanguve, Thembisa and Mtulwa. He is a former high school teacher at Thembisa and Soshanguve. Mtulwa is his home village. In these areas he had no problem in initiating contact, selecting a respondent, setting interview conditions and getting informed consent. Extra effort was required to convince members of the Mpophomeni area to participate, seeing that the researcher was not known there and first had to gain the trust of the interviewee.

4.4.2.2 Participant observation

Kane (1985) notes two kinds of participant observation which are relevant in this study: structured observation and indirect observation. Structured observation entails that specific types of behaviour or activities are chosen for observation and recorded whenever they do occur. Indirect observation includes the study of physical traces to examine human or other activity. Kane (1985) puts forward the following points to be noted in observing situations:

- An observer should avoid judgemental adjectives and quick leaps to abstractions. Certain actions should not be interpreted as referring to specific states;
- If the observer considers his interpretation to be useful, such a record should be separated from the rest of the notes by some distinguishing mark like putting it within slashed lines, as a reminder that it is an opinion of the observer;
- An observer should not record what people say as if it were a fact. He should rather write such a statement in a reported speech: e.g. 'Mr Mkhize said that..."
- The observer should record questions or comments which he makes in the course of an interview or observation, as they may have an effect on the situation.

These points were taken into consideration by the researcher when observing the behaviour and attitudes of the learners towards the health texts. Participant observation techniques were used to learn from the respondents' actions. It was used to complement the other research techniques. The following section deals with how the components of text communication were incorporated into the primary research method of the present study– the use of corpora as research method.

4.5 The components of text communication

4.5.1 Cohesion

In this study Halliday and Hasan's (1976) five main cohesive devices in English (reference, substitution, ellipsis, conjunction, and lexical cohesion), were useful in analysing the data from the health texts compiled for the research project. The relevance of these devices is discussed below.

- Reference

As discussed in Chapter 3 of this study, in a Zulu sentence the relationship of words to the governing noun is shown by prefixal elements which bring about agreement (concordance) in the sentence. Instead of using pronouns as common reference items, Zulu uses prefixes. In her thesis, Moropa (2005) mentions that Xhosa, like Zulu, is an agglutinating language and states that

> a very important feature of the South African indigenous languages which must be taken into account when using computer tools is that any word that stands in a particular relationship to the noun has a concord which is derived from the particular noun class prefix to indicate concordial system. The concordial system can be described as a frequent repetition of certain morphemes in the same sentence, and this promotes the euphony of the language.

The noun class system in Zulu is illustrated in the following table, which shows the grouping of nouns according to prefixes.

Table 4.1: The classes of the noun

Class	Prefix	Contents
1	*umu-*	persons, e.g. *umuntu* (a person)
1(a)	*u-*	terms of relationship, proper names, e.g. *ubaba* (my father)
2	*aba-*	plural of Class 1, e.g. *abantu* (people)
2(a)	*o-*	plural of Class 1(a), e.g. *obaba* (fathers)
3	*umu-*	natural phenomena, *e.g. umuthi* (a tree)
4	*imi-*	natural phenomena, e.g. *imithi* (trees)

Class	Prefix	Contents
5	*ili-* or *i-*	miscellaneous, e.g. *ilitshe* (a stone)
6	*ama-*	plural of Class 5, collectives, e.g. *amatshe* (stones), *amanzi* (water)
7	*isi-*	implements, miscellaneous, e.g. *isitsha* (a plate or a dish*)*
8	*izi-*	plural of Class 7, e.g. *izitsha* (plates or dishes)
9	*in-*	animals, abstracts, miscellaneous, e.g. *inja* (a dog)
10	*izin-*	plural of Class 9, e.g. *izinja* (dogs)
11	*ulu-* or *u-*	long objects, miscellaneous, e.g. *uthi* (a stick) with Class 10 as its plural, e.g. *izinti* (sticks)
14	*ubu-*	abstracts, collectives, e.g. *ubukhulu* (largeness or size), without plural
15	*uku-*	infinitives from verb stems, e.g. *ukubona* (to see)
15(a)	*uku-*	only a few nouns remain in this class, e.g. ukunene (the right hand)
16	*pha-*	it is no longer an active noun class prefix in Zulu and is used to form locatives, e.g. *phandle* (outside*)*
17	*ku-*	it is no longer an active noun class prefix in Zulu and is used to form locatives, e.g. *kumama* (to/at/by mother)

(Handbook of isiZulu, Taljaard & Bosch: 1988, p. 3-4)

Taljaard and Bosch summarise the system of Zulu concords as follows:

(i) The importance of the class prefixes does not lie only in the fact that they indicate the classes to which the different nouns belong, but also in the fact that they are employed in linking the noun to other words in a sentence. This is

done by means of a **concord** which is derived from the class prefix of the noun and normally bears a close resemblance to the class prefix. This concord is prefixed to the verb in the sentence.

(ii) This system of concordial agreement is important because it forms the basis of the whole sentence structure of isiZulu (and other Bantu languages). E.g. in the sentence, "The woman washes the plate", the word for "the woman" in isiZulu is *inkosikazi*, for "wash" it is *–geza*, and for "plate" is "*isitsha*". The subject noun *inkosikazi* must now be linked (or brought into concordial agreement) with the verb *–geza* by means of a **subject concord** *i-* which was derived from the class prefix *in-* of the subject noun: *Inkosikazi igeza isitsha*. In this way a variety of concords may be used in a sentence, e.g. the sentence, "Both honest boys who are eating eat meat", would look like this in isiZulu:

Boba*bili* ***aba****fana* ***aba****qotho* ***aba****dlayo* ***ba****dla inyama*.

What is relevant in this discussion is that both of these sentences can be used without their subject nouns, as shown below:

I*geza isitsha*. (Lit. She washes the plate.)
Boba*bili* ***aba****qotho* ***aba****dlayo* ***ba****dla inyama*. (Lit. Both who are honest who are eating eat meat.)

These sentences show that the concords can be used in the place of pronouns and therefore utilised as cohesive devices.

Moropa (2005:102-105) discusses the use of a demonstrative in Xhosa to translate articles such as 'the', 'a' and 'an' and argues as follows:

Xhosa does not have articles such as 'the', 'a' and 'an'. In the English/Xhosa Parallel Corpus, the articles in most cases are translated by the first position demonstrative 'this'/'these'. These strategies are used by all the translators. The three positional types of demonstrative pronouns in Xhosa correspond basically to the English 'this', 'that', 'that

yonder'. Primarily, the demonstrative is used before a noun or pronoun or alone to indicate time and position.

As a reference device, the demonstrative would be used alone, without the noun it refers to. For example:

> *Ukudla kakhulu kuyakhuluphalisa.* ***Lokhu*** *kungadala izifo.* (Lit. Eating a lot of food is fattening. **This** can cause diseases.)

In Zulu, demonstratives can be listed, with reference to noun classes as discussed above, according to the three positional types as follows:

Table 4.2: Zulu demonstratives

Noun Class	This	That	that yonder
1	lo/lona	Lowo	lowaya/loya
2	Laba	Labo	Labaya
3	lo/lona	Lowo	lowaya/loya
4	le/lena	Leyo	leyaya/leya
5	Leli	Lelo	Leliya
6	la/lana/lawa	lawo	Lawaya
7	Lesi	Leso	Lesiya
8	Lezi	Lezo	Leziya
9	le/lena	Leyo	leyaya/leya
10	Lezi	Lezo	Leziya
11	Lolu	Lolo	Loluya
14	Lobu	lobo	Lobuya
15 & 17	loku/lokhu	loko/lokho	lokuya/lokhuya

These demonstratives could be examined in the health texts by the researcher to determine which of them were used as a cohesive device.

- Substitution and ellipsis

In Chapter 3 it was mentioned that the use of substitution as a cohesive device includes

substitutes like *do*, *one* and *the same.* It was also stated that ellipsis involves the omission of an item, but only those cases where the grammatical structure itself points to an item or items that can fill the slot in question (Baker 1992:187). The relevance of these cohesive devices lies in the fact that "since substitution and ellipsis are purely grammatical relations which hold between linguistic forms rather than between linguistic forms and their meanings, the details are highly language-specific" (Baker 1992:187). The researcher focused on how these devices were reproduced in Zulu since English differs structurally from Zulu.

- Conjunction

In Chapter 3 it was stated that since conjunction is a device for signalling relations between chunks of information, conjunction is naturally bound up with the chunking of information, how much to say in one go, and how the relations between such chunks of information are perceived and signalled.

In this study the researcher focused on the purpose of the translation and the freedom the translator felt entitled to in rechunking information and/or altering signals of relations between chunks, so as to determine whether the translation conforms to source-text patterns of cohesion. A source oriented text would be regarded as a 'foreign' translation if it deviates from the typical target-language patterns of chunking information and signalling relations.

- Lexical cohesion

The two lexical cohesion devices which were discussed in the previous chapter are 'reiteration' and 'collocation', which are defined as "the role played by the selection of vocabulary in organising relations within a text … (and) that lexical cohesion covers any instance in which the use of a lexical item recalls the sense of an earlier one" (Baker (1992:202-203). **Reiteration** refers to the repetition of lexical items which includes a repetition of an earlier item, a synonym or near-synonym, a superordinate or a general word. Kruger (2000:89) quotes Halliday and Hasan (1976) who define collocation as some or other semantic relation that results from the co-occurrence of lexical items that are in some way or other typically associated with one another, because they tend to co-occur regularly in similar (textual) contexts. Though **collocation** is a cohesion device which has

not been dealt with satisfactorily by text-linguistic scholars, this study concentrated on how problems such as the impossibility of reproducing equivalent networks of lexical cohesion in a target text, were dealt with by the translators.

4.5.2 Coherence

Since coherence is subjective and judgements concerning it may vary from reader to reader, the translator is expected to be aware of implied meanings and try to make them explicit to the reader. The translator would adopt strategies like adding information or paraphrasing to ensure that the text is accessible to the target reader.
The researcher used, for example, frequency lists to uncover some words or expressions which are peculiar to the target audience and then studied the way they were dealt with by the translator.

4.5.3 Intentionality and acceptability

In Chapter 3 it was stated that the relationship between intentionality and acceptability requires that the receiver must be able to determine what kind of text the sender intended to send, and what was to be achieved, in order to recognize and accept it as a text. The focus of the present study excluded the study of the these two components and it will therefore not be discussed any further.

4.5.4 Situationality

The corpus compiled for the present study included texts from areas in two provinces of the country. This study focused on dialect markers so as to describe those that affected the linguistic choices that the Zulu translators made and had to make. The study of these features included the use of frequency lists to identify dialect markers followed by a description of their use by taking into account the targeted readers.

4.5.5 Informativity

This principle was also excluded from the present study since informativity as a measure of

the information load that a translation provides to a target language reader about the source language events, states, processes, objects, individuals, places and institutions was beyond the scope of the present study.

4.5.6 Intertextuality

The pilot study revealed that the respondents were familiar with the health texts as produced in this country. The respondents were therefore expected to relate the selected texts to those that they had already encountered in prior experience.

4.5.7 Efficiency, effectiveness and appropriateness

In Chapter 3 it was stated that effectiveness differs from efficiency in that it promotes processing depth whereas efficiency promotes processing ease. Appropriateness must mediate between these two opposing factors to indicate the proper balance between the conventional and the unconventional in each situation. Though these components are important in analysing the communicativeness of a text, they will not be foregrounded in the present study.

The following section deals with the last component of text communication ─ accessibility.

4.5.8 Accessibility

As defined in Chapter 3, this principle is understood to mean every aspect of a text which makes it either easy or difficult to read. It relates to aspects such as the text's visual impact (e.g. the clarity of the typeface, the positioning of diagrams and illustrations); its stylistic features (e.g. the use of familiar words and structures); the organization of the information (e.g. the table of contents, index and headings); its conceptual level; ~~an~~perhaps the most important ─ the amount of interest aroused in the reader by the text.

In the pilot phase of the present study respondents were asked questions on some of these aspects. The following discussion deals with how some of these aspects were used to describe the accessibility of the health texts selected for the present study.

- **Illustrations**

As discussed in Chapter 3, for learners who lack the intrinsic motivation to read, interest must be sparked initially by the extrinsic features of the book its appearance, illustrations and lay-out (Mobley 1986:10). That is, the interest to read can be improved by using illustrations, diagrams, pictures and by using an attractive lay-out for the text. This makes the text more accessible to the target readers.

During the pilot phase respondents were expected to comment on the use of illustrations and pictures. Both positive and negative comments were taken note of. Furthermore, the researcher studied the use of illustrations, diagrams or pictures so as to give a general comment on their use. The researcher had to do this manually, because illustrations cannot be analysed by concordancers such as ParaConc.

- **Organization of information**

In Chapter 3 it was stated that this principle relates to the following features, which affect the organization of the text: (i) logical and conceptual structure, (ii) advance organizers, (iii) questions, (iv) format variations and (v) non-verbal information.

The present study focused on the use of questions as an integral part of the text organization (questions which require the reader to do something) because such questions can have a marked effect on both understanding and recall. The focus was on how they were dealt with by the translators.

- **Language aspects**

In Chapter 3 it is mentioned that vocabulary and sentence structure are the important aspects of accessibility (readability). That is, words outside the knowledge of the reader cause a breakdown in communication while complex or unfamiliar sentence patterns cause the reader to lose the thread of meaning, especially if punctuation is inadequate. This study primarily focuses on the use of words and sentence patterns so as to describe the accessibility of the health texts compiled for the present study. Explicitation and simplification strategies as used by the translators are examined and described. However, Mobley's warning that "merely replacing long words and sentences with shorter ones will

not necessarily make texts more readable", should be considered. The strategies are dealt with in Chapter 5 of the present study.

- **Content and conceptual difficulty**

This aspect was considered both in the pilot study and in analysing the texts using corpus tools. The respondents were asked questions on concepts they could not understand and the researcher used corpus tools to describe the seemingly difficult concepts and how they were dealt with by the translators.

- **Clarity of meaning**

This study focused on how translators dealt with implied meanings. The problem was discussed in par. 4.5.2 ("Coherence") above. Accessibility to the target readers is improved by the elimination of ambiguities in the text.

4.5.9 Summary

In the preceding sections, aspects of Phase 2 of the study (such as the period when the study was conducted) were identified. Furthermore, corpus as used in the present study was described. De Jong and Schellens's text evaluation methods were described and matched with the text features which needed to be evaluated to determine text quality. The usefulness of the components of text communication was also discussed. Mobley's (1986) aspects of readability (accessibility) were discussed as an additional component of text communication.The following section deals with corpus-based methodology.

4.6 Corpus-based methodology

The corpus that was designed and compiled for the present study is called the English-Zulu Health Text Corpus (EZHTC). This corpus consists of texts which were collected by the researcher. In the following section, it is described how the texts were collected.

4.6.1. The collection of the texts

In the present research project the parallel corpus consisted of a set of health texts in

English and their translations into Zulu. The researcher collected the health material from the distribution outlets of the national and provincial governments as well as from *Soul City*. The latter is an NGO, a multi-media health promotion and social change project.

The SA government led a communication campaign called Khomanani, which formed part of the national drive to prevent the spread of HIV/Aids. On the Khomanani website accessed on July 20, 2007 it was mentioned that the aim of that campaign was to "improve care, support and treatment for people who have HIV and AIDS, and to give support to their families".

Using material in 11 official languages, Khomanani made an attempt to reach all the citizens of this country. Being driven and funded by the Department of Health on behalf of the government, two privately contracted companies, Johnnic Communications and Meropa Communications Consortium, had to ensure that the aims of the national government were achieved.

Of significance for the present study, is that during the period of September 2001 to March 2004 (the first phase of the Khomanani campaign), the Red Ribbon Resource Centre provided free print materials. During this period more than one million pamphlets, booklets and posters were distributed. The health texts collected for this study included some of these materials.

According to the Khomanani website, the project's mission for the second phase of their campaign (2004 to 2006) was "to continue to mobilize individuals and organizations across the nation to respond to the challenges of HIV and AIDS, TB and STIs". The campaign also aimed at reducing new infections. The response to these challenges seems to be covered by the contents of the health texts as produced by the national government about the challenges of HIV and AIDS, TB and STIs.

The national government also produced texts on other themes, which were also collected for this study. The themes included albinism, food supplements, diabetes, drug abuse, healthy babies, hearing, passive smoking, iodine deficiency disorders and balanced diet.

Given the fact that the areas covered by this study were located in Gauteng and KwaZulu-Natal, the health texts produced by these provinces were collected.

In KwaZulu-Natal two sets of texts were collected – printed materials and electronic material. The printed materials covered themes such as heart disease, cholera and breastfeeding. A number of texts held in electronic form were retrieved from the website of KwaZulu-Natal's Department of Health for the purpose of this study. These texts were on cholera, flies, food safety, food sampling, Aids, Caring for people with HIV, Living with HIV-AIDS, malaria, milk, pesticides, the plague, rabies, rodents, scabies, shingella, typhoid, water purification and yellow fever.

In Gauteng, the printed materials collected covered the following themes: cholera, TB and HIV, surviving rape, Hepatitis, drug abuse and Polio. Most of the Gauteng texts in electronic form were collected from the City of Tshwane Municipality. These texts dealt with oral rehydration, scabies, urinary tract infection, diabetes, breast feeding, TB, pregnancy, STIs, drugs, immunization, Patients Charter.

The last set of texts was those produced and distributed by Soul City. In the present study the effectiveness of the printed material, in the form of booklets, was relevant. Each of the booklets included an explanation of difficult words in selected official languages and a list of places to help the reader. Themes covered by the booklets and collected for this study included blood pressure, caring for children, Aids in our community, living positively with Aids, parenting, reproductive health, STIs, the mother and child, women abuse and HIV.

4.6.2 Text availability

The researcher managed to collect English health texts of about 107 825 words with their translation into Zulu (74 853 words), from printed texts and other electronic texts, including short texts from KwaZulu-Natal's website. The reason for this limited number of texts was that the new government introduced 11 official languages in 1994. Until that time, South Africa had two official languages, Afrikaans and English. The new dispensation meant that public information texts, including health texts, had to be translated into all 11 languages. This was done, mainly, by writing texts in English and

then translating these texts into the indigenous languages.

The texts collected for the present study, together with their Zulu version, were the following:

Table 4.3: Texts produced by National Department of Health

Source Text	Target Text	*Number of Words*
Albinism	*Ubunkawu*	3544/2393
Balanced Eating for Good Health	*Indlela Yokudla Ebhalansile Enempilo*	1325/921
Circles of Support – Caring for Children	*Imizungelo Yokuxhasa – Ukunakekelwa Kwabantwana*	292/222
Common Sicknesses of People with HIV and AIDS	*Izifo Ezivamile Kubantu Abane-HIV Ne-AIDS*	268/213
Look at Me – What Can I Be?	*Ngibheke Kahle – Ucabanga Ukuthi Ngingaba Yini?*	936/598
Do You Want a Healthy Baby?	*Ingabe Ufuna Ukuba Nomntwana Ophile Kahle*?	447/405
Hearing and Understanding	*Ukuzwa Nokuqonda*	730/631
HIV and AIDS in the Workplace	*Igciwane Lesandulela-ngculazi Nengculazi Emsebenzini*	256/208
HIV, AIDS and Relationships	*Isandulela-ngculazi, Ingculazi Nobudlelwane*	288/229
How to Prevent Iodine Deficiency Disorder	*Ngabe Zivikelwa Kanjani Izimpawu Ezibangwa Ukuntuleka Kwe-ayodini Emzimbeni*	552/444
Play It Safe With Alcohol	*Qaphela Utshwala*	258/245
Pregnancy and HIV	*Ukukhulelwa Negciwane Lesandulela-ngculazi*	311/239
Take Action to Stop TB at Work	*Thatha Isinyathelo Sokuqeda Isifo Sofuba Emsebenzini*	265/226
TOTAL NUMBER OF WORDS		**9472/6974**

Table 4.4: Health texts for Tshwane

Source Text	Target Text	*Number of Words*
Oral rehydration in Case of Diarrheoa	*Okuphuzelwa Ukubuyisela Amanzi Emzimbeni Emva Kohudo*	212/218
Scabies Pamphlet	*Iphamfulethe Yenzenzane*	440/342
Breastfeeding	*Ukuncelisa Ibele*	756/521

Source Text	Target Text	*Number of Words*
Cancer	*Umdlavuza*	744/578
Questionnaire	*Uhlu Lwemibuzo Yocwaningo*	5700/4718
Interaction Between HIV and TB	*Ukuhambisana Kwegciwane Lengculazi Nesifo Sofuba*	258/198
Urinary Tract Infection in Women	*Izifo Zomgudu Womshobingo Kwabesifazane*	392/300
Are You Pregnant or Planning to Have a Baby?	*Ngabe Ukhulelwe Yini Noma Uhlela Ukuba Nengane*	*403/322*
STIs	*Izifo ezithathelwana Ngocansi*	713/501
What Are Drugs?	*Ziyini Izidakamizwa*	177/169
Immunization	*Ukugonywa*	430/320
Just Say No to Drugs	*Funda Ukuthi Cha Ekusetshenzisweni Kwezidakamizwa*	181/167
Patients' Rights Charter	*Umhlahlandlela Wamalungelo Eziguli*	792/579
Polio	*Isifo Sovendle*	315/223
Surviving Rape	*Ukuqhubeka Nempilo Emva Kokudlwengulwa*	1039/668
Tuberculosis Can Be Beaten	*Isifo Sofuba Siyelapheka*	264/158
TOTAL NUMBER OF WORDS		**12816/9982**

Table 4.5: Texts for KwaZulu-Natal

Source Text	Target Text	*Number of Words*
Breast milk	*Ukuncelisa ibele*	1038/694
Registration certificate	*Isitifiketi Sokubhalisa*	723/469
Cholera - Text 1	*Isifo Sohudo Ikholera*	259/179
Cholera - Text 2	*Ikholera*	*593/227*
Food Safety	*Ukuvikeleka Kokudla*	721/580
Food Sampling	Ukuhlolwa Kokudla	192/118
Heart Disease	*Isifo Senhliziyo*	935/591
Food Labeling	*Ukubhalwa Kokudla*	672/525
Malaria	*Umalaleveva*	762/566
What is milk	*Ubisi Oluphephile*	536/354
Plague	I-Plague	745/446
Rabies	*Amarabi*	660/373
Rodent Control	*Ukunqanda Amagundwane*	944/519
Scabies	*Utwayi*	677/448

Source Text	Target Text	*Number of Words*
Shingella	*Ishingela*	602/428
Passive Smoking Kills	*Ukuhogela intuthu Yogwayi Obhenywa Ngomunye Umuntu Kuyabulala*	149/474
Scheduled Trades	*Uhwebo Oluvumelekile*	849/474
Typhoid Fever	*I-Typhoid Fever*	580/404
Water Purification	*Ukuhlanzwa Kwamanzi*	234/171
Yellow Fever	*I-Yellow Fever*	325/256
TOTAL NUMBER OF WORDS		**12*196*/82*96***

Table 4.6: Texts from *Soul City*

Source Text	Target Text	*Number of Words*
High Blood Pressure	High Blood Pressure	4576/3299
Aids in Our Community	*Ingculazi Emphakathini*	5195/3331
Living Positively with Aids	*Phila ngokuzethemba ne-HIV ne-AIDS*	8515/5528
Pregnancy and HIV	*Ukukhulelwa Negciwane Lengculazi*	1815/1305
TB	*Isifo Sofuba*	3801/2523
Caring Together for Children	*Ukunakekela Izingane Sibambisene*	4150/2839
Tomorrow Is Ours	*Ikusasa Ngelethu*	9974/6926
Anti-retroviral Treatment for Life	*Ukwelashwa Ngemishanguzo Edambisa Igciwane Lengculazi Impilo Yonke*	7092/4965
Your Reproductive Health Book	*Incwadi Yakho Yezempilo Ngezenzalo*	8553/5591
Condoms	*Amakhondomu*	97/61
Sexually Transmitted Diseases	*Izifo Ezithathelwana Ngocansi*	5132/3653
The Mother and Child Care	*Incwadi Yomame Kanye Nokukhuliswa Kwabantwana*	6613/4253
Testing for HIV	*Ukuhlolelwa i-HIV*	1529/1143
Help Stop Women Abuse	*Siza Ukunqanda Ukuhlukunyezwa Kwabesimame*	5868/3845
STIs	*Izifo Ezithathelana Ngocansi, ama-STIs*	431/339
TOTAL NUMBER OF WORDS		**73341/49601**

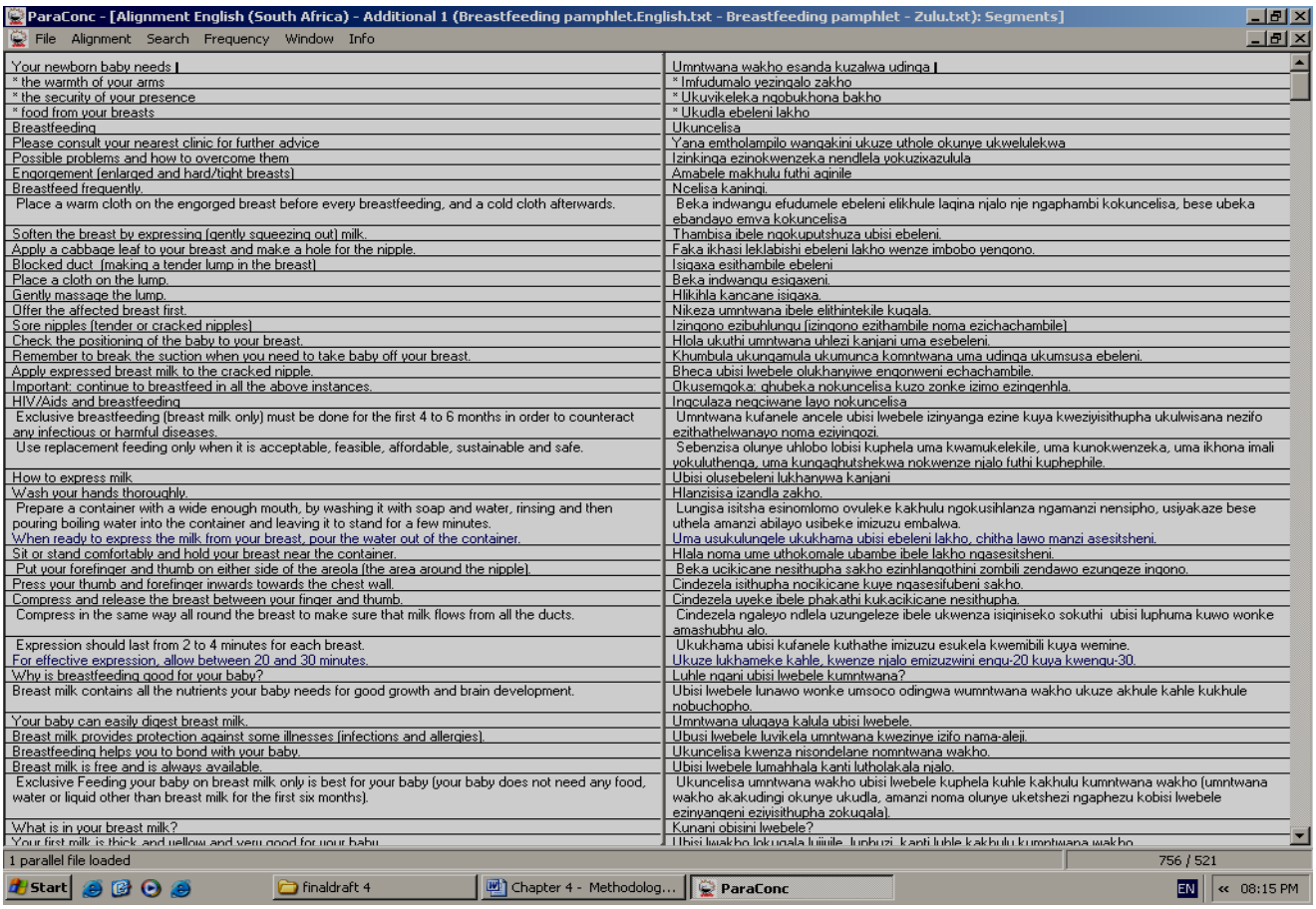
The total number of words for all the texts are 107 825/74 853]

4.6.3 Alignment

In the present study instances of words and sentence structures were extracted from parallel texts ─ health texts in English with their Zulu translations, by using the ParaConc tools. These were words and sentence structures from the pilot study data, expressions identified by using the components of text communication as well as by using the corpus tools, for example, frequency lists. The extraction of the words or sentence structures was possible only after the English texts and their translations into Zulu had been aligned. The alignment means "linking a unit of text in one language with a unit of text in another language" (Olohan 2004:26). In the present study it refers to linking a unit of health texts in English with its translation in Zulu.

The ParaConc software automatically aligns the source text with its translation. However, mismatches between the source text and its translation do occur – such mismatches are corrected by doing the necessary linkings manually. An example of an English text aligned with its Zulu version is a text on breast milk as shown below. Since ParaConc does not include Zulu, this language is represented by Additional 1 in the examples given in this study.

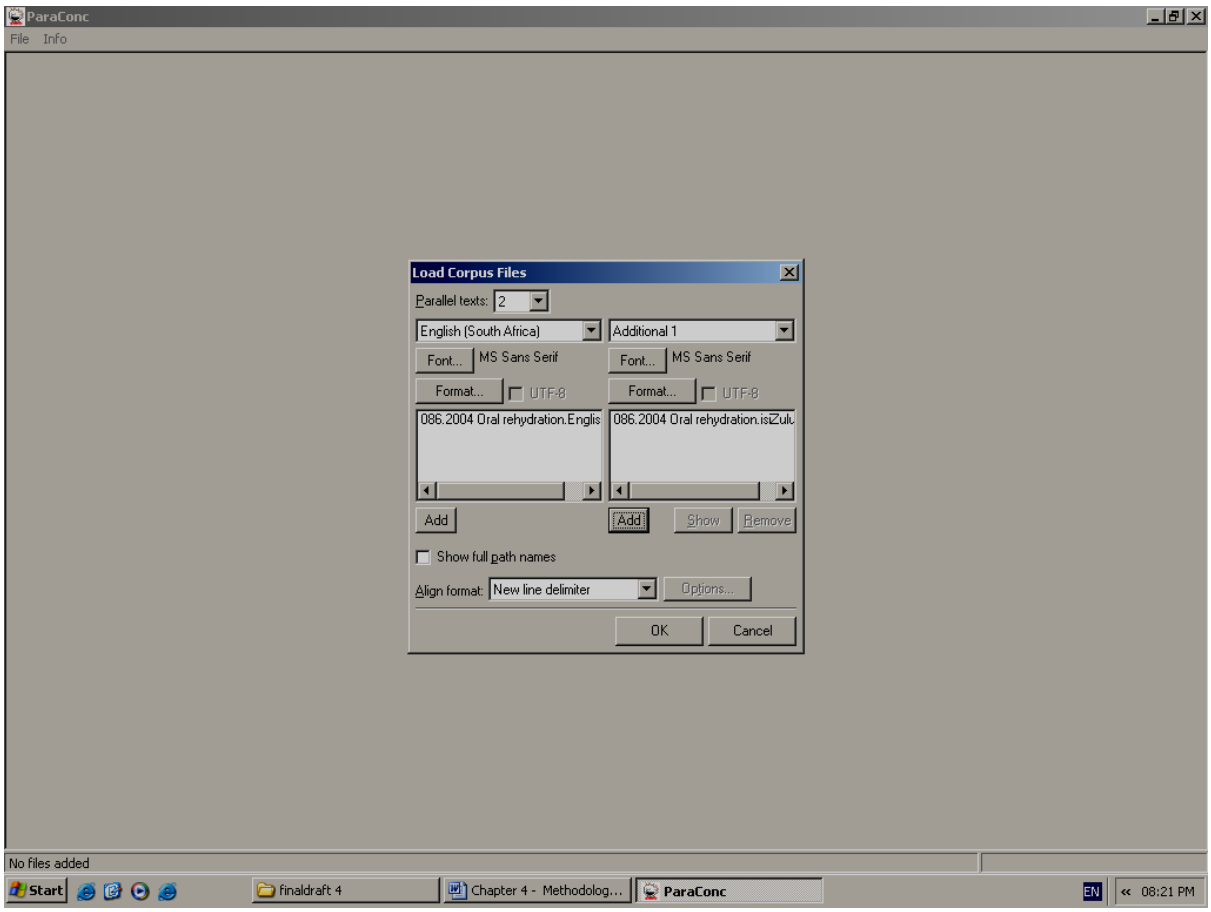
Figure 4.1: An English text aligned with its Zulu version



This is an example of one health text aligned with its Zulu version. Since many texts were collected and compiled for the present study, the researcher had to decide on the steps to follow in conducting the research. The texts were grouped according to the target readership and the producers. That is, there are 16 health source texts with their Zulu version produced by Tshwane Metropolitan Municipality; 13 by the National Department of Health; 19 for KwaZulu-Natal and 15 by *Soul City*.

The researcher would, for example, load an English source text with its Zulu version and align them as shown above. Loading means choosing the two parallel texts saved as plain texts by means of the parallel concordancer. The loading activity is shown in the following screen below.

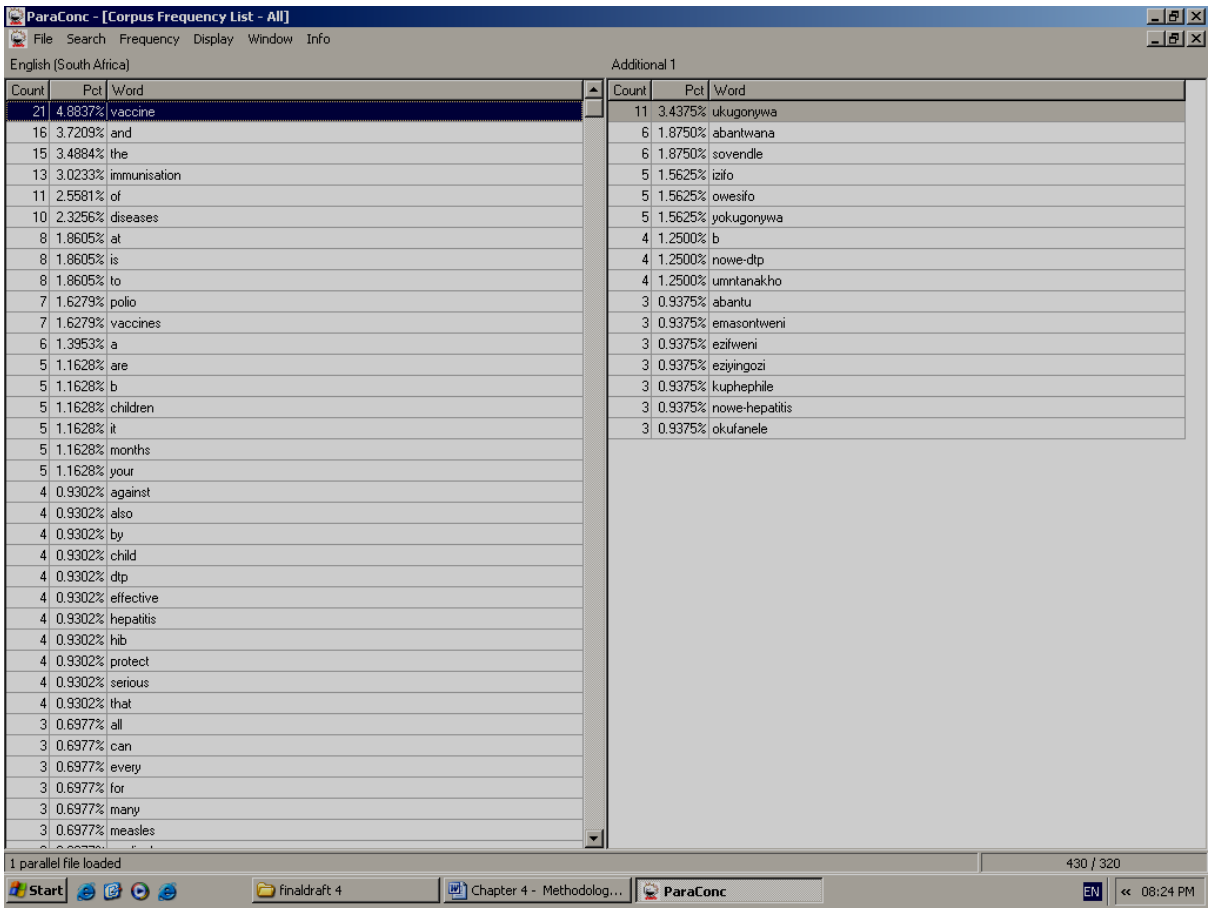
Figure 4.2: Loading of texts



The screen shows that there are two parallel texts that can be loaded, though more could be loaded by using the drop down menu. By clicking on the add button more texts could be chosen for analysis. For example, the researcher could load all the KwaZulu-Natal texts to study the use of a word or sentence structure in all the texts. Since the texts were written on different themes some words would be perculiar to a specific text, while others could be extracted from almost all the texts. For the present study the primary focus was on the principle of accessibility. For example, the translator could concentrate on words by doing a search enquiry on a corpus compiled for a region. He would then do a search on the same words by using a corpus compiled for another region to see how they were dealt with in the Zulu translations.

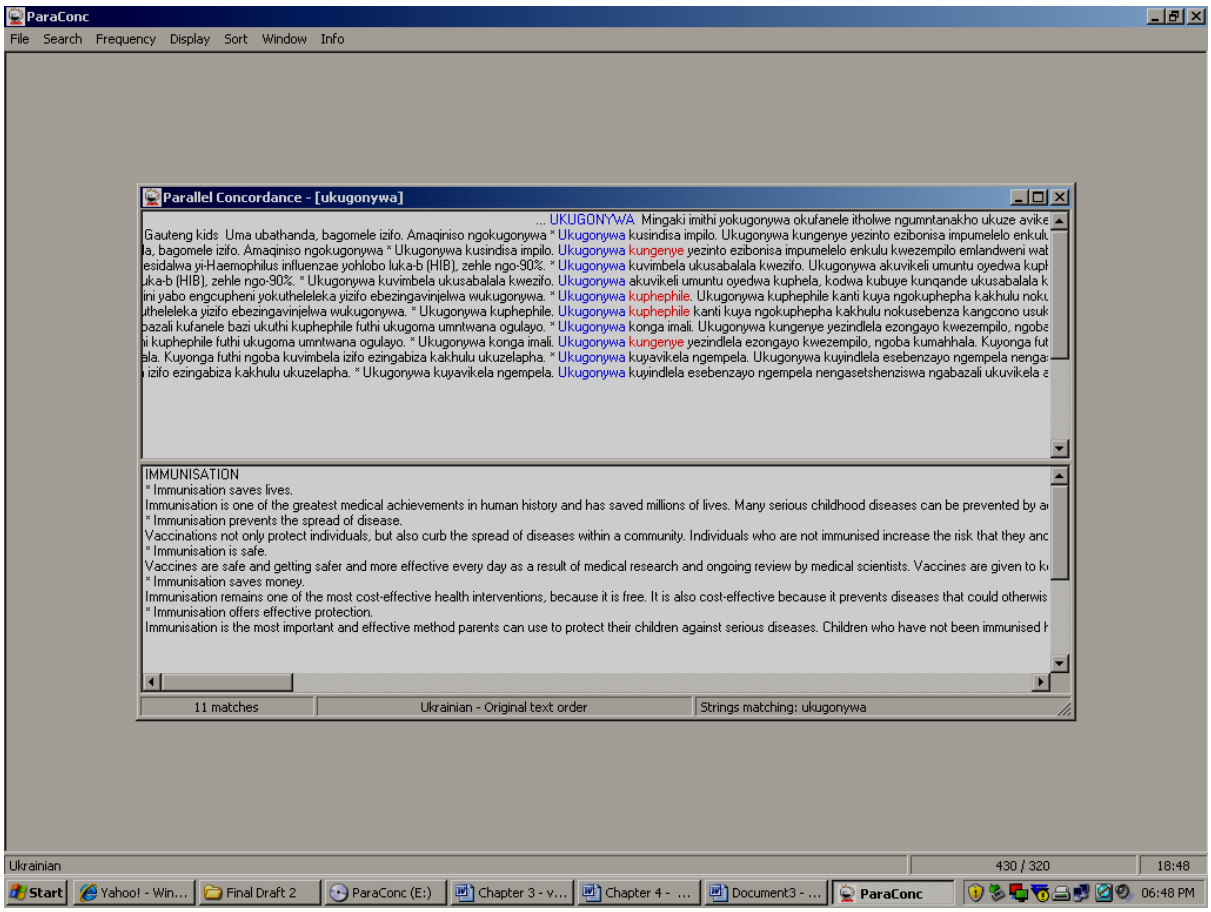
The alignment process could be followed by making a frequency list, like the following frequency list extracted from two parallel texts from the Tshwane corpus.

Figure 4.3: Frequency lists of a parallel text



This is a frequency list from a text on immunization with its Zulu version. The frequency list tool shows that, in the English version the word 'vaccine' appears 21 times, while its Zulu version (*ukugonywa*) appears 11 times. This frequency list can be used to display the key words in context, for example the Zulu word ***ukugonywa*** (to be strengthened with medicines). This can be done by using the corpus concordancing tool, as shown in the following screen.

Figure 4.4: The display of key words in context



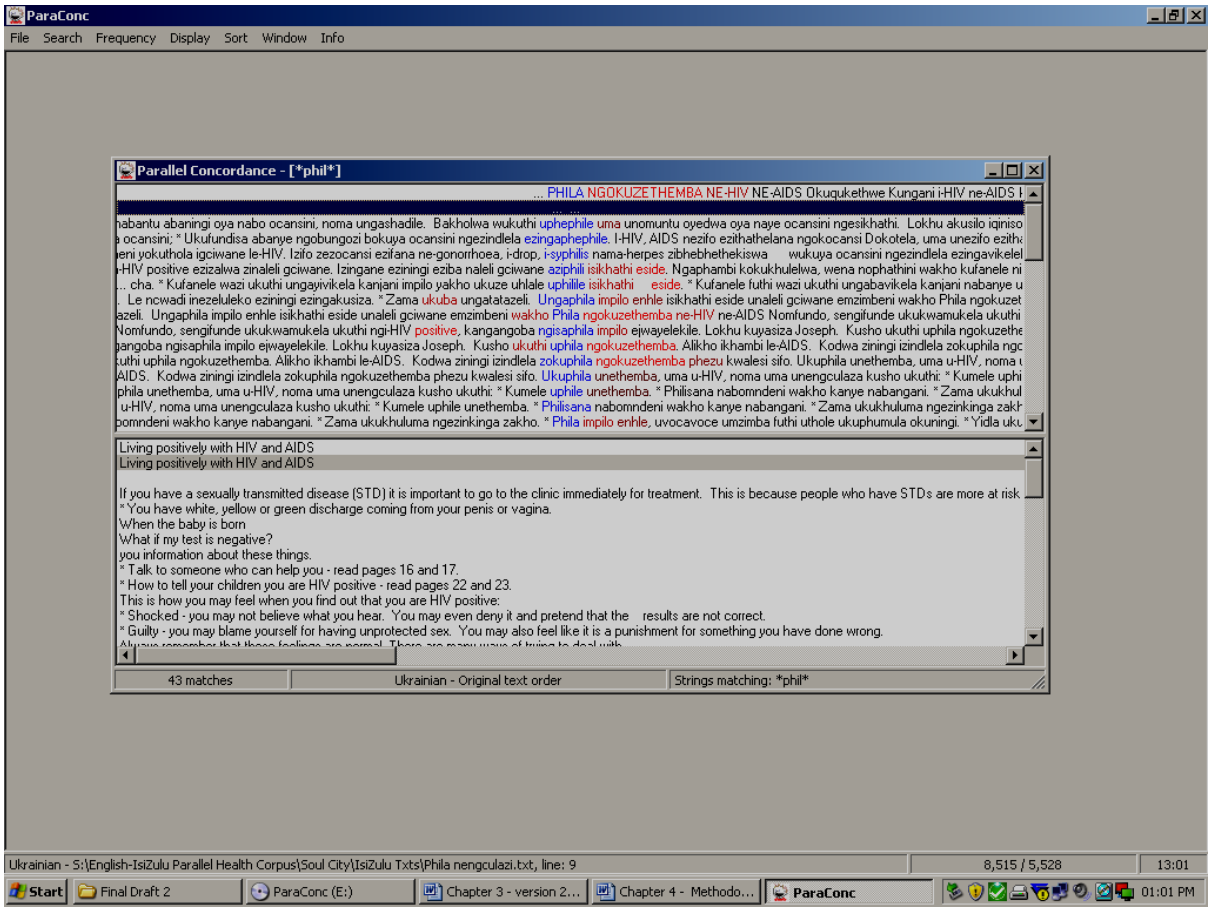
This example shows that the key word in context can be the Zulu word. The lines in which it appears are in the upper part of the screen and their English versions are in the bottom part of the screen. One of the reasons why the Zulu text has a lower frequency of the word *'ukugonywa'* (to be vaccinated) than the English 'vaccine' is that Zulu, like Xhosa and other Nguni languages, is an agglutinating language. That is, words in these languages include roots/stems written together (conjunctively) with concords and some connectives. Moropa (2005:81) correctly observes that "conjuctivism makes it difficult to analyse the frequency list in Xhosa", as well as in Zulu. The solution to this problem is what is termed 'wild cards' as discussed by Michael Barlow (2003:37). The summary of the most useful wildcard characters follow below:

- The asterisk

The asterisk, in a search string, matches zero or more characters. This makes it easier for making a frequency list of a Zulu text because the researcher has various options when dealing with a word that may have various formations emanating from prefixes and

suffixes that have been affixed to its stem or root. The table of noun class prefixes as presented above shows the type of prefixes that can be affixed to nouns. Concords and suffixes are also affixed to verbal stems/roots. Therefore, the researcher could use a nominal or verbal stem/root together with the asterisk in his search inquiry. For example, a search inquiry for the verbal root **–phil-** can be done on the text entitled *Living Positively with Aids* from the *Soul City* corpus by using the asterisk and the result is shown in the following screen.

Figure 4.5: The use of an asterisk in a search inquiry



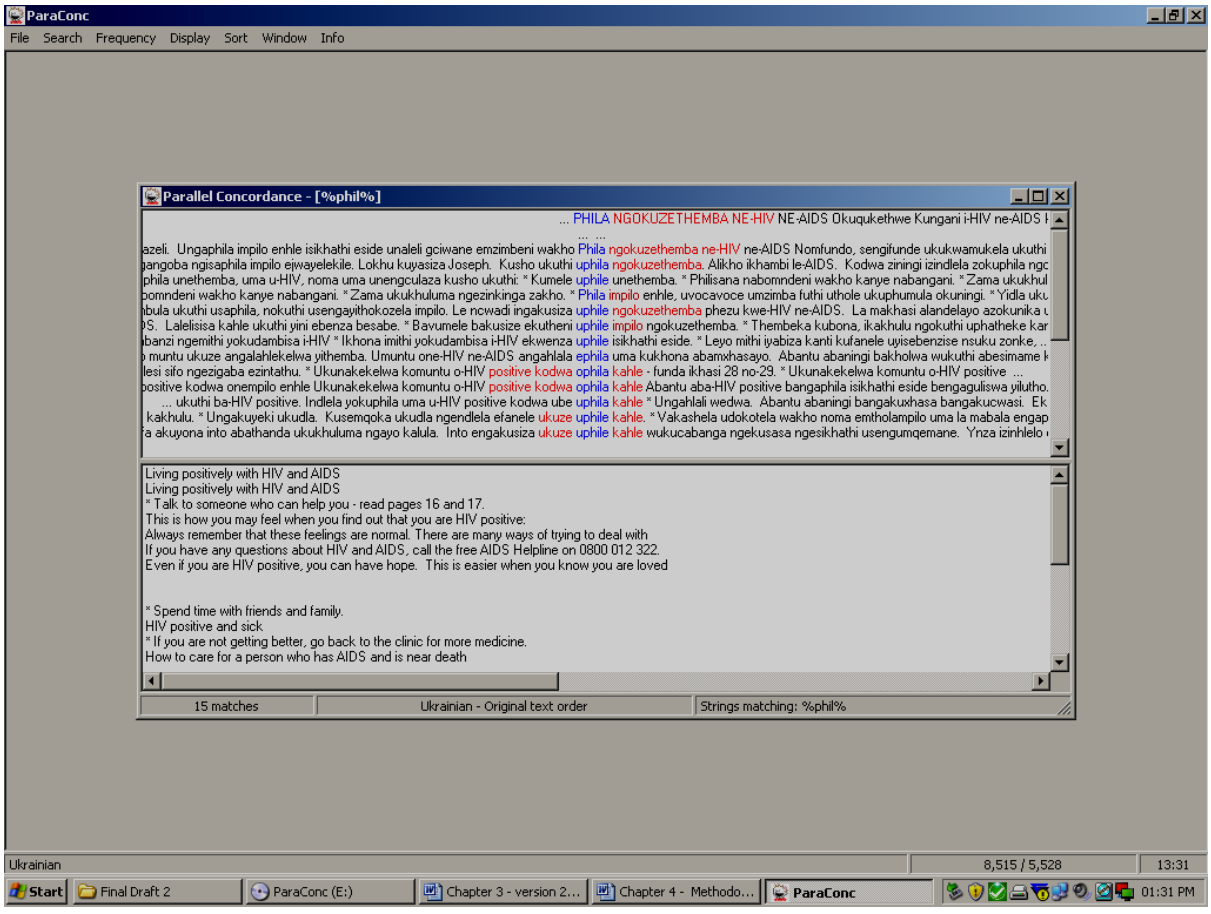
The result of this inquiry includes words that do not denote the meaning of the root -phil-. For example, the word ***uphephile*** (you are safe) is from the verbal root ***–pheph-*** (safe) with its verbal extension ***–el-***. The researcher would delete lines with such irrelevant words and then concentrate on analysing the rest. Another interesting example is the Zulu version ***i-syphilis***, which is an example of the transference translation strategy. In other words, the English word syphilis was transferred as it is into the target text, with just the Zulu nominal prefix affixed to it. The computer grouped this word with the other Zulu words with the

verbal root ***–phil-*** since the middle part of the word syphilis has letters similar to the verbal root ***–phil-***. This line should also be deleted from the other relevant lines. However, it gives information about the translation strategy the translator used to deal with the term syphilis.

- The % wildcat

The wildcat character % stands for zero or one character. That is, in its place there should be zero or only one character. Using the example of the verbal root *–phil-*, the search item could be %*phil*%. The result is shown in the following screen.

Figure 4.6: The use of the % wildcat in a search inquiry



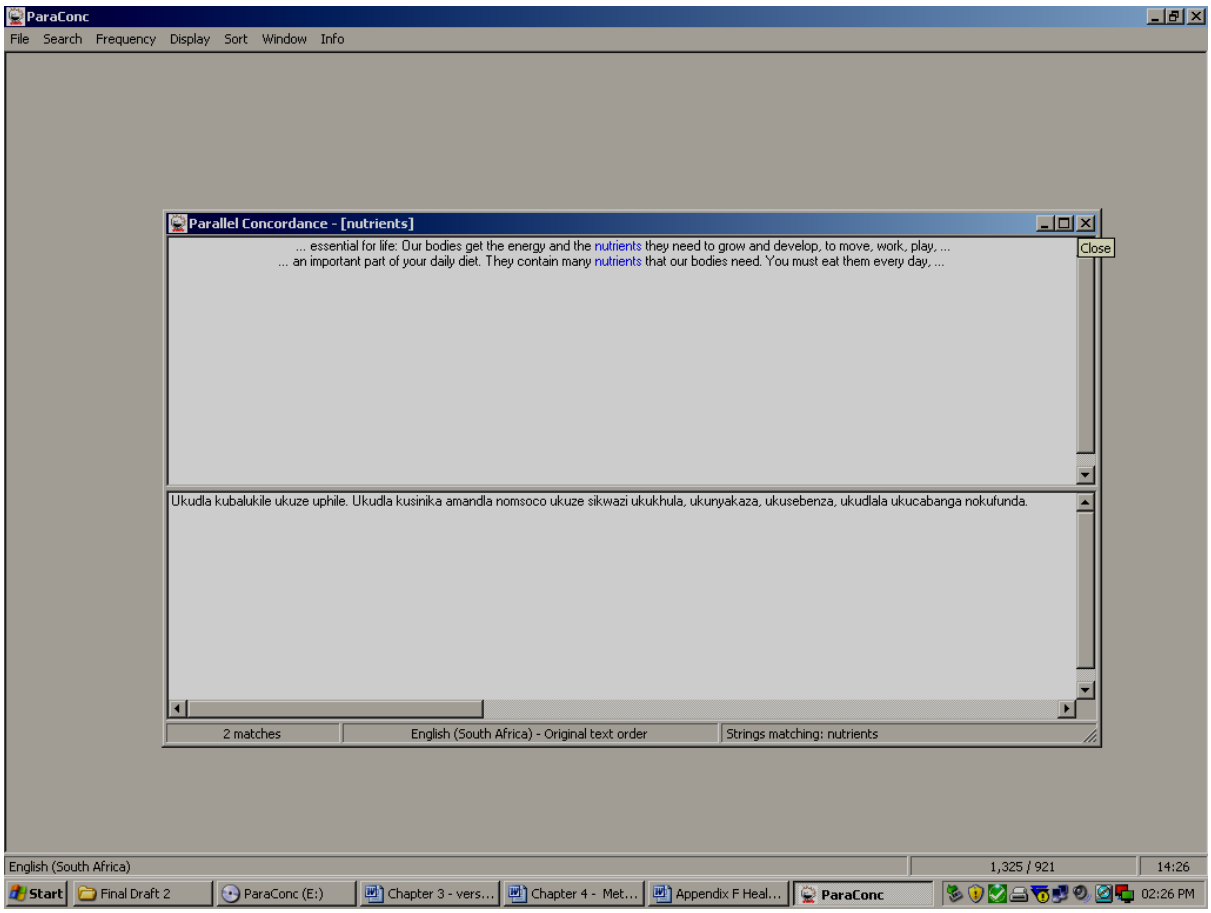
The screen shows that the key word in context, in all the lines, is from the verbal root ***–phil-*** which shows that this wildcat is useful in analysing agglutinating languages like Zulu.

In the following sections, the way in which the other input data is used will be briefly discussed. Firstly, the use of the data collected during the pilot study is discussed. This will be followed by the use of the components of text communication.

4.6.3.1 Pilot study data

Appendix F gives a list of the words and expressions which the respondents had to comment on. These were categorised into the following themes: sex, birth defects/disability, nutrition, pregnancy and drugs. The researcher could for example take one word/expression under the theme of sex and then use a concordancing tool to see how it was dealt with by the translators. The researcher's descriptive discussion included the responses from the learners. For example, a word on the theme of nutrition such as 'nutrients' could be used as a key word in context and relevant parallel texts would be identified. The search inquiry would then typically yield results as shown in the following screen.

Figure 4.7: Using words from the pilot study data for a search inquiry



The components of text communication were also used in the study.

4.6.3.2 The use of components of text communication

Aspects of the principle of accessibility, such as text simplification, were used to study how complex concepts were dealt with by the translators. For example, explicitation of texts was studied to describe the strategies used by the translators. The explicitation and simplification strategies could be described by using the difficult concepts as key words in context.

For the present study, comparing the source texts with their translations by using the parallel concordancer (the ParaConc), was not enough because the texts contained a lot of illustrations. The ParaConc software programme cannot analyse illustrations. For this reason, the researcher had to use both the concordancer and the hard copies of the texts to analyse the accessibility of the health texts.

4.7 Conclusion

In this chapter an overview of studies on youth risk behaviour was presented. It was mentioned that some of the themes that the South African Youth Risk Behaviour survey focused on, as commissioned by the Department of Health and the Department of Education in 2002, are covered by the health corpus compiled for the present study. Though the present study dealt with the same themes, the focus was on health texts, not on youth risk behaviours.

The chapter focused on the analytical framework and research methodology adopted in the present study. Firstly, the researcher had to do a pilot study in the initial stages of the study. The pilot study was divided into two phases; the first phase helped the researcher to finalise the questions that the researcher used in the second phase of the pilot study. The data collected during the pilot study formed part of the words and sentences extracted by corpus tools.

The researcher made use of frequency lists and the concordancing tool to analyse and

describe data extracted from the health corpus compiled for the present data. Furthermore, the principles of text communication, as discussed in this chapter, were useful in describing data extracted from the health corpus.

The next chapter deals with the results, findings and interpretations.

CHAPTER 5

RESULTS, FINDINGS AND INTERPRETATIONS

5.1 Introduction and objectives

In Chapter 4 the analytical framework and research techniques which were used to collect data were discussed. The chapter distinguished between two sets of data which were collected by using the English-Zulu Health Texts Corpus (EZHTC), namely the data collected by the researcher from Gauteng and KwaZulu-Natal Grade 10 to 12 Zulu-speaking learners and the data extracted by the researcher from the EZHTC.

The data from the learners were obtained by using a combination of focus group and semi-structured interviews during the second phase of the pilot study. The researcher then used ParaConc tools to extract data from the EZHTC. The frequency lists helped in extracting words. Some data were extracted and studied only by aligning the source and the target texts.

The aim of this chapter is to discuss and interpret the findings. In Chapter 1 it was mentioned that the accessibility of the translated Zulu health texts may be restricted by geographical, linguistic and cultural constraints. In Chapter 2 an attempt was made to show that the translated Zulu health texts in the EZHTC were produced under cultural and geographical constraints, which may lead to inaccessibility. In the previous two chapters (3 & 4) it was pointed out that vocabulary and sentence structure are the most important aspects of accessibility. In interpreting the data, the strategies as used by the translators in dealing with words and sentence patterns, received attention.

The researcher would, for example, choose certain words from the parallel texts which could pose a translation problem as a result of geographical, linguistic or cultural constraints, by using the frequency list tools. For the Soul City texts the frequency list was not used since the booklets selected for the present study had a list of words which were said to be difficult. The researcher chose some of the problematic words from that list and

studied the strategies used by the translators in an attempt to make the texts easier to read. The strategies for translating problematic words (or sentence patterns) which are considered in the present study are: *simplification* ─ i.e. making the text easier to understand ─ (which include using a superordinate or more general word, using a general word with extended meaning, using more familiar or common synonyms, translation by paraphrase, breaking up of sentences and using fewer words); *explicitation* ─ making implied meaning explicit (which include overuse of lexical repetition, adding explanatory information and using a demonstrative); and using strategies of avoiding the use of certain culturally unacceptable terms, particularly those that refer to sexual issues.

Since the majority of the texts compiled for the present study are short texts, it was easy to identify the sentence patterns by aligning the texts and observing how the English sentences were translated into Zulu. This made it easier to study other components of text communication, such as cohesion (reference, conjunction and lexical cohesion) and coherence, where the recall of words used earlier is required.

The interpretation of the data required the use of the following resources: a reliable Zulu cultural resource, translation dictionaries as well as monolingual dictionaries. For Zulu cultural aspects, the researcher used Raum's (1973) work on avoidances and taboos among the Zulu, which has valuable information on issues like sexual and speech restraints among the Zulu. Raum (1973) used about 470 Zulu informants in his study, including Inkosi M.G. Buthelezi, leader of Inkatha Freedom Party, as well as his mother, Princess Magogo Buthelezi. Many of the references to Zulu culture will be done with acknowledgement of this resource.

Raum (1973) makes a distinction between two kinds of cultural restraints in Zulu: *Zila* (taboos) and *Hlonipha* (respectful restraints or avoidances). In his discussion on how the Zulu observe these constraints in real life, Raum (1973: 40-41) argues as follows:

Certainly the Zulu system of restraints has developed a pronounced tendency towards formal cohesion and uniformity … In this sense one is justified in speaking of a tendency in Zulu thought and custom to systematize restraints.
The acknowledgement of such a tendency must not lead us to assume that the Zulu system

forms a Procrustean bed of behaviour norms which like Bagehot's 'cake of custom' cannot easily be broken. It will rather be shown that individuals frequently accepted restraints and are capable of 'inventing' their own critical prohibitions and avoidances. Thus Zulu restraints do not form a mail-shirt like order in which the existence of one link ensures the functioning of all others.

The important point is that though the Zulu system of restraints exists, individuals may choose not to observe some of them. Furthermore, they may introduce their prohibitions and avoidances into the system. The violation of Zulu restraints and the introduction of new ones into the system may be interpreted on the basis of the dynamic nature of culture. This will be considered in the interpretation of the data. For example, the data collected from the Grade 10 to 12 learners may show their reaction towards the Zulu system of cultural restraints.

The researcher used one translation dictionary in interpreting the data: the combined *English/Zulu* and *Zulu/English* dictionaries by Doke, Malcolm, Sikakana and Vilakazi (1990). For the purpose of this study, two Zulu monolingual dictionaries were used: Mbatha's *Isichazamazwi SesiZulu* (2006) and Nyembezi's *Isichazamazwi Sanamuhla Nangomuso* (1992). The Zulu monolingual dictionaries were, for example, used for studying synonyms. Certain concepts needed to be analysed by using an English monolingual dictionary. For that purpose the researcher used Tulloch's *Complete Wordfinder* (1993).

As shown in the previous chapter, the texts were grouped according to the areas they were produced for: national, Gauteng and KwaZulu-Natal texts. The areas the texts were produced for were clearly marked. For example, it would be mentioned at the end of the text that the text was produced by the Gauteng Provincial Government. What could not be determined was the translator, which meant that it would be possible for a translator based in KwaZulu-Natal to translate a text into Zulu for the Gauteng reader and vice versa. Another set of texts considered in the study is texts produced by Soul City, in the form of booklets.

The researcher focused on four of the Soul City booklets with their Zulu versions, in his

interpretation, and are listed as follows:

- *Aids in our community/Ingculazi emphakathini;*
- *Help stop women abuse/Siza ukunqanda ukuhlukunyezwa kwabesimame;*
- *Living positively with HIV and AIDS/Phila ngokuzethemba ne-HIV ne-AIDS;* and
- *The mother and child hand book/Incwadi yomama kanye nokukhuliswa kwabantwana.*

These booklets are produced for and distributed in urban areas, as stated in the booklet entitled *The mother and child handbook*:

> This Community Development Project is brought to you in the interests of a Healthy Nation by the Institute of Urban Primary Health Care, and supported by the following companies …

The discussion of the findings of the main study is divided under two main headings. Under the first heading, (called 'The plain texts') the discussion will focus on the use of vocabulary (which relates to non-lexicalised or problematic concepts/terms, diseases and related terms, drugs/ointments and related terms), culturally charged terms/expressions which are to be avoided, sentence patterns and other miscellaneous expressions. The area the health text was produced for will be indicated for every cited example. Under the second heading (called 'The non-verbal information') the use of non-verbal information in the source and target texts will be examined. Before the findings of the main study are presented, the results of the pilot study are briefly presented below.

5.2 Results of the pilot study

The results of the first phase of the pilot study are presented first.

5.2.1 The first phase of the pilot study

Appendix C shows that more than two thirds of the high school learners were familiar with health texts before the interview. This implies that the health texts produced by the

Department of Health and the NGOs are distributed to the intended target readership. A large percentage of respondents who said they had seen the texts were from rural areas. Ironically, the rural community which was visited in January 2003 at Loteni (KwaSani Local Municipality in Sisonke District Municipality) in KwaZulu-Natal said a mobile clinic visited the area only once a week.

Appendix C shows that, though the respondents did come across health texts, the availability of these texts in their immediate environment was limited, as very few of them could be collected by the researcher in the area. The rural community (when interviewed in 2003) was using traditional healers more often than the other communities. More than 40% of the respondents (cf. Appendix C) felt that health texts should discuss the role of traditional healers.

Apart from the data obtained from the high school learners, the researcher also interviewed teachers and adults at Lotheni, a rural area, and Mpendle, a semi-urban area. The intention of these interviews was to obtain additional data, especially regarding their attitude towards health texts. Though only a few learners were interviewed, it was clear that they did read health texts.

During this phase of the pilot study, some traditional healers were visited in Mpumalanga. The aim was to find out to what extent they cooperated with the Department of Health, as well as the number of patients who made use of their service. The traditional healers were very proud of the effectiveness of their medicine. The researcher had an appointment with the Chairperson of the Gauteng Traditional and Faith Medical Practitioners to obtain more information. The Chairperson indicated that (at that stage) there was co-operation between the Department of Health and the traditional healers. Posters from the Department of Health decorated the walls of some healers. The researcher was shown a room where traditional healers got lectures on different topics, such as human physiology.

Furthermore, two traditional healers were interviewed in KwaZulu-Natal at Lotheni and one at the researcher's home. A questionnaire (cf. Appendix B) was filled in to obtain more data from these respondents. It is important to report on the responses of the interviewees to the questionnaires, since part of the aim of this research was to examine the

attitude of the Zulu speakers towards health texts, modern medical practitioners, as well as traditional healers.

The two traditional healers who were interviewed worked in the rural area that was visited. The discussion revealed that they were proud of their services since many of their patients came back to thank them after they had recovered. However, they had different opinions of modern medical science. One chose not to co-operate with trained medical doctors and said that she did not believe these modern medical doctors knew anything. She said most of her patients came to her after having failed to get help from such doctors. She also believed that some diseases were brought into this country by whites. Perhaps she found it difficult to acknowledge that western medical practitioners provided an effective service.

The second traditional healer seemed to take modern medical doctors seriously. She agreed that these doctors have an important service to offer. She even mentioned that she did refer her patients to trained medical doctors, especially if their problems required physical examination. She said she would like to work together with modern medical practitioners. She mentioned that she was proud to have helped a white woman who could not conceive.

The traditional healer who was interviewed at the researcher's house seemed to acknowledge the contribution of western medical practitioners. However, she seemed not to trust them as she emphatically said that their aim was to steal knowledge from traditional healers.

It was noted that the three traditional healers did not worry about patients who could not pay them. They all said that they continued to treat patients who had not paid for previous service rendered. They believed that the service they rendered was in the form of an instruction from the ancestors. This forms the difference between them and the doctors who are trained in western method.

The details of the results of the first phase of the pilot study as well as those of the focus groups of the second phase of the pilot study are presented in the relevant appendices (Appendices C, G, H, I and J). Next follows the results of the second phase of the pilot

study.

5.2.2 The second phase of the pilot study

On the preferred language the responses of the learners from the townships are almost the same. There are those who prefer health texts written in English and those who prefer to read them in Zulu. What was not expected is those who said they prefer to receive health texts written in both English and Zulu.

The Muzikawuthandwa respondents present a different picture to the problem. All of them prefer to read the health texts in their home language. It seems as if these learners, all from the chosen rural area in KwaZulu-Natal, are comfortable with their mother-tongue. It is also noted that this is an area where almost all the respondents speak Zulu.

The semi-structured interview schedule was also used to evaluate the other document aspects, such as examined to assess the communicative effectiveness of the health texts. There are questions set to evaluate comprehension, application, appreciation, acceptance, relevance or completeness of the texts.

There are terms or expressions examined to determine whether they indeed threaten comprehension. The English-isiZulu parallel texts show that the translators sometimes choose to use loan words. The negative responses of some of the learners to some of these loan expressions show that this strategy should be used with caution; not in cases where the source language expressions are lexicalised in the target language; particularly where the context is not clear to the reader.

The responses of some of the learners also showed that paraphrasing (as a simplification strategy) can create misunderstanding if key information is omitted in the paraphrase. This was uncovered in the translation of ‘waste products’ which is created by physiological processes. It is also noted that in the Zulu medical system details of physiological processes and the names of the organs involved is not lexicalised. This was the challenge faced by the translator who chose to paraphrase the expression ‘waste products’.

Some of the negative responses were, however, unjustified. For example, in the parallel texts on drugs the translator used the super-ordinate terms (simplification strategy) *usikilidi* and *utshwala* for cigarettes and alcohol respectively. This strategy is acceptable and does not create misunderstanding.

Some negative responses show that, because of certain beliefs or attitudes, the learners do not want to use the information as conveyed by the health texts, particularly on abstinence, using a condom, contraceptives, abortion (because, for example, they want the child), doing exercises when pregnant as well as drinking a lot of water in a day.

Zulu traditions on sex and childbearing may also be used to explain these negative responses. In a Zulu social system, children are brought up in a certain way, which may lead to negative responses towards the use of condoms and contraceptives. For engaged couples, for example, the *ukusoma* custom (where the male does not penetrate the female, i.e. thigh sex) may be preferred, instead of the use of condoms.

On the acceptance, relevance or completeness of the health texts, the texts which the learners responded to, may be compared with the contents of the original texts referred to in chapter 3.

Those learners who believe that the use of traditional healers and their medicines should receive attention in the health texts suggest that the health texts, as they are at the moment, exclude certain important information relevant to their lives. *Inqolobane Yesizwe*, *Kusadliwa Ngoludala* and *NginguSosobala Mbatha* support these learners by elevating the status of traditional healers in Zulu culture. Ignoring traditional healers, for a Zulu, is therefore tantamount to sidelining his culture.

There are learners who believe in abstinence. Perhaps it is those who stick to their culture. That is, they wait until their time comes.

The expressions *inkawu* and *ubunkawu* for ‘albino’ and ‘albinism’, respectively, are also a pair of words which are entered as such in *Inqolobane yesizwe* and isiZulu dictionaries, including the recent publication of M.O. Mbatha’s *Isichazamazwi SesiZulu* (2006).

However, as the learners indicated, people with this condition, including people who know the real origin of the problem, do not like these expressions.

With regard to the pictures used in the texts, most of the learners appreciate them. The only problem they have is explicit pictures on issues such as sex. What is crucial in the Zulu culture is observed by some learners: parents or older people would not discuss sex matters with children.

The preceding paragraphs briefly presented the results of the pilot study. The details of the results are presented in the appendices. The following section will now focus on the findings of the main study, the corpus-based study.

5.3 The plain texts

In this section the accessibility of the texts is considered by examining only the plain texts. Non-verbal information is not considered. The discussion is presented as four subsections, namely *the use of vocabulary, cultural issues/constraints*, *sentence patterns* and *other miscellaneous expressions*.

5.3.1 The use of vocabulary

The use of vocabulary includes translation problems emanating from expressions which are not lexicalized or problematic in Zulu, the translation of terms relating to diseases, drugs/ointments and other medical concepts. The discussion will focus mainly on the use of vocabulary with reference to these problematic areas. The translation of non-lexicalized concepts such as physiological processes and body organs, and other related problematic terms are dealt with first.

5.3.1.1 Physiological processes, body organs and related concepts

The Zulu health system, as discussed in Chapter 2, recognizes that the Zulu traditional healer is not knowledgeable about the functioning of body systems such as the nervous, digestive, reproductive and urinary systems. Bryant (1966:15) commented on the Zulu

traditional healer's knowledge of physiological processes as follows:

He could tell you something, at any rate, about the form and appearance in health and disease of the respiratory, digestive, and circulatory organs; but the whole nervous system, save the bare existence of the brain and the spinal cord, is to him a perfect blank. He possesses no name for nerves and knows naught of their existence. A similar state of ignorance reigns throughout the whole domain of physiology. He could not even give a school boy explanation of the function of any of the principal organs. He knows that the blood "runs" through the body, but he is not aware of any connection between the circulation of the blood and the beating of the heart.

What is important for the present study is that the 'lack of knowledge about the physiological processes' in the Zulu health system is demonstrated by the lack of medical terminology. When translating health texts into Zulu, translators usually battle to find solutions for the absence of medical terms which could be used to describe physiological processes and the organs/parts of the body that are involved in these processes. Examples of terms/words which are problematic or not lexicalized in Zulu are given in Table 5.1 below:

Table 5.1: Non-lexicalized or problematic concepts– physi ological processes, body organs and related terms

Example	Source	Strategy
1. ST (Source Text): **Genes** are units of heredity and are contained in all body cells. TT: (Target Text): ***Ufuzo*** *yizinto ezisemzimbeni zofuzo ezemukelwa kubazali yingane.* BT: (Back translation): **Heredity** is things of heredity that are in the body which are received from parents by the child.)	*Albinism/Ubunkawu* (National)	Use of familiar words
2. ST: …. there is any history of a hereditary/**genetic** disease in your or your husband's family, irrespective of how long ago. TT: … *uma ninanoma yimuphi umlando wesifo sofuzo noma* ***samajini*** *emndenini wakini noma emndenini womyeni wakho, ngale kokubheka ukuthi kudala kangakanani sagcina ukuziveza leso sifo.*	*Do you want a healthy baby?/Ingabe ufuna ukuba nomntwana ophile kahle?* (National)	Use of loan words

Example	Source	Strategy
BT: … if you have any history of a disease of heredity or **genes** in your family or your husband's family, irrespective of how long the disease last revealed itself.)		
3. ST: **abdominal X-rays** TT: ***i-X-ray ezingxenyeni ezingezansi zomzimba wakho ezifana nesisu*** BT: on: **an X-ray in the lower parts of your body such as the stomach)**	*Do you want a healthy baby?/Ingabe ufuna ukuba nomntwana ophile kahle?* (National)	Use of 'pure' loan words (transference) plus paraphrasing
4. ST: **Oral rehydration (The title)** TT: ***Okuphuzelwa ukubuyisela amanzi emzimbeni, i-oral rehydration*** BT: **That which is drank to bring back water in the body, oral rehydration)**	*Oral rehydration/Okuphuzelwa ukubuyisela amanzi emzimbeni, i-oral rehydration* (for Tshwane)	Paraphrasing plus 'pure' loan word
5. ST: **A urinary tract infection can only be clinically confirmed if the urine contains nitrites and leucocytes.** TT: *Isifo somgudu womshobingo singaqinisekiswa kuphela uma umshobingo uqukethe* ***usawoti obizwa nge-nitrite namalukosayiti (okumhlophe okusegazini).*** BT**:** A urinary tract infection can only be confirmed if the urine contains **nitrites and leucocyetes (white things in the blood)**.	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Explanation plus 'pure' loan word; loan word plus explanation
6. ST: Pus cells, blood and **protein** in the urine TT: *Amangqamuzana obovu, igazi* ***namaphrotheni*** *emshobingweni …* BT: Pus cells, blood and **protein** in the urine …)	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Use of indigenised loan words
7. ST: Use of pills with a high **oestrogen** content (breast cancer) TT: *Ukusebenzisa amaphilisi agcwele ihomoni,* ***i-oestrogen*** *(umdlavuza webele)* BT: Use of pills with a lot of **oestrogen** (breast cancer).	Cancer/*Umdlavuza* (for Tshwane)	Use of 'pure' loan words
8. ST: Follow a well-balanced diet to build your **immune system.** TT: *Yidla ukudla okuphelele wakhe* ***amasosha akho omzimba****.* BT: Eat a complete diet and build **the soldiers of your body**.)	*Prevention of TB/Ukuzivikela esifweni sofuba* (for Tshwane)	Use of general words with extended meaning
9. ST: **Shigella** is a bacteria that causes diarrhoea in humans. TT: ***Ishigela*** *igciwane elibangela ukukhishwa isisu ebantwini.*	*Shigella/Ishigela* (for KwaZulu-Natal)	Use of indigenised loan words

Example	Source	Strategy
BT: **Shigella** is a germ that causes diarrhoea in humans.)		
10. ST: … certain blood fats (for example: **cholesterol** and **triglycerides**) which will lead to a build up of fatty deposits in the arteries. TT: … *amafutha athize egazini (blood fats) (i-**cholesterol** nama-**triglycerides**) lokhu okubangela ukunqwabelana kokusamafutha emithanjeni yegazi enhliziywen*i BT: … certain fats in the blood (blood fats) (**cholesterol** and **triglycerides**) this that cause deposits of fat-like things in the arteries.	*Heart disease/Isifo senhliziyo (for KwaZulu-Natal)*	Use of 'pure' loan words
11. ST: **Passive smoking** TT: ***Ukuhogela intuthu yogwayi obhenywa ngomunye umuntu*** BT: **Inhaling tabacco smoke from another person who is smoking**	*Passive smoking/Ukuhogela intuthu yogwayi obhenywa ngomunye umuntu kuyabulala* (for KwaZulu-Natal)	Paraphrasing
12. ST: Some people think that only **homosexual men** can get AIDS. TT: *Kunabantu abacabanga ukuthi **yizitabani** kuphela ezingathola ingculazi.* BT: There are people who think that it is only **homosexual men** who can get AIDS.	*Aids in our community/Ingculazi emphakathini* (Soul City)	Coinage
13. ST: You can **masturbate** and bring yourself to climax. TT: *Unga**shaya indlwabu** bese uzifikisa wena ebumnandini obuphelele.* BT: You can '***shaya indlwabu***' (**masturbate**) and bring yourself to complete enjoyment.)	*Aids in our community/Ingculazi emphakathini* (Soul City)	Coinage
14. ST: … **your insulin** will work better. TT: … *i-insulin yakho izosebenza kangcono.* BT: … your insulin will work better.)	*Balanced eating for good health/Indlela yokudla ebhalansile enempilo* (National)	Use of 'pure' loan words

The examples show different strategies used by the translator(s) to solve the translation problems and are discussed as follows:

(a) The use of indigenised loan words: examples 2, 5, 6, 7 and 9

In example 2 the translator decided not to avoid the use of the term 'genes'. He used it as a loan word – *amajini* (genes). Such a decision implies that the target reader knows the English term because the loan word is not accompanied by any explanatory information. To verify the truthfulness of this supposition a separate research study would be required. For the present study, the translator's decision is trusted to be a reasonable decision, particularly since the subjects in the present study are Grade 10 to 12 learners. These learners can be expected to have come across a term such as 'genes' in their Biology classes.

Another source language term which seemed to have posed a problem for the translator is 'leucocytes' (cf. example 5). In the *English/Zulu dictionary* (1990) the loan word *amalukosayiti* is used for 'leucocytes', with an explanation that it is something white in the blood. The translator used this definition as it is, i.e. the loan word with an explanation.

Example 6 shows the translator's choice of the loan word for the term 'protein' (*amaphrotheni*) since this term is not lexicalized in Zulu. In the *English/Zulu dictionary* (1990) the term is defined as '*ukudla okuyinyama*' (food that is meat). The use of the loan word by the translator suggests an attempt to find a more accurate Zulu equivalent. It is also noted that the use of loan words was rare in the KwaZulu-Natal sub-corpus and Example 9 represents one of the few that could be cited. In that example the Zulu equivalent of shigella is '*ishigela*'. The translator affixed the relevant prefix (i-) and then deleted one [*l*] as required by the Zulu orthography. Furthermore, it is also noted that a shigella is also referred to as a germ (*igciwane*) and in Zulu texts a virus is also termed a germ, like the HIV which is translated as igciwane lengculazi (a germ of Aids) in Zulu. This means that a Zulu version for the three terms (bacterium, germ and virus) is *igciwane* ('germ').

In example 7, the translator used the word *'ihomoni'* (hormone) as an explanatory word, which suggests that the target readers are already familiar with it. Like in Example 2 above, Grade 10 to 12 learners can be expected to have come across the term 'hormone' in some of their school subjects.

(b) The use of 'pure' loan words (transference): examples 3, 5, 10 and 14

These are examples that show the translators' preference to use 'pure' loan words (transference) for concepts that are not yet lexicalized or problematic in Zulu. That is, the source text terms are transferred to the target text without any modification, except for affixing the relevant prefix, as Zulu nouns always start with a prefix. That is why this strategy is also termed transference. For instance, in example 3 the translator merely affixed the appropriate prefix to the source language term and the Zulu equivalent of X-ray becomes *i-X-ray*. Using this strategy requires a hyphen to separate the prefix from the source language term.

In example 5 the transference strategy is again used. The *Complete Wordfinder* (1993) defines a 'nitrite' as 'any salt or ester of nitric acid'. The translator decided to transfer the term with an explanation that it is a salt.

A source language term may not only be problematic to the target language, but, also, to the source language (Example 10). That is, it may also be necessary to simplify a technical term for the source text readers ('cholesterol' and 'tryglycerides'). The source text writer chose to first explain the terms before using them – 'certain blood fats (for example cholesterol and tryglycerides'). The Zulu translator used the explanation and then transferred the source language terms to the target language, with the relevant Zulu prefixes (i.e. *i-* affixed to cholesterol and (*n*)*ama-* affixed to triglycerides). The term 'insulin' (Example 14) is also transferred to the target text with its relevant Zulu prefix – *i-insulin*.

(c) Paraphrasing: examples 4 and 11

Paraphrasing generally refers to expressing the same message in different words. In the present study, there are instances where translators had to use this strategy to translate physiological processes, body organs or other related terms which are not yet lexicalized in Zulu. The term 'rehydration' is not entered in the *English/Zulu and Zulu/English dictionary*. The *Complete Wordfinder* defines dehydrate as 'absorb water again after

dehydration'. The translator's strategy was to paraphrase the term, followed by the transfer /repetition of the source language term (Example 4).

In example 11, the long paraphrase (*Ukuhogela intuthu yogwayi obhenywa ngomunye umuntu kuyabulala*) is aimed at making the text accessible to the target reader.

(d) General words with extended meaning: example 8

Moropa (2005:90) refers to this strategy as the term formation process, where new meanings are attached to existing words which linguists such as Morris and Mtinsilana (1988) call "semantic transfer". This is one of the strategies used by the Zulu health texts translators in the present study. The word 'soldier' means 'a person serving in or having served in an army' (*Complete Wordfinder*). In Zulu health texts the 'immune system' is termed 'the soldiers of the body' since it protects the body – just like the soldiers protecting their country against enemies or intruders.

(e) Coinage: examples 12 and 13

'Coinage' is a term formation process that refers to the invention of a new word or phrase. In Zulu, the terms 'homosexual', 'gay' and 'lesbians' are still a problem for translators. *ISichazamazwi SesiZulu* (2006) defines '*isitabane*' (Example 12) as a male person who behaves like a woman and even chooses a male lover (as does a girl). For a 'homosexual' in general the *ISichazamazwi SesiZulu* uses '*inkonkoni*' or '*ungqingili*'. The problem for translators seems to be the inacceptability of these terms. That is why many of them end up using expressions like '*umuntu othandana nomunye onobulili obufana nobakhe*' (a person who loves another person of his/her same sex) to solve this problematic term. However, such a strategy leads to a translated phrase which is much longer than the original word of the source text. The *Complete Wordfinder* gives 'gay'as the favoured word by homosexuals with reference to themselves.

The *English/Zulu* dictionary defines 'masturbation' as '*ukuzenza ukuba kuphume amalotha*' (making oneself release semen). The phrase (idiom) '*ukushaya indlwabu*' (Example 13) is not found in the translation or Zulu monolongual dictionaries, though it is

used by some members of the public.

(f) Using familiar words: Example 1

Moropa (2005:91) notes that using a more familiar or common synonym would fall in the category that Baker (1992:28) calls "translation by a more neutral or less expressive word". The present study focused only on using familiar words as a translation strategy to solve non-lexicalized items. In other words, in cases where the source language term is not lexicalized in Zulu, the translator uses a target term that is more familiar to the target reader. In the *Complete Wordfinder*, a gene is defined as "a unit of heredity composed of a chromosome, etc., that determines a particular characteristic of an individual". Since this term is not lexicalized in Zulu, the translator decided to use the term the target readers are familiar with (Example 1)— *ufuzo* (heredity). The word tells us about the result of the function of genes. A negative comment about the use of this term (*ufuzo*) by the translator in this context was received from Mpophomeni Secondary School learners (cf. Appendix I). As indicated above, this reaction shows that the respondents selected for the present study are familiar with terms like 'genes'.

The discussion on the strategies as used in the EZHTC by the translators showed that to find TL equivqlents for non-lexicalised or problematic concepts that relate to physiological processes and other related concepts, the translators used 'pure' loan words (transference), transference plus an explanation, paraphrasing, general word with extended meaning, coinage (though not yet generally accepted) and familiar words. The next section deals with the translation of names of diseases and other related terms.

5.3.1.2 Names of diseases and other related terms

In discussing the prevalence of disease among the Zulu people before the white man's invasion, Bryant (1966:24) states that

> there is reason to believe that the Zulu race was singularly long-lived and free from disease, but endemic and epidemic fevers, especially malaria and dysentery, were periodically prevalent, and demanding a heavy toll at every outbreak …

This observation implies that the Zulu people had to start naming the new diseases that

manifested themselves as observed by Bryant (1966:24) when he states that

> Constitutional and organic diseases – consumption, rheumatism, kidney, bladder and uterine complaints – were all there prior to the advent of the European; but they were markedly rarer than with us, and on account of this rarity were unnamed and only hazily recognised …

Naming of unfamiliar or new diseases is, for the purpose of the present study, a problem for the Zulu translator. Zulu translators devise strategies to deal with such a problem, and the following examples illustrate such strategies as used in the EZHTC.

Table 5.2: Diseases and other related terms

Example	Source	Strategy
1. ST: Information on wise food choices for people with **Type 2 Diabetes** … TT: *Ulwazi ngendlela yokudla engcono okufanele ilandelwe abantu* ***abanesifo sikashukela*** … BT: Information on a better way of eating which should be followed by people with **diabetes** …	*Balanced eating for good health/Indlela yokudla ebhalansile enempilo* (National)	Paraphrasing plus omission
2. ST: If you have been **diagnosed** with TB … TT: *Uma* ***utholakale ukuthi*** *unesifo sofuba* … BT: If you were found to be having TB …)	*TB and HIV/Isifo sofuba negciwane lengculazi* (National)	Paraphrasing
3. ST: An old myth suggested that **a person with albinism** was the result of a black person-gorilla mating. TT: *Inganekwane endala ithi* ***umuntu oyinkawu*** *ungumphumela wokuhlangana ocansini komuntu nemfene*. BT: An old folk-tale says **a person who is an albino** is the result of a (black) person-ape mating.)	*Albinism/Ubunkawu* (National)	Cultural substitution
4. ST: **meningitis/** TT: ***isifo solwebu lobuchopho*** **(meningitis)** BT: a disease of the brain's membrane	*Immunisation/Ukugonywa* (For Tshwane)	Paraphrasing
5. ST: **Pulmonary tuberculosis** is caused by small tuberculosis germs.	*Tuberculosis can be beaten/Isifo sofuba siyelapheka* (for Tshwane)	Paraphrasing plus omission

Example	Source	Strategy
TT: ***Isifo sofuba*** *sibangelwa ngamagciwane amancane.* BT: A disease of the chest is caused by small germs.)		
6. ST: **Plague** (title of text) TT: i*Plague* BT: Plague	*Plague/iPlague* (For KwaZulu-Natal)	'Pure' loan word
7. ST: **Typhoid fever** (title of text) TT: ***iTyphoid fever*** BT: Typhoid fever)	*Typhoid fever/iTyphoid fever* (for KwaZulu-Natal)	'Pure' loan word
8. ST: **Yellow fever** (title of text) TT: ***iYellow fever*** BT: Yellow fever	*Yellow fever/iYellow fever* (for KwaZulu-Natal)	'Pure' loan word
9. ST**: Scabies** (title of text) TT: *Utwayi* BT: Scabies	*Scabies/Utwayi* (for KwaZulu-Natal)	Synonyms
10. ST: **Cholera (**title of text) TT: *Isifo sohudo, ikholera* BT: The disease of diarrhoea, cholera)	Cholera/Isifo sohudo, ikholera (for KwaZulu-Natal)	Paraphrasing and indigenised loan word
11. ST: Sometimes there is an **abnormal** discharge (yellow, green, profuse) and sores, warts or blisters around the sex organs. TT: *Kungaba noketshezi (oluphuzi, oluluhlaza okotshani noluningi), izilonda, izinsumpa namashashazi ezithweni zangasese*. BT: There may be fluid (yellow, green and profuse), sores, warts and blisters around the sex organs.)	*Sexual transmitted infections (STIs)/Izifo ezithathelwana ngocansi (STIs)* (for Tshwane)	Omission
12. ST: **Scabies** is a common skin disease caused by mites. TT: *Inzenzane* (Scabies) *yisifo esejwayelekile sesikhumba.* BT: Scabies is a common skin disease.	Scabies pamphlet/ Iphamfulethe yenzenzane (for Tshwane)	Synonyms and omission
13. ST**: pneumonia** TT: *inyumoniya* BT: pneumonia	Babies under 6 months need breastmilk only/*Abantwana badinga ibele kuphela ngezinyanga zokuqala eziyisithupha*	indigenised loan word
14. ST: **immunization/vaccines** TT: *ukugonywa* BT: to be vaccinated)	Immunization/Ukugonywa	Familiar word

The translators used different strategies for terms relating to diseases, as demonstrated by the examples.

(a) Paraphrasing: example 2

An example of a non-lexicalized related term, where a paraphrase was used, is ‘diagnose’ (Example example 2). The *English/Zulu dictionary* defines the term ‘diagnose’ as ‘*xilonga ukwazi isifo*’ ─ ‘examine to know the disease’. Since the term ‘diagnose’ is not used in the Zulu health system, the translator decided to paraphrase it.

Paraphrasing was also complimented by other strategies, such as omission (Examples 1 and 5) ─ as shown in paragraph (b) below ─ and loan words (Example 10 ─ paragraph (c))

(b) Paraphrasing plus omission: examples 1 and 5

The translator may decide to omit a word that he regards as not crucial in conveying the message of the text. This appears to be what was in the translator’s mind when he omitted ‘Type 2’ of the term ‘Type 2 diabetes’ (Example 1). Perhaps he thought it would lead into inaccessibility had he tried to include it (i.e. Type 2) in the translation. Similarly, in Example 5, ‘pulmonary tuberculosis’ is a specific type of TB. The translator decided to use a paraphrase, *isifo sofuba* (a disease of the chest - TB), with an omission (‘pulmonary’) (Baker 1992:40). The word ‘abnormal’ (discharge) was also omitted in Example 5, which implies that the translator regarded the word ‘abnormal’ as not important in conveying the intended message ─ i.e. avoiding lengthy explanations that will distract the reader (Baker 1992:40).

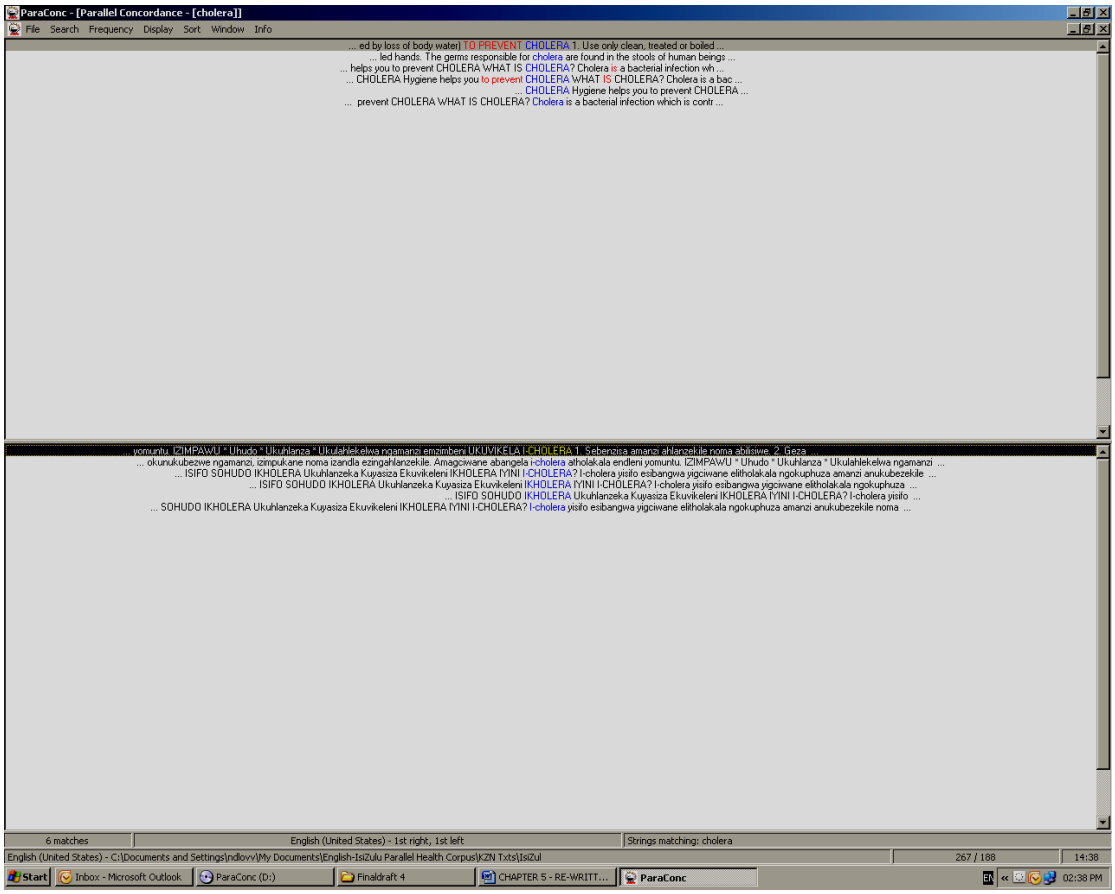
(c) Paraphrasing plus ‘pure’ loan word: examples 4 and 10

In Example 4 the translator used a paraphrase for the term meningitis (*isifo solwebu lobuchopho* = a disease of the brain’s membrane) followed by the transfer of the source language term, meningitis, in an attempt to reach his/her target readers. The strategy demonstrates the translator’s attempt to solve a problem of a non-lexicalized disease term.

Example 10 suggests that the translator wanted to ensure that he reaches his readers by paraphrasing the term ‘cholera’ and then use a loan word for those who are familiar with its use in the source language. For this reason the paraphrase is followed by the loan word

'*ikholera*'. But, in another cholera text produced for KZN, the translator used the indigenised loan word '*ikholera*' or the 'pure' loan word *i*-cholera throughout, which suggets that the source language term is known to the target readers. The use of the indeginised loan word/'pure' loan word is shown in the following screen from the text.

Figure 5.1: The Zulu version of term 'cholera"



As shown, the term 'cholera' is rendered as *ikholera/kholera* or *icholera* in all the lines where it appears.

(d) Cultural substitution: example 3

The *English/Zulu dictionary* defines an albino as '*umuntu oyinkawu yasekhaya*' (lit. a person who is a domestic ape). The *ISichazamazwi SesiZulu* defines '*inkawu'* (an albino) as '*umuntu onesikhumba esimhlophe kakhulu*' (a person who has a very white colour). During the second phase of the pilot study some learners (for example, at Muzikawuthandwa Secondary School – Appendix J) indicated that the word '*inkawu*' for

people with albinism is not acceptable these days. The main problem is that there is not yet a more acceptable term for the condition in Zulu. The translator therefore decided to use the unacceptable term – *inkawu*.

(e) Indigenised loan word: example 13

The *Complete Wordfinder* defines pneumonia as 'a bacterial inflammation of one lung or both lungs causing the air sacs to fill with pus and become solid. *ISichazamazwi Sanamuhla Nangomuso* defines 'inyumoniya' as '*isifo sokuvuvukala kwamaphaphu*' (the disease of the swelling of lungs). The translator seemed to have used an English monolingual dictionary to create a term for this condition or, if he preferred a loan word, chose it because it is more accurate for readers who are familiar with the source language term.

(f) 'Pure' loan words – transference: examples 6, 7 and 8

These are also examples that suggest that, according to the translators, the source texts terms are familiar to the target readers: Plague = i*Plague*; Typhoid fever = i*Typhoid fever*; Yellow fever = i*Yellow fever*. The source texts terms are therefore expected to be separated by a hyphen from the prefixes. But, the translators avoided the use of the hyphen by writing the source terms in italics. In Chapter 4, Figure 4.3 also shows that some Zulu translators feel that if an English term is believed to be known by the target readers, it can simply be transferred to the target text. In that screenshot (Figure 4.3), the term 'hepatitis' is simply transferred to the Zulu text. The question that arises is whether all the the target readers are indeed familiar with these terms. It should also be noted that the normal Zulu version for the term 'hepatitis' is *isifo sesibindi* (disease of the liver). Possibly, the translator assumed that urban Zulu readers are familiar with the English version.

(g) Synonyms plus omission: examples 9 and 12

Examples 9 and 12 show that translators may choose to use synonyms for a source language term. The words '*utwayi'* and '*inzenzane'* are used for Scabies by the KwaZulu-Natal and Tshwane translators respectively. The *English/Zulu* and *Zulu/English dictionary*

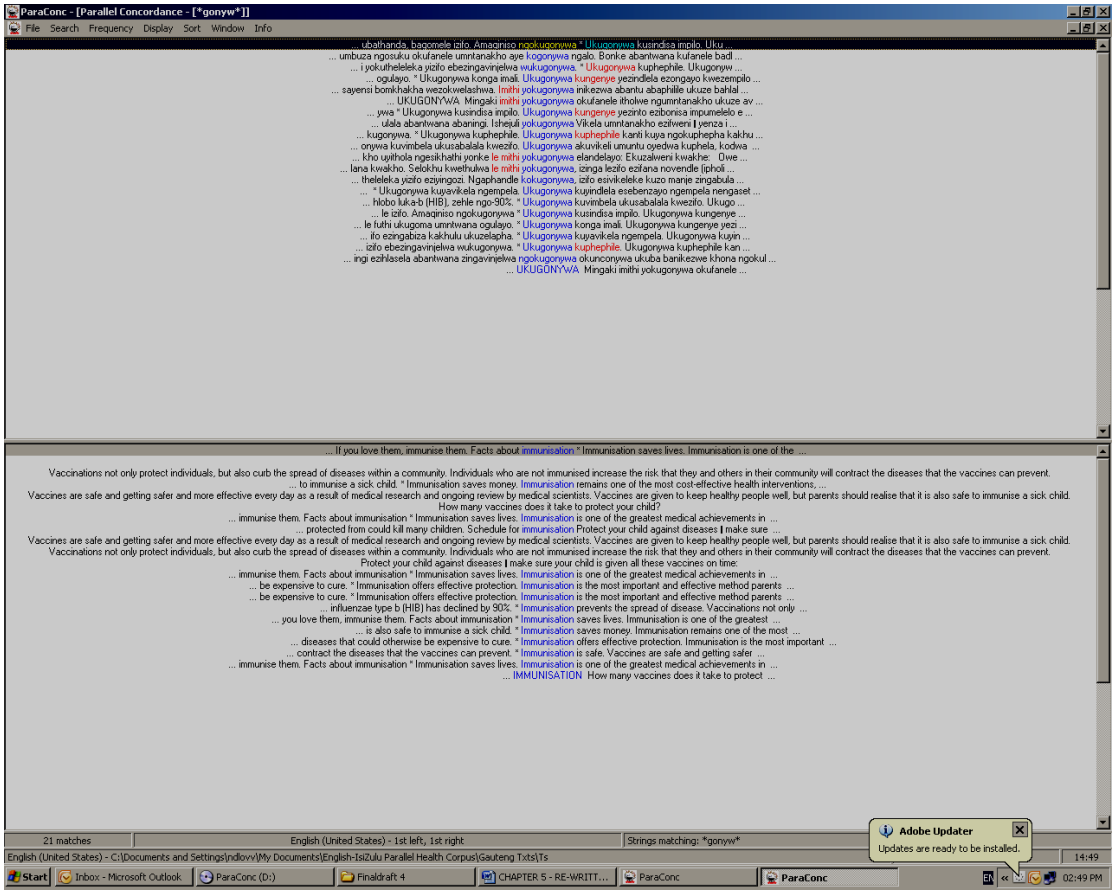
uses *utwayi* and *inzenzane* as synonyms for Scabies.

This section showed the different strategies used by the Zulu translator in creating terms for diseases and related medical terms.

(h) General word: example 14

Example 14 illustrates the translator's use of a farmiliar word for source language terms that may confuse readers. The translator consistently used *ukugonywa* (to strengthen with medicine) for terms such as 'immunisation', 'vaccines' and 'vaccinations', as indicated by the following screen from the source text entitled 'Immunisation', which was produced for Tshwane.

Figure 5.2: Familiar word for immunisation/vaccines/vaccinations



The preceding discussion on the translation of words referring to diseases and other related terms showed that translators' strategies included the following: paraphrasing,

paraphrasing plus omission, paraphrasing plus 'pure' loan word, cultural substitution, paraphrasing plus indigenised loan word, indigenised loan word, 'pure' loan word, synonyms and general words.

The following section focuses on how the translators dealt with translation problems relating to drugs/ointments and other medical terms.

5.2.1.1 Drugs/ointments and other medical concepts

Given the fact that the health texts compiled for the present study are produced and distributed by the western health system, the Zulu translator is expected to make the terms relating to drugs/ointments and other medical concepts, as used by western health practitioners, accessible to the Zulu reader. The accessibility of such terms is dicussed below by focusing on the strategies used by the translators. The examples from the EZHTC are given as Table 5.3.

Table 5.3: Translation of drugs/ointments and other medical terms

Example	Source	Strategy
1. ST: Illegal drugs like **mandrax**, **ecstacy**, **heroin** or dagga TT: *Izidakamizwa ezingavunyelwe ezifana nama-**mandrax**, i-**ecstancy**, i-**heroin** nensangu* BT: Drugs that are not allowed like **mandrax**, **ecstacy**, **heroin** and dagga	*What can I be?/Ngibheke kahle: Ucabanga ukuthi ngingaba yini?* (National)	Transference/ "pure" loan word
2. ST: Apply an emulsion that contains 25% **benzyl benzoate** (such as **Ascobiol**) to the whole body. TT: *Zigcobe ngomuthi oqukethe u-25% we-**benzyl benzoate** (njenge-**Ascobiol**) emzimbeni wonke.* BT: Smear yourself with an emulsion that contains 25% of **benzyl benzoate** (such as **Ascobiol**) on the whole body.	*Scabies pamphlet/Iphamfulethe yenzenzane* (for Tshwane)	Transference/ "pure" loan word
3. ST: Use **pads**, rather than **tampons**.	*Urinary tract infection/Isifo somgudu womshobingo* (for	Transference/ "pure" loan word

Example	Source	Strategy
TT: *Sebenzisa **ama-pads kunama-tampons*** BT: Use **pads** rather than **tampons**.	Tshwane)	
4. ST: Don't use vaginal sprays or **deodorisers** if you tend to suffer from bladder infections. TT: *Musa ukusebenzisa izifutho zesitho sangasese noma **ama-deodorisers** uma wejwayele ukuhlaselwa yizifo zesinye.* BT: Don't use the private part's sprays or **deodorisers** if you tend to be attacked by bladder diseases.	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Transference/ "pure" loan word
5. ST: Use of pills with a high **oestrogen** content (breast cancer) TT: *Ukusebenzisa amaphilisi agcwele ihomoni, **i-oestrogen** (umdlavuza webele)* BT: Use of pills with a lot of **oestrogen** (breast cancer).	Cancer/Umdlavuza (for Tshwane)	Transference/ "pure" loan word preceded by explanation
6. ST: Get your babies vaccinated with **BCG** at birth to protect them against TB. TT: *Goma izingane zakho **nge-BCG** zisanda kuzalwa uzivikele esifweni sofuba.* BT: Vaccinate your children at birth with **BCG** and protect them against TB.	*Prevention of TB/Ukuzivikela esifweni sofuba* (for Tshwane)	Transference/ "pure" loan word
7. ST: Drugs are **chemical** substances, legal or illegal, that produce the following changes in the user. TT: *Izidakamizwa zenziwa **ngamakhemikhali**, ezingaba semthethweni noma zingabi semthethweni, kanti zidala lezi zinguquko ezilandelayo kulowo ozosebenzisayo.* BT: Drugs are made of **chemicals**, which can be legal or illegal, and they cause the following changes in the user.	*What are drugs/Ziyini izidakamizwa* (for Tshwane)	Loan word
8. ST: **Mandrax, Cocaine, LSD** TT: ***i-Mandrax, i-Cocaine, i-LSD*** BT: **Mandrax, Cocaine, LSD**	*What are drugs/Ziyini izidakamizwa* (for Tshwane)	Transference/ "pure" loan word (prefix i- has been added)
9. ST: Don't use **bubble bath** or **bath salts** and oils … TT: *Musa ukusebenzisa **o-bubble bath** noma **o-bath salts** nowoyela*	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Transference/ "pure" loan word

Example	Source	Strategy
BT: Don't use **bubble bath** or **bath salts** and oil …		
10. ST: **rehydration** TT: *Ukubuyisela amanzi emzimbeni* BT: To bring back water to the body	*Cholera/Ikholera* (for KwaZulu-Natal)	Paraphrase
11. ST: a **cooler box** with ice TT: ***isiqandisi* (cooler box)** *esinamaqhwa* BT: **something that makes cool (cooler box)** with ice.	*Cholera/Ikholera*. (for KwaZulu-Natal)	Paraphrase plus "pure" loan word/transference
12. ST: **chlorination** TT: ***Ukuhlanzwa kwamanzi*** BT: **The cleaning of water**	*Cholera/Ikholera* (for KwaZulu-Natal)	Paraphrase
13. ST: **Irradiation** TT: ***Ukuveza emisebeni ukuze kufe amagciwane*** BT: **To expose to rays in order to kill germs**	*Food labelling/Ukubhalwa kokudla* (KwaZulu-Natal)	Paraphrase

(a) Transference/ "Pure" loan words: examples 1, 3, 4, 5, 6, 7, 8, and 9

The examples demonstrate that terms relating to names of drugs or ointments are simply transferred to the Zulu translation by affixing appropriate prefixes. Examples 1 and 8 list the names of illegal drugs, but 'dagga' is not transferred, because it is lexicalised in Zulu. In example 2 the terms 'Ascobiol' and 'benzyl benzoate' were transferred to the target text. The use of '*umuthi*' for emulsion is an attempt by the translator to reach the target readers. That is, if Ascobiol is a medicine, the target readers would understand that the term refers to the name of the medicine. Example 3 demonstrates another transference strategy. That is, the words 'pads' and 'tampons' were thought to be familiar to the users of the products (i.e. women). This example is also appropriate under cultural concepts, as pads and tampons belong to the western culture. Another example which assumes pre-knowledge of the target readers is Example 5 where the translator used the word 'ihomoni' (hormone)— the use of this loan word was discussed above an explanatory word before transferring the term 'oestrogen'. This results in the use of a 'pure' loan word preceded by explanation. Examples 6 and 9 further show that names of products or ointments can simply be transferred to the Zulu target text. In Example 11 the translator decided to use another strategy (paraphrasing), in addition to using a 'pure' loan word, in an attempt to

reach his readers.

(b) Paraphrase: examples 10, 11, 12 and 13

In example 10 the translator chose to paraphrase the term ‘rehydration’. According to the *Complete Wordfinder* the verb ‘rehydrate’ means to ‘absorb water again after dehydration. This term is not entered in the *English/Zulu dictionary* and the translator is assumed to have used an English monolingual dictionary for his paraphrase. The *Complete Wordfinder* defines chlorination as ‘the treatment of water with chlorine to disinfect it’. The translator appears to have used part of this definition to solve this linguistic translation problem (Example 12). The *English/Zulu dictionary* defines the verb ‘irradiate’ as to ‘*veza imisebe*’ (show rays). The translator seemed to have been guided by this definition in translating the term ‘irradiation’ (Example 13). In Example 11 the translator decided to employ a transference strategy in addition to using a paraphrase word in an attempt to reach his readers – *isiqandisi* (‘that which cools down’), is followed by ‘cooler box’.

(c) Indigenised loan words: examples 7

Like the use of transference as a translation strategy, indigenised loan words suggest that the translator assumes the target readers’s pre-knowledge. Example 7 serves as an illustration – ‘chemical substances’ is rendered as *(ng)amakhemikhali* (chemicals).
The discussion on the translation of drugs/ointments and other related concepts showed that the Zulu translators used strategies such as transference, paraphrase and loan words to solve the translation problems. The following section focuses on how Zulu translators deal with cultural issues/constraints.

5.3.1.4 Cultural issues/constraints

In this section the possible effect of Zulu avoidances and taboos is discussed by looking at the decisions taken by the translator to solve some translation problems. Table 5.4 contains examples of instances where the translator(s) avoided naming parts of the body or specific actions. These terms are regarded as obscene by many Zulu speaking people and using them directly would make the texts inaccessible to sensitive Zulu readers.

Table 5.4: Dealing with cultural issues/constraints

Example	Source	Strategy
1. ST: Contact your clinic or doctor immediately if you experience bleeding from the **vagina** … strong flow of water from the **vagina**. TT: *Thintana nekliniki noma nodokotela ngokushesha uma wopha* ***esithweni sakho sangasese*** *… ukugeleza kakhulu kwamanzi aphuma* ***esithweni sakho sangasese***. BT: Contact your clinic or doctor immediately if you are bleeding from **your private part** … strong flow of water from **your private part**.	*Do you want a healthy baby?/Ingabe ufuna ukuba nomntwana ophile kahle?* (National)	Avoidance: indirect
2. ST: When a man **has sexual intercourse** with a woman … TT: *Uma indoda* ***iya ocansini*** *nowesifazane …* BT: When a man goes to a sleeping mat with a woman …	*Albinism/Ubunkawu* (National)	Avoidance: indirect
3. ST: **vagina** TT: *isitho sangasese* BT: private part	*Sexually Transmitted Infections (STIs)/Izifo ezithathelwana ngocansi* (National)	Avoidance: indirect
3. ST: **intercourse** TT: *ukuya ocansini* BT: to go the sleeping mat	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Avoidance: general words with extended meaning
4. ST: **Sexually** Transmitted Infections (title of the text) TT: *Izifo ezithathelwana* ***ngocansi*** BT: Diseases transmitted by **sex**	*Sexually Transmitted Infections (STIs)/Izifo ezithathelwana ngocansi* (for Tshwane)	Avoidance; general word with extended meaning
5. ST: STIs (for "sexually transmitted infections") are spread from someone who already has the disease to another person while **having sex**. TT: *U-STI umele 'sexually transmitted infections'. Umuntu ongenaso utheleleka ngalesi sifo* ***ngocansi*** *nomuntu osenaso.* BT: STI stands for 'sexually transmitted infections'. A person who does not have it gets infected with this desease **through the sleeping mat with**	*Sexually Transmitted Infections (STIs)/Izifo ezithathelwana ngocansi (STIs)* (for Tshwane)	Avoidance: general word with extended meaning

Example	Source	Strategy
someone who already has it.		
6. ST: sex TT: *ucansi* BT: a sleeping mat	*Rabies/Amarabi* (for KwaZulu-Natal)	Avoidance: general word with extended meaning
7. ST: This means that the penis does not enter the **vagina** or anus. TT: *Loku kusho ukuthi **isitho sangasese sowesilisa** singaneni **kwesowesifazane** noma **ezinqeni**.* BT: This means that the man's private part does not enter that of the woman or the buttocks.	*Aids in our comminity/Ingculazi emphakathini* (for KwaZulu-Natal)	Avoidance: indirect
8. ST: you are bleeding from the **vagina** when you are pregnant. TT: *wopha **ngaphansi** uma ukhulelwe*. BT: you are bleeding from **below** if you are pregnant.	*The mother and child care hand book/Incwadi yomama kanye nokukhuliswa kwabantwana* (Soul City)	Avoidance: indirect
9. ST: **sex** TT: ***ucansi*** BT: **a sleeping mat**	*Living positively with HIV and AIDS/Phila ngokuzethemba ne-HIV ne-AIDS* (Soul City)	Avoidance: general word with extended meaning
10. ST: Some people **have sex** because they believe that it is their traditional right. TT: *Abanye abantu **baya ocansini** ngoba bekholwa wukuthi kuyilungelo labo ngokwesiko*. BT: Some people **have sex** because they believe that it is their traditional right.	*Aids in our community/Ingculazi emphakathini* (Soul City)	Avoidance: general words with extended meaning
11. ST: You have sores on your **vagina** or **penis** TT: *Uma unezilonda **esithweni sangasese*** BT: If you have sores on your **private part.**	*Living positively with HIV and AIDS/Phila ngokuzethemba ne-HIV ne-AIDS* (Soul City)	Avoidance: indirect
12. ST: The HIV germ can only live in blood, sperm and **vaginal juices** … TT: *Igciwane i-HIV lihlala egazini, esidodeni kanye **nakulobumanzi obutholakala ngaphansi kumuntu wesifazane** …* BT: The HIV germ lives in the blood, sperm and **this fluid which is found below the**	*Aids in our community/Ingculazi emphakathini* (Soul City)	Avoidance: general words with extended meaning

Example	Source	Strategy
female person		
13. ST: This means that the **penis** does not enter the **vagina** … TT: *Loku kusho ukuthi **isitho sangasese sowesilisa** singaneni **kwesowesifazane*** BT: This means that **the private part** of a man should not enter **that of a woman**	*Aids in our community/Ingculazi emphakathini* (Soul City)	Avoidance: indirect
14. ST**: penis** TT: *isitho sangasese* BT: **private part**	*Aids in our community/Ingculazi emphakathini* (Soul City)	Avoidance: indirect
15. ST: **anus** **TT: *izinqe*** BT: **buttocks**	*Aids in our community/Ingculazi emphakathini* (Soul City)	Avoidance: indirect
16. ST: pain in the **testicles** if you are a man TT: *ubuhlungu **emasendeni** uma ungowesilisa* BT: pain in the **testicles** if you are a man	*Aids in our community/Ingculazi emphakathini* (Soul City)	Direct Zulu word
17. ST: **Sex without penetration** TT: ***Ukusoma (ukuya ocansini ngaphandle kokungena kowesifazane)*** BT: *Ukusoma* (having sex without entering the woman)	*Aids in our community/Ingculazi emphakathini* (Soul City)	Cultural substitution

The *Complete Wordfinder* defines the term 'vagina' as the canal between the uterus and vulva of a woman or other female mammal. The *Zulu/English dictionary* gives the term '*ingquthu*' as the *hlonipha* term (a word that is used to avoid another word that must be avoided) for vagina. *ISichazamazwi Sanamuhla Nangomuso* defines '*ingquthu*' as '*isitho sobulili sowesifazane*' (the female sex organ). What is noted is that the translators (in Examples 1, 3, 7, 11 and 13) did not even use the *hlonipha* term; they preferred to substitute 'private part' for 'vagina'. Examples 8 and 12 further show that the translators indeed avoided the term 'vagina' by using 'below' (the female person) to refer to this part of the body.

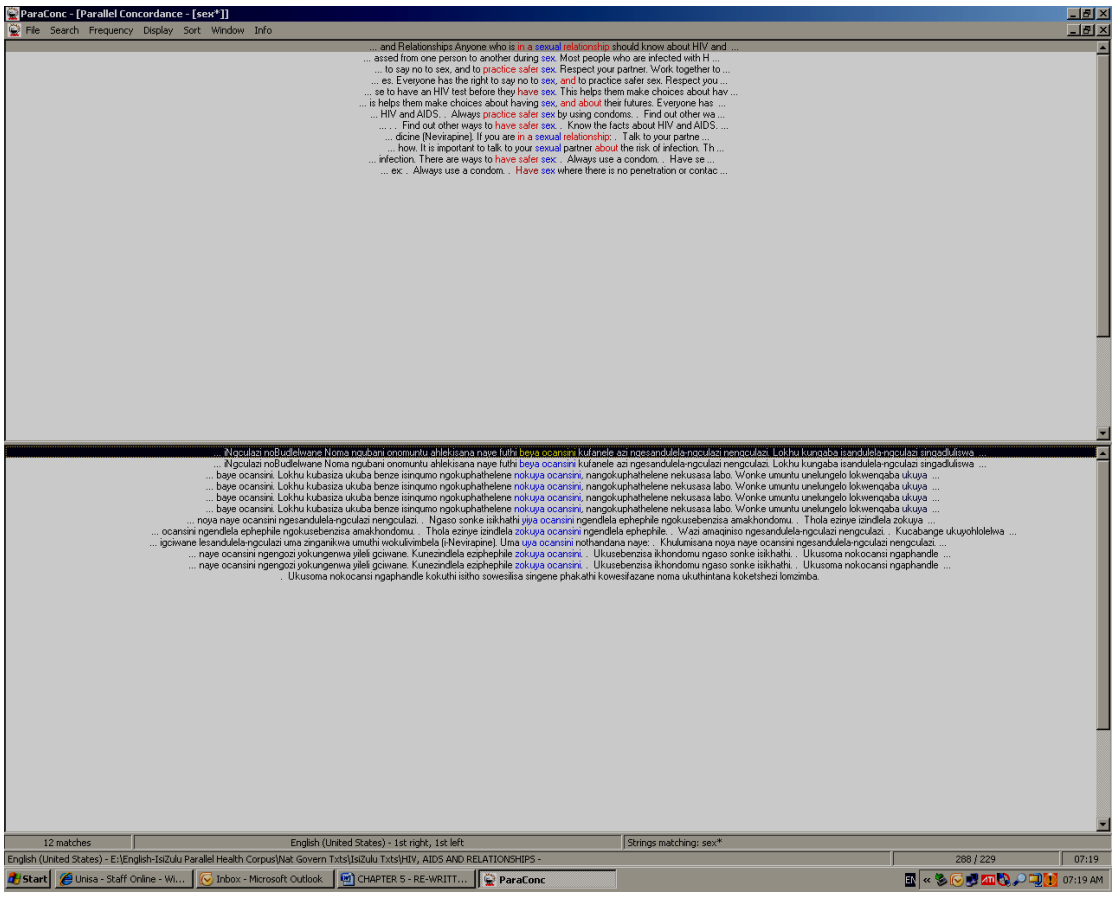
In the same way the translators avoided the direct word for 'penis' by rendering it as '*isitho sangasese*' ('private part')– Examples 7, 11, 13 and 14. The *English/Zulu* dictionary

translates ‘penis’ as ‘*umthondo*’ or ‘*umphambili*’ which the translators chose not to use. The *ISichazamazwi Sanamuhla Nangomuso* gives four alternatives for ‘penis’: *isitho sobulili somuntu wesilisa* (male sex organ), *iphobana*, *umpipi*, *umchamo*. The translators avoided the more direct terms for ‘penis’ by choosing ‘isitho sangasese sowesilisa’ (male) ‘private part’. But, it is surprising to find one sensitive term being used, as illustrated in the following example 16 ─ ‘*amasende’* for ‘testicles’. It cannot be explained why the translator chose to be explicit in this case. Some learners at Mpophomeni (cf. Appendix I) and Thembisa (cf. Appendix H) said the Zulu version (*amasende*) brings shame to the listener/reader and and some said that, instead, *amaqanda* (lit. eggs) should be used for testicles.

The translators demonstrated that there is no problem in using the direct word ‘*izinqe*’ (buttocks) for ‘anus’, though ‘buttocks’ are not accurate in this context (examples 7 and 15). They also assumed that the target readers would understand that the term ‘*izinqe*’ refers to ‘anus’ in this context.

The Zulu translators, like any other Zulu writer, use ‘*ucansi’* (a sleeping mat) for ‘sex’ (Examples 2, 3, 4, 5, 6, 9, 10, 17). The examples demonstrate that Zulu writers and translators avoid the direct Zulu word for ‘sex’. The *Zulu/English dictionary* has ‘*ukulala*’ (to sleep), which does not seem to be explicit, for ‘to have sexual intercourse’. In *ISichazamazwi Sanamuhla Nangomuso* ‘*ukulala*’ is defined as ‘*ukuya ocansini nowesifazane*’ (lit. to go to a sleeping mat with a woman’, which is an indirect way of putting it. *ISichazamazwi SesiZulu* has ‘*ukuya ocansini*’ for ‘*ukulala*’. The translators chose the indirect way of referring to sexual intercourse, which seems to be the acceptable form in written texts. A national text on HIV, AIDS and relationships showed that the indirect way of naming sex was used consistently as shown by the folowing screen.

Figure 5.3: The Zulu version of sexual intercourse/sex



In this text 'to have sex' is always rendered as '*ukuya ocansini*' – to go to the sleeping mat. This indirect Zulu version of referring to sexual intercourse is preferred in written texts. The same can be said with regard to all terms relating to sex.

In Example 17 we find a cultural substitution for 'sex without penetration'. *Ukusoma* is a Zulu custom where young men who have passed pubertal stage and the necessary rites are allowed to '*soma*' (have thigh sex) with their girl friends. The translator decided to use this term because he/she apparently thought that the target readers will be more familiar with it, instead of trying to translate the concept of sex without penetration as something new to Zulu readers. Many learners selected for the present study (cf. Appendices F to K) stated that they would like to see the health texts showing respect to the culture and religion of the people. Tannen (2006: 366) expresses the inseparability of language and culture by stating that "… language is learned and used in cultural context". In other words, when a Zulu reads a health text, it should refer to his culture, which is the case in this example.

The examples showed that terms referring to sex and sexual organs, in particular, are avoided in written texts and they are substituted with indirect terms. Writers and translators seem to be careful when using terms referring to sex and sexual organs to avoid inaccessibility of their writings. The following section examines the transference of source language sentence patterns to the Zulu target language.

5.3.2 Sentence patterns

It was pointed out above (in section 5.1) that the focus in studying the sentence patterns in the EZHTC includes cohesion (reference, conjunction and lexical cohesion) and coherence. The focus is on accessibility and the examples follow below.

Table 5.5 Sentence patterns

Example	Source	Component of communication/strategy
1. ST: When a man has sexual intercourse with a woman his sperm cells will fertilize the egg cell of the woman within her body. **This** is the process of conception. TT: *Uma indoda iya ocansini nowesifazane, amagqamuzana obudoda bayo azovundisa amagqamuzana eqanda kwesifazane emzimbeni wakhe.* ***Lena*** *yinqubo yokukhulelwa.* BT: When a man has sexual intercourse with a woman, his sperm cells will fertilize the egg cells in the woman inside her body. **This** is the process of becoming pregnant.	*Albinism/Ubunkawu* (National)	Reference
2. ST: The guidelines will help you … If you follow **them**, your insulin will work better. TT: *Le migomo izokusiza … Uma ulandela* ***le mithetho,*** *i-insulin yakho izosebenza kangcono.* BT: These guidelines will help you … If you follow **these rules**, your insulin will work better.	*Balanced eating for good health/Indlela yokudla ebhalansile enempilo* (National)	Lexical cohesion
3. ST: These foods are usually the staple (main) food in the	*Balanced eating for good health/Indlela yokudla*	Simplification: combining two sentences into one

Example	Source	Component of communication/strategy
diet. They should be the central part of each meal. TT: *Lokhu kudla yikhona kudla okuqinile nokusisithusayo, ngakho kufanele kube yisisekelo sesidlo sakho.* BT: This food is the food that is solid and which satisfy us, hence it should be the basis of your diet.	*ebhalansile enempilo* (National)	
4. ST: Vegetables and fruit should be an important part of your daily diet. They contain many nutrients that our bodies need. TT: *Ukudla amaveji nezithelo kubalulekile ngoba kunomsoco omningi odingwa imizimba yethu.* BT: Eating vegetables and fruit is important because they have a lot of nutrients which are needed by our bodies.	*Balanced eating for good health/Indlela yokudla ebhalansile enempilo* (National)	Simplification: combining two sentences into one
5. ST: Rehydration is the replacement of liquid … TT: ***Ngalokhu*** *sisho ukubuyisela amanzi* … BT: **With this** we mean the replacement of water …	*Oral rehydration/Okuphuzelwa ukubuyisela amanzi emzimbeni, i-rehydration* (for Tshwane)	Reference
6. ST: Wash your hands after application TT: *Geza izandla zakho emva kwa****lokho*** BT: Wash your hands after **that**.	*Scabies pamphlet/Iphamfulethe yenzenzane* (for Tshwane)	Reference
7. ST: Sometimes there is an abnormal discharge (yellow, green, profuse) and sores, warts or blisters around the sex organs. **These** can be painful or painless. TT: *Kungaba noketshezi (oluphuzi, oluluhlaza okotshani noluningi), izilonda, izinsumpa namashashazi ezithweni zangasese.* ***Lokhu*** *kungaba buhlungu noma kungabi buhlungu.* BT: There may be fluid (yellow, green and profuse), sores, warts and blisters aound the sex organs. **These** can be	*Sexual Transmitted Infections (STIs)/Izifo ezithathelwana ngocansi (STIs)* (for Tshwane)	Using fewer words and reference

Example	Source	Component of communication/strategy
painful or painless.		
8. ST: Liver/kidneys: cause **organ** failure TT: *Isibindi/izinso: kwenza **zi**ngasebenzi kahle* BT: Liver/kidneys: cause **them** not to work well	*Drugs/Izidakamizwa* (for Tshwane)	Reference
9. ST: Don't use bubble bath or bath salts and oils **if** you tend to suffer from bladder infection. TT: *Musa ukusebenzisa o-buble bath noma o-bath salts nowoyela **uma** wejwayele ukuhlaselwa yizifo zesinye.* BT: Don't use bubble bath or bath salts and oil **if** you are used to being attacked by bladder infections.	*Urinary tract infection/Izifo zomgudu womshobingo* (for Tshwane)	Paraphrase
10. ST: To ensure the realisation of the right of access to health services, as guaranteed in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996), the Department of Health is committed to upholding, promoting and protecting this right, and therefore proclaims this PATIENT'S RIGHTS CHARTER as a common standard for achieving the realisation of this right. TT: *Ukuqinisekisa ukuthi ilungelo lokufinyelela osizweni lwezempilo liyafezeka, njengoba kuqinisekiswe kuMthethosisekelo weRiphabliki yaseNingizimu Afrika, 1996 (Act 108 of 1996), uMnyango Wezempilo uzibophezele ekuqhakambiseni nasekugqugquzeleni nasekuvikeleni leli lungelo. Ngakho-ke umemezela lo MHLAHLANDLELA WAMALUNGELO EZIGULI, njengomgomo ohlanganisa bonke abantu wokufeza leli lungelo.* BT: To ensure that the right of	*Patient's rights charter/Umhlahlandlela wamalungelo eziguli* (for Tshwane)	Breaking up a long sentence

Example	Source	Component of communication/strategy
access to health-care services is achieved, as guaranteed in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996), the Department of Health is committed to upholding , promoting and protecting this right. Therefore it proclaims this PATIENT'S RIGHTS CHARTER as a standard that includes all people in achieving this right.		
11. ST: If you suspect that you or a friend or a member of your family suffers from TB, report to the **municipal** clinic where you will be examined and treated. The earlier a sufferer of TB is discovered, the easier the treatment and cure. TT: *Uma usola ukuthi wena noma umngani wakho noma omunye welungu lomndeni unesifo sofuba phuthuma uye emtholampilo uyobatshela ukuze ukwazi ukwelashwa masinyane lesi sifo singakakudli kakhulu.* BT: If you suspect that you or your friend or a member of your family suffers from TB, hasten to the clinic and tell them so that you can be cured immediately before this disease can do more damage to you.	*Tuberculosis can be beaten/Isifo sofuba siyelapheka* (for Tshwane)	Omission and using fewer words, i.e. combining two sentences into one
12. ST: The TB germ starts destroying the surrounding tissue, and inflammation begins to develop in the lung. TT: *La magciwane abese eqala edla la maphaphu.* BT: These germs then start to destroy these lungs.	*Tuberculosis can be beaten/Isifo sofuba siyelapheka* (for Tshwane)	Simplification by using fewer words
13. ST: STIs (for "Sexually transmitted infections") are spread from someone who already has the disease to another person while having sex. TT: *U-STI umele 'sexually transmitted infections'.*	*Sexually Transmitted Infestions (STIs)/Izifo ezithathelwana ngocansi* (for Tshwane)	Explicitation: lexical repetition and additions

Example	Source	Component of communication/strategy
Umuntu ongenaso utheleleka ngalesi sifo ngocansi nomuntu osenaso. BT: STI stands for 'sexually transmitted infections'. A person who does not have it gets infected with this disease through sex with a person who already has it.		
14. ST: The first milk (foremilk) that comes from each breast is nutritious, but also looks thin and watery. **This** milk is especially to quench the baby's thirst. TT: *Ubisi oluphuma kuqala olubukeka luhlambulukile lunomsoco futhi lubalulekile.* ***Lolu*** *bisi luqeda ukoma kumntwana.* BT: The milk that comes out first which looks watery has nutritients and is important. **This** milk quenches thirst in the child.	*Babies under 6 months need breastmilk only/Abantwana badinga ibele kuphela ngezinyanga zokuqala eziyisithupha* (for KwaZulu-Natal)	Source text reproduced – reference technique
15. ST: Certain foods are completely exempt from labelling. **These** foods include: TT: *Ukudla okuthize kuyakhululwa ngokuphelele ekutheni kubhalwe (igama lakho) Lokhu kubandakanya:* BT: Certain foods are completely exempt from labelling (their names). These include:	*Food labelling/Ukubhalwa kokudla* (for KwaZulu-Natal)	Reproduced source text-reference technique
16. ST: Safe food preparation: **This** helps minimize the growing and spread of bacteria. TT: *Indlela ephephile yokulungisa ukudla:* ***Lokhu*** *kusiza ekwehliseni ukwanda nokubhebhetheka kwamagciwane.* BT: Safe food preparation: **This** helps in minimizing the growing and spread of germs (bacteria).	*Cholera/Ikholera* (for KwaZulu-Natal)	Reproduced text – reference
17. ST: Promote the construction and use of clean	*Cholera/Ikholera* (for KwaZulu-Natal)	Lexical cohesion

Example	Source	Component of communication/strategy
toilets. TT: *Gqugquzela ukwakhiwa* ***kwamathoyilethe*** *nokusetshenziswa* ***kwamathoyilethe*** *ahlanzekile.* BT: Promote the construction of **toilets** and use of clean **toilets**.		
18. ST: These usually set in within 3 to 6 days after infection with severe headache, backache, muscular pains, and a rise in temperature usually occurs. TT: *Izimpawu zalesi sifo zivame ukuziveza ezinsukwini ezintathu kuya kweziyisithupha ngemuva kokuthola lesi sifo. Sona-ke sihambisana nekhanda elinkenkethayo, ubuhlungu bomhlane, ubuhlungu bezicubu zomzimba, kanti nezinga lokushisa nalo linuka lingabikezelanga.* BT: The symptoms of this disease usually reveal themselves within 3 to six days after infection. It is accompanied with severe headache, backache, muscular pains, and temperature rises without any warning.	*Yellow fever/iYellow fever* (for KwaZulu-Natal)	Breaking a long sentence into two
19. ST: **Profuse watery stools (diarrhoea – sudden in onset)** TT: ***Uhudo*** BT: **diarrhea**	*Cholera/Isifo sohudo, ikholera (Note in this title paraphrase + indigenized loan word).* (for KwaZulu-Natal)	Simplification – using fewer words
20. ST: Certain perishable foods should be kept in a refrigerator maintained at a temperature of 1.4ºCelsius. TT: *Ukudla okuthile okusheshayo ukubola kumele kuhlale kuqashelwe ukuthi kugcinwe kusezingeni elifanele lokubanda. Okuningi kwalokhu kudla kudinga ukuba kugcinwe kwizinga lika-1.4ºC.* BT: Certain foods which perish quickly should be watched that they are kept at an appropriate temparature level. Most of these foods need to be kept at a	*Food safety/Ukuvikeleka kokudla* (for KwaZulu-Natal)	Explicitation – words added

Example	Source	Component of communication/strategy
temparature level of 1.4ºC.		
21. ST: Preventive measures TT: *Ungazivikela kanjani?* BT: How can you protect yourself?	*Cholera/Ikholera* (for KwaZulu-Natal)	Changing a statement into a question
22. ST: The only numbers you should not write down on this list are PIN numbers for any credit cards or accounts, and bank numbers. **These** should be given to the person who has your Power of Attorney. TT: *Izinombolo okungafanele uzibhale phansi yilezo eziyimfihlo zama-credit cards noma zama-account nezasebhange. Kufanele* ***zi****nikezwe lowo muntu ogunyazwe ngummeli wakho.* BT: The numbers that you should not write down are those that are a secret, of credit cards or accounts and bank numbers. **They** should be given to the person authorised by your attorney.	*Living positively with HIV and AIDS/Phila ngokuzethemba ne-HIV ne-AIDS* (Soul City)	Reference
23. ST: Safe sex means having sex without penetration. **This** means that the penis does not enter the vagina or anus TT: *Ukuya ocansini ngendlela ephephile kusho ukuya ocansini kepha owesilisa angangeni kowesifazane …* ***Loku*** *kusho ukuthi isitho sangasese sowesilisa singaneni kwesowesifazane noma ezinqeni.* BT: Safe sex means sex when a man does not enter the woman. **This** means that the man's private part does not enter that of the woman or the buttocks.	*Aids in our comminity/Ingculazi emphakathini* (for KwaZulu-Natal)	Reference - reproducing source text pattern
24. ST: Some people have sex for money or favours. TT: *Abanye abantu baya ocansini ngoba befuna imali noma befuna ukwenzelwa izinto ezithile.* BT: Some people have sex	*Aids in our community/Ingculazi emphakathini* (Soul City)	Explicitation: words added

Example	Source	Component of communication/strategy
because they want money or they want certain things to be done for them.		
25. ST: Organise a transfer for a woman who needs to leave the city to escape. TT: *Zama ukumshintshela kwenye indawo owesimame odinga usizo.* BT: Try to transfer the woman who needs help to another place.	*Help stop women abuse/Siza ukunqanda ukuhlukunyezwa kwabesimame* (Soul City)	Simplification – omission and paraphrasing
26. ST: How to protect the child against the sun TT: *Ingavikelwa kanjani ingane eyinkawu elanganeni?* BT: How can a child who is an albino be protected from the sun?	Albinism/*Ubunkawu* (National)	Changing a statement into a question
27. ST: How to avoid getting scabies TT: *Ungazivikela kanjani ekutholeni inzenzane* BT: How can you protect yourself from getting scabies?	Scabies pamphlet/*Iphamfulethe yenzenzane* (for Tshwane)	Changing a statement into a question
28. ST: How to prevent urinary tract infection TT: *Izindlela zokuzivikela ezifweni zomgudu womshobingo* BT: The ways of protecting oneself from urinary tract infection	Urinary tract infection/*Izifo zomgudu womshobingo* (for Tshwane)	Reproducing a statement
29. ST: How to behave towards others TT: *Indlela yokuziphatha phakathi kwabanye* BT: The way to behave among others	Drugs/*Izidakamizwa*	Reproducing a statement
30. ST: How is it spread? TT: *Lubhebhetheka kanjani?* BT: How does it spread?	Scabies/*utwayi* (for KZN)	Reproducing a question
31. ST: How is it transmitted? TT: *Ibhebhetheka kanjani?* BT: How does it spread?	Shigella/*Ishigela* (for KZN)	Reproducing a question
32. ST: How to prevent iDD TT: *Ngabe zivikelwa kanjani izimpawu ezibangwa ukuntuleka kwe-ayodini emzimbeni* (IDD) BT: How are signs that are caused by the deficeincy of	Iodine deficiency disorder/*Izimpawu ezibangwa ukuntuleka kwe-ayodini emzimbeni* (National)	Changing a statement into a question

Example	Source	Component of communication/strategy
iodine in the body protected?		
33. ST: How to prevent AIDS TT: *Ingavinjwa kanjani ingculazi* BT: How can AIDS be prevented?	AIDS in our community/*Ingculazi emphakathini* (for Soul City)	Changing a statement into a question
34. ST: How young people can prevent AIDS TT: *Abantu abasha bangayivimba kanjani ingculazi* BT: How can young people prevent AIDS?	AIDS in our community/*Ingculazi emphakathini* (for Soul City)	Changing a statement into a question
35. ST: How to tell someone you are HIV positive TT: *Ungamtshela kanjani omunye ukuthi u-HIV positive* BT: How can you tell someone that you are HIV positive?	Living Positively with HIV and AIDS (for Soul City)	Changing a statement into a question
36. ST: How to tell your children you are HIV positive TT: *Ungazitshela kanjani izingane zakho ukuthi u-HIV positive* BT: How can you tell your children that you are HIV positive	Living Positively with HIV and AIDS (for Soul City)	Changing a statement into a question

A discussion on how translators deal with sentence patterns may be expected to focus on how such patterns are transferred to the target language. In this section the focus is not only on how source language patterns are reproduced in the target language, but also on how the target language sentence patterns differ from those of the source language, since the structure of Zulu differs from that of the source language (English). How the translators reproduced the sentence patterns or deviated from them will be shown by focusing on components of text communication as well as simplification and explicitation strategies as used by the Zulu translators.

(a) Reference techniques: examples 1, 5, 6, 7, 8, 14, 15, 16, 22 and 23

Example 1 shows that a demonstrative can be used as a reference technique (a cohesive device) in a health text. This also shows that the translator decided to maintain the

sentence pattern of the source text to reproduce the cohesiveness of the source text. Example 5 is an example where the translator used the demonstrative 'this' to refer back to the topic of the text - a reference technique which is absent from the source text. In Example 6 the demonstrative 'that' is used to refer back to the application of the emulsion. Again, this reference technique has been added by the translator.

In the first sentence of example 7, the translator changed some lexical items. That is, rather than starting the sentence with 'Sometimes there is an abnormal discharge …', he/she opted for simplifying the sentence (by using fewer words) – 'There may be fluid …'. It is noted that, like in the source text, the demonstrative 'these' (*lokhu*) was used by the translator, as a reference technique.

Example 8 shows that the concord *zi-* (them) was used to refer back to the organs (liver and kidneys). Examples 14, 15 and 16 demonstrate the use of a demonstrative in the source and target texts. In examples 22 and 23 the translators used cohesive devices in the form of demostratives and concords.

(b) Lexical cohesion: examples 2 and 17

In Example 2 the translator reiterated a lexical item by repeating a near synonym of guidelines ─ i.e. rules. The translator could use the object concord *-yi-* in place of the pronoun '**them**'. In that case the last sentence would read as '*Uma u**yi**landela, i-insulin yakho izosebenza kangcono*'. The object concord *-yi-* would then function like the English pronoun '**them**'.

In example 17, the repetition of the word 'toilets' is meant to achieve lexical cohesion.

(c) Combining two or more sentences into one: examples 3 and 4

Examples 3 and 4: It can be argued that the translators combined the two sentences in each instance to make the Zulu version easier to read, and therefore more accessible to the target readers. That is, since the conjunctive is used to signal relations between chunks of information, the reader is expected to see the relation between the two sentences joined by

the conjunctive. In Example 3 the relation between the two sentences is brought about by the conjunctive ‘hence’ and in Example 4 by ‘because’.

(d) Using fewer words: example 12

In example 12 the translator used fewer words that still conveyed the message that the TB germ causes damage to the lungs. Another instance is example 19, where the translator used just one word (*uhudo*) for a phrase that contain eight words in the source text (profuse watery stools (diarrhoea – sudden in onset)). The translator seems to be of the opinion that there is no new information that is conveyed to the target reader in trying to explain how diarrhoea manifests itself─ his readers know this. If that is the case, the translator has succeeded in conveying his message in as few words as possible.

(e) Breaking up a long sentence: examples 10 and 18

Example 10 shows that translators sometimes break up a long sentence into two sentences in order to make it easier to read. In this specific instance, the translator did not change the sentence pattern of the source language. By omitting the conjnctive ‘and’, which is followed by ‘therefore’, he maintained the original pattern. The second sentence therefore starts with ‘therefore’. The translator seems to be aware of the finding that when “too much information is introduced at once, the reader will have difficulty in absorbing” it (Mobley 1986:35). A similar example of the use of this simplification strategy (breaking up a sentence into two sentences) is found in example 18.

(f) Omission: examples 11 and 25

In example 11 the word ‘municipal’ is omitted, as it could apparently create confusion in target readers; the translator omitted the word ‘municipal’ and translated only the word ‘clinic’. In Example 25 the source text tells the reader that the message of the text is indeed for urban readers. The translator seems to feel that this message could help any woman in need. For this reason, the reference to the ‘city’ is omitted.

(g) Adding words: examples 13, 20 and 24

In Example 13 the translator decided to break the sentence into two. The back translation ended up having 27 words instead of the 20 words of the original text. That is, explicitation results in lexical repetition and additions. Therefore, instead of just 'STI for' the back translation has 'STI stands for', and instead of having 'spread to another person', the back translation now puts it explicitly that it is 'another person who does not have it'. Another instance is Example 20, where the translator used more words than in the source text in order to make the text easier to understand (explicitation strategy). The back translation contains 31 words against the 16 words of the source text. Using the addition of words as strategy is also demonstrated by example 24, where the word order of the source text is changed to add lexical items for clarity (explicitation). In example 24, the back translation has 18 words compared to the 8 words of the source text.

(h) Changing a statement into a question: examples 21, 26, 27, 32, 33, 34, 35 and 36

Mobley (1986:22-23) states that "the use of questions as an integral part of the text organization (questions which require the reader to do something) can have a marked effect on both understanding and recall". Therefore the changing of a statement into a question by the translator would be regarded as an attempt to improve understanding and remembering of the message that the reader has processed. What is interesting in the EZHTC corpus, is the two different ways in which the word 'how' is was used. The first use is to ask or report questions while the second use is to introduce statements about the manner in which something happens or is done. The examples as given in the above table are discussed below.

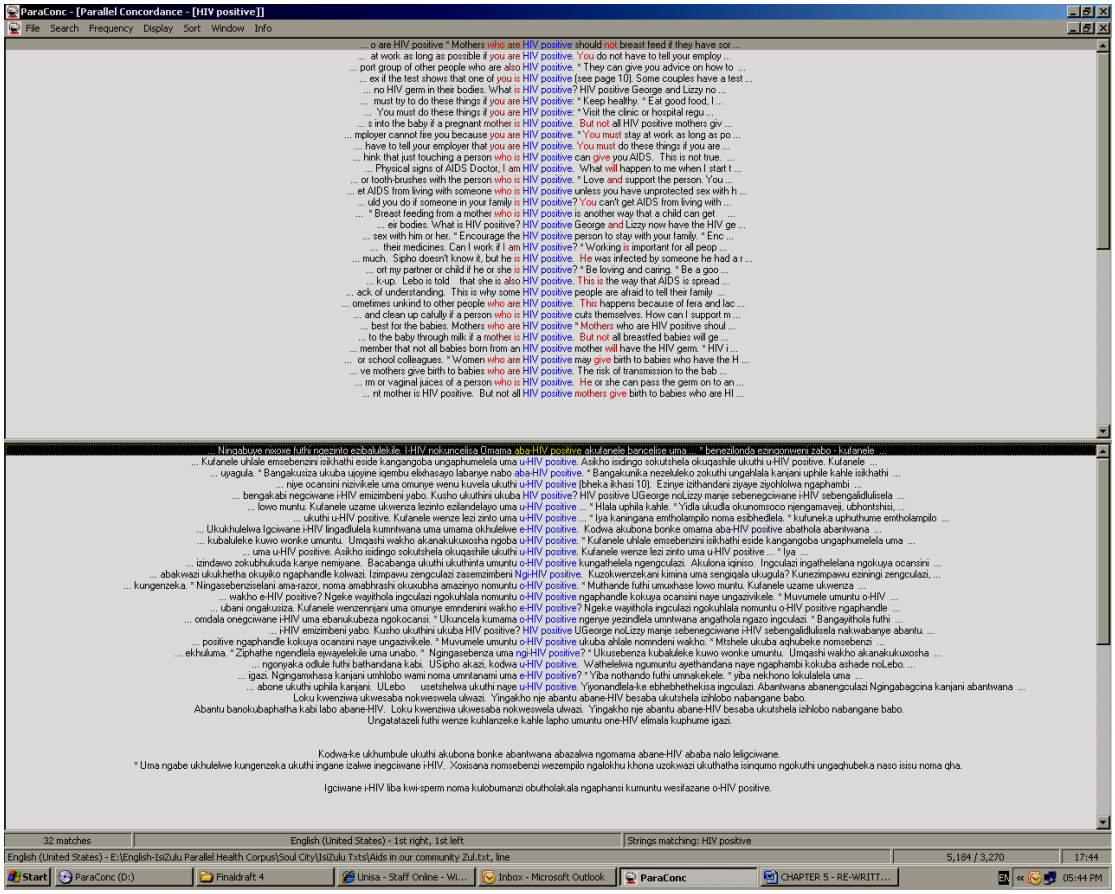
Examples 21 and 26 can be regarded as instances where the translators deliberately change statements into questions. The phrase 'Preventive measures' is deliberately changed to '*Ungazivikela kanjani?*' (How you can protect yourself). This is perceived as having a positive effect on the target reader's understanding and recall of the message. In the same way the statement 'How to protect the child against the sun' is changed to '*Ingavikelwa kanjani ingane eyinkawu elanganeni?'* (How can a child who is an albino be protected against the sun) (Example 26) by the translator. The deliberate change of a statement to a

question is enhanced by the use of a question mark at the end of the question. Surprisingly, some of the translator's questions from statements do not have question marks at the end (Examples 27, 32, 33, 34, 35 and 36). This seems to be an error on the translators' part, who fail to realize that, without the question mark, the word 'how' introduces statements about the manner in which something happens or is done. Other strategies which were used by the translators are discussed below.

(i) Other strategies: examples 35 and 36

Examples 35 and 36 show that the translators deliberately used the transference strategy for the term 'HIV positive'. The common acceptable Zulu version for this term is 'ukuba negciwane lengculazi' (to have the HIV). The deliberate transfer of the source language term (HIV positive) suggests that the translators were aware that they were mainly writing for urban readers (Soul City produce texts mainly for urban readers). The following screenshot illustrates the deliberate use of the transference strategy by the translators. For example, though the translators of the booklet 'Aids in our community' transferred the term 'HIV positive' in many instances, line 18 on the screen (People are sometimes unkind to other people who are HIV positive) is rendered as *'Abantu banokubaphatha kabi labo abane-HIV'* (People sometimes illtreat those who have HIV) and line 6 has the Zulu version *'abantwana abanegciwane i-HIV'* (children who have the virus, the HIV) for 'children who are HIV positive'.

Figure 5.4: The Zulu version of 'HIV positive'



Examples 28 and 29 illustrate the translators' awareness of the use of 'how' as to introduce statements about the manner in which something happens or is done. The statement 'How to prevent urinary tract infection' is reproduced as *Izindlela zokuzivikela ezifweni zomgudu womshobingo* (The ways to protect yourself from urinary tract infection) (Example 28). In Example 29 the Zulu version of 'How to behave towards others' is *Indlela yokuziphatha phakathi kwabanye* (The way of behaviour among others).

Examples 30 and 31 illustrate the correct reproduction of the use of 'how' to ask or report questions in the target text. The question 'How is it spread? is correctly reproduced as *Lubhebhetheka kanjani?* (How does it spread?) (Example 30), and similarly the question 'How is it transmitted?' is rendered as *Ibhebhetheka kanjani?* in Zulu.

The examples on changing a statement to a question illustrate that translators can change a statement into a question with the aim of improving understanding and the recall of the message in health texts. Translators can also choose to reproduce a statement or a question, if they intend producing a source-oriented target text. The following section deals with other examples that the researcher found worthy to look at, mainly the use of dialect markers.

5.3.3 Other related examples

The following examples present examples on dialect markers and other examples that could be noted.

Table 5.6: Dialectical markers and other examples

Example	Source	Strategy
1. ST: HIV/AIDS is a serious disease that affects **millions** of South Africans. TT: *I-HIV/AIDS yisifo esihlasela* ***amagidigidi*** *abantu eNingizimu Afrika.* BT: HIV/AIDS is a disease that attacks **millions** of people in South Africa.	*Caring for people with HIV and AIDS/Ukunakekela abantu abanesandulela-ngculazi nengculazi (i-HIV ne-AIDS)* (National)	dialectical
2. ST: The **sick person** must drink as much as possible of this mixture until you get to the clinic or hospital. TT: ***Isigulane*** *kumele siphuze lo mvango kakhulu size sifike ekliniki noma esibhedlela.* BT: The **sick person** must drink this mixture a lot until she/he gets to the clinic or hospital.	*Halt the spread of cholera!/Nqanda ukubhebhetheka kwesifo sohudo (cholera)* (for Gauteng)	dialectical
3. ST: The cholera germ is found **in human waste (faeces)**. TT: *Igciwane lecholera litholakala* ***uma abantu bezithuma.*** BT: The cholera germ is found **if people defecate**.	*Cholera/Cholera* (for Gauteng)	dialectical
4. ST: If your body **cannot** change the food …	*Diabetes Alert/Qaphela isifo sikashukela* (for Gauteng)	dialectical

Example	Source	Strategy
TT: *Uma umzimba wakho **ungakhoni** ukushintsha ukudla …* BT: If your body **cannot** change the food …		
5. ST: These people may be **able to** cure some of the infections that people get, but as far as we know nobody has found a cure for AIDS. TT: *Laba bantu kungenzeka **bakhone** ukwelapha ezinye izifo abantu abazitholayo kodwa ngolwethu ulwazi akukho muntu oselitholile ikhambi lengculazi.* BT: These people may be **able to** cure some of the infections that people get, but according to our knowledge nobody has found a cure for AIDS.	*Aids in our community/Ingculazi emphakathini* (Soul City)	dialectical
6. ST: Wash your **cutting board** especially well with soap and water. TT: *Geza **ugqoko lokuqobela** ngensipho namanzi.* BT: Wash ***ugqoko*** for cutting with soap and water.	*Shigella/Ishigela* (KZN)	Cultural substitution
7. ST: Wash and iron clothing because ironing kills the eggs of the **organism**. TT: *Ukuwasha noku-ayina izimpahla ngoba lokhu kubulala amaqanda.* BT: Washing and and ironing clothes because this kills the eggs.	*Scabies/Utwayi* (KZN)	Omission
8. ST: The only numbers you should not write down on this list are PIN numbers for any **credit cards** or accounts, and bank numbers. TT: *Izinombolo okungafanele uzibhale phansi yilezo eziyimfihlo zama-**credit cards** noma zama-account nezasebhange.* BT: The numbers that you should not write down are those that are a secret, of **credit cards** or accounts and bank numbers.	*Living positively with HIV and Aids/Phila ngokuzethemba ne-HIV ne-AIDS* (Soul City)	Transference/'pure' loan words

Example	Source	Strategy
9. ST: You can *masturbate* and bring yourself to climax. TT: *Unga**shaya indlwabu** bese uzifikisa wena ebumnandini obuphelele.* BT: You can '***shaya indlwabu***' (**masturbate**) and bring yourself to complete enjoyment.	*Aids in our community/Ingculazi emphakathini* (Soul City)	Use of idiom

The correct standard Zulu word for 'millions' (example 1) is '*izigidigidi*'. The use of '*amagidigidi*' suggests that the translator, who seemed to be a speaker of a non-standard Zulu dialect, might have been infuenced by the dialect. Since this example is from the national sub-corpus and produced for the entire Zulu population in the country, the translator was expected not to use dialectical expressions. In other words, translators were not expected to purposefully choose an expression for readers of a specific geographical area. This example is quoted in Ndlovu's (2006) article entitled 'The limits of simplification in translated isiZulu health texts', where the use of this dialect marker is demonstrated to be inappropriate. The word '*isigulane'* (example 2) is a Xhosa word for patient and a Siswati version is 'sigulane'. It is expected that the speakers of Gauteng Zulu may accept the usage of this word. However, it should be noted that a large number of Zulu speakers in Gauteng use the standard version of their language. The translator's problem is to decide whose expectations should be respected: the speakers of standard Zulu, or of non-standard isiZulu. The *English/Zulu* dictionary has '*isiguli*' for 'patient'.

The *Zulu/English dictionary* defines the idiom '*ukuya ngaphandle*' (lit. to go towards the outside) as 'to go to relieve nature'. In *Isichazamazwi SesiZulu* '*ukuya ngaphandle*' is defined as '*ukuzikhulula*' (to relieve oneself) or *ukubhosha* (to defecate). The phrase '*uma abantu bezithuma*' (example 3), which is not standard Zulu, literally means 'if people send themselves'. It appears that the translator's choice is a dialectical expression. The word '*ukuzithuma*' is a Xhosa word meaning to relieve oneself, evacuate one's bowels (Mini et al, 2003, Volume 2).

The word '*ungakhoni*' (example 4) is a Swati or Ndebele form for '(it) cannot'. The correct standard Zulu form is '*ungakwazi*'. Gauteng Zulu does use the Swati form '*khona*'

for ‘can’. It is therefore understandable why the translator delibarately or unconsciously chose this Swati expression for his readers. Perhaps the reason for using the non-standardized Swati ‘-khona’ (example 5) may be that the translator is a speaker of the dialect or that he/she had Gauteng readers in his/her mind.

In example 6 the translator decided to substitute *ugqoko* (the native meat-tray carved of wood) for ‘cutting board’, apparently because the target readers would be more familiar with it than a cutting board. Translation by omission is demonstrated by example 7. The translator seemed to have omitted the word ‘organism’ because the context suggests that it is the scabies mites that are the topic of discussion. Example 8 is an instance where the translator decided to use a transference strategy for the source language non-lexicalized ‘credit cards’. The *English/Zulu* dictionary defines ‘masturbation’ (example 9) as ‘*ukuzenza ukuba kuphume amalotha*’ (making yourself release semen). The phrase (idiom) ‘*ukushaya indlwabu*’ is not found in the translation or Zulu monolongual dictionaries, though it is used by some members of the public. The avoidance of the use of sensitive terms/expressions which are regarded as taboo or offensive by speakers of Northern Sotho, a language related to Zulu, is also noted by Mabule (2009:45): “the naming and the functions of organs of human reproduction are perceived as taboo in Northern Sotho”.

The following section focuses on the use of illustrations in the EZHTC.

5.4 Illustrations

The discussion deals only with the use of illustrations in selected health texts. In Chapter 3 it was argued, following Mobley’s (1986) model, that the function of illustrations is to develop motivation (interest) and/or to provide information. It was also stated that illustrations may distract a reader from the learning (reading) process if (1) they are badly placed, (2) the content/concept is not recognizable, (3) they distract attention from the ideas in the text, (4) the illustrations contain too much information, (5) the focus of the illustration is not clear and (6) the print and illustration are merged.

The following discussion will focus on these aspects and the comments by the learners selected for the present study will also be taken into consideration. The discussion will deal with one set of texts at a time (the national, Gauteng, KwaZulu-Natal and the Soul

City texts respectively).

5.4.1 National texts

The majority of the texts were in the form of leaflets and three languages were accommodated in each of them (English, Zulu and Sesotho). There seemed to be a problem in the placement of illustrations since the use of the three languages entailed that an illustration had to be repeated for each language in the same leaflet. Generally, the producers avoided this by having a different illustration as close as possible to the information to which it refers. That is, the illustrations in one leaflet seemed to be aimed at developing interest, but the information they provided was not the same for the readers of the three languages since each language would have a different illustration. This is illustrated by the leaflet on common sicknesses of people with HIV and AIDS as shown by Fig 5.5(a) and (b) below:

Figure 5.5(a): Leaflet on common sicknesses of people with HIV and AIDS

Common Sicknesses of People with HIV and AIDS

HIV slowly damages a person's immune system. The immune system is the part of the body that fights germs. These germs make us sick. With a damaged immune system, the body is not properly protected against germs. This is why people living with HIV can get sick more easily and more often.

If you have any of the following signs of sickness, get treatment straight away:

- Chest pain and coughing that doesn't go away
- Night sweats and fever
- Loss of weight and a runny tummy
- Painful swallowing and sores in or around the mouth
- Bad headaches
- Not being able to see properly
- Tiredness

If your immune system stays strong, you will get sick less often. There are ways to help keep your immune system strong and prevent sickness:

- Get medicines to prevent common sicknesses.
- Eat healthy food. Ask your health worker for ideas.
- Exercise regularly.
- Don't drink alcohol or use tobacco.
- Keep your house and yourself clean.
- Wash your hands after using the toilet and before eating.
- Wash all your vegetables in clean water.
- Cook meat and chicken well.

- Don't share things that are used on the body, like toothbrushes, razors and needles.
- Get treated straight away if you do get sick.
- Always use a condom when you have sex. This will protect you from getting infected with HIV again. It will also protect your partner.

If you have any questions about HIV and AIDS, you can phone the free 24-hour AIDS Helpline at 0800 012 322. There are other leaflets in this series that give more information about AIDS.

AFRIKAANS Algemene siektes van mense met MIV en VIGS

Hiv beskadig geleidelik 'n persoon se immuunstelsel. Die immuunstelsel is die deel van die liggaam wat teen kieme stry. Hierdie kieme maak ons siek. As 'n immuunstelsel beskadig is, word die liggaam nie behoorlik teen kieme beskerm nie. Dit is waarom mense wat met MIV leef, makliker en meer dikwels siek word. Kry dadelik behandeling as jy enige van die volgende tekens van siekte het:

- Borspyn en hoes wat nie weggaan nie.
- Nagsweet en koors.
- Gewigsverlies en lopende maag.
- Pynvolle sluk en sere in of rondom die mond.
- Ernstige hoofpyne.
- Om nie behoorlik te kan sien nie.
- Moegheid.

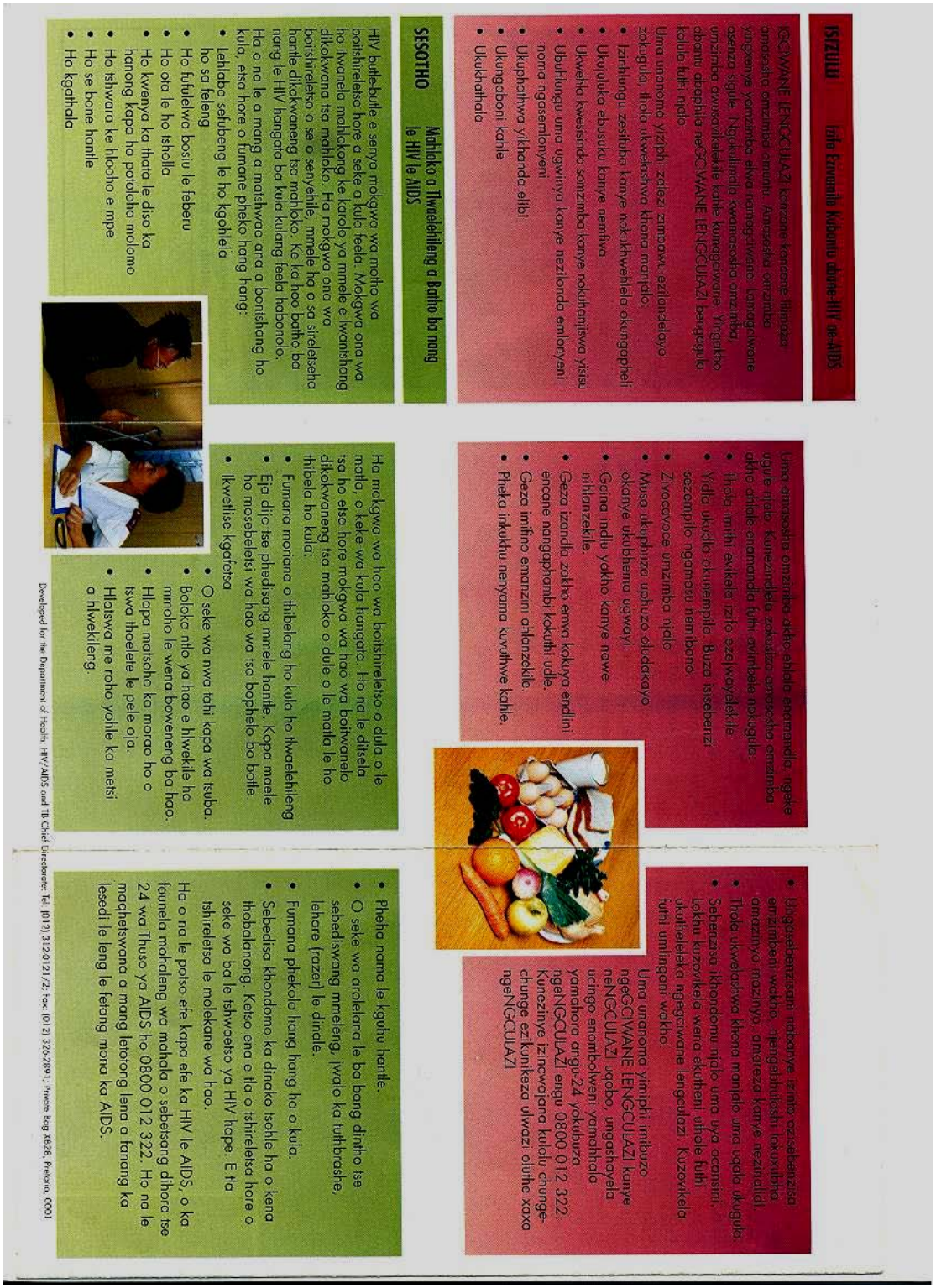
As jou immuunstelsel sterk bly, sal jy minder dikwels siek word. Hier is maniere wat kan help om jou immuunstelsel sterk te hou en siekte te voorkom:

- Kry medisynes om algemene siektes te voorkom.
- Eet gesonde kos. Vra jou gesondheidswerker vir idees.
- Eet gereeld.
- Moenie alkohol drink of tabak gebruik nie.
- Hou jou huis en jouself skoon.
- Was jou hande nadat jy die toilet gebruik het en voordat jy eet.
- Was al jou groente in skoon water.
- Kook vleis en hoender behoorlik.

- Moenie dinge deel wat op die liggaam gebruik word nie, soos tandeborsels, skeermes-lemme en naalde.
- Gaan dadelik vir behandeling as jy siek word.
- Gebruik altyd 'n kondoom wanneer jy seks het. Dit sal keer dat jy weer met MIV geïnfekteer word. Dit sal ook jou seksmaat beskerm.

As jy enige vrae oor MIV en VIGS het, bel gerus die gratis 24-uur VIGS Hulplyn by 0800 012 322. Daar is ook ander blaadjies in hierdie reeks wat vir jou meer inligting oor VIGS kan gee.

Figure 5.5(b): Leaflet on common sicknesses of people with HIV and AIDS



However, in the leaflet entitled 'Sexually Transmitted Infections (STIs)', the pictures depicting the signs of STIs were placed at the end of the English and Afrikaans side of the text. It is not entirely correct to argue that such illustrations are badly placed. Rather, the

problem arises because different languages are used in one leaflet. It is not clear whether this detracts from the reading process, since the leaflet is not a long text.

A different case was found in the booklet entitled '*Albinism*'. On page 8 of the Zulu version readers were referred to an illustration presented on page 6. It was noted that this was not the case in the source text. This seemed to be a case of adding information in order to make the translation more accessible to the new readership. The booklet on albinism had another illustration which could detract from the reading process in that the focus of the illustration was not clear. The source text had an illustration on recessive inheritance (p. 6). The labelling of the illustration is complete, showing normal genes (N) and faulty recessive counterparts (r). This was not the case in the Zulu version – the labelling of the faulty recessive counterparts was not complete. This could not be the mistake of the translator since, sometimes, translators have to translate a text of which the illustrations are inserted at a later stage. It is therefore the responsibility of the text producers to ensure that the final version of the translated text is proofread.

5.4.2 Gauteng texts

Most of the Gauteng texts were received electronically and almost all of them without illustrations. The leaflets (hardcopies) on polio and passive smoking were also without pictures and presented in beautiful coloured paper to develop interest in the reader. An interesting leaflet was the one on Voluntary Counselling and Testing (VCT), where the same illustrations were repeated for each of the languages used: four languages were used (English, Afrikaans, Sesotho and Zulu), as shown by Figure 5.6 below:

Figure 5.6: Leaflet on Voulntary Counselling and Testing (VCT)

That is, each illustration was as close as possible to the information to which it referred for each language. It was noted that the use of illustrations in this leaflet differed from that of the national leaflets.

5.4.3 KwaZulu-Natal texts

Most of the texts collected for the present study were retrieved from the provincial health department's website and each of them was a text of two pages. The producers of the texts seemed to have taken a decision to ensure that the Zulu version of each text should also not exceed two pages. This had an effect on the use of illustrations.

For example, in the parallel text entitled *Food safety/Ukuvikeleka kokudla*, there are more food diagrams in the source text than in the target text. This suggests that the plain target text needed more space than that of the source text. By contrast, the parallel text entitled *Cholera/Isifo sohudo-kholera* showed that the source text had less space left for illustrations than the target text. The source text had only one enlarged horrifying picture representing a virus, while the target text had a similar picture plus pictures of fruit and vegetables. The suggestion is that, if there is space for extra illustrations, producers would use this opportunity to make the text more attractive to the reader.

The following parallel texts represented those source texts where the illustrations were similar to those of the Zulu versions: *Rabies/Amarabi* (picture of a dog); *Food labelling/Ukubhalwa kokudla* (packaged food picture); *Shigella/Ishigela* (food on chopping board); *Plague/iPlague* (picture of a flea); *Malaria/Umalaleveva* (two mosquito pictures). In these texts the use of illustrations in the source and target texts is expected to fulfil the same functions ─ either to develop motivation, to add information or both.

The other parallel text on cholera (entitled *Cholera/Isifo sohudo – Ikholera*) was surely meant for the rural population. It included pictures of a Zulu hut and a latrine as well as a girl relieving herself near the stream. The illustrations of the source text were the same as those of the target text.

5.4.4 Soul City texts

In the four booklets referred to under 5.2.3 above, the illustrations used in the source texts were similar to those used in the Zulu versions and each source language booklet had the same number of pages as those of the target language booklet. This suggested that the producers aimed at ensuring that the target texts achieve the same effect as the source texts. However, a general comment could be made about some of the illustrations, particularly those on the themes of sex.

The comment is based on what a traditional Zulu is expected to know and avoid when it comes to sexual matters. For example, in parent-child relationships, children are not allowed to see their parents naked (a rule which is extended to any adults). In the modern world, it is unclear how a traditional Zulu reacts when he/she sees pictures of naked people in books, even if the intention is educational like in the health texts. Some learners from Thembisa (cf. Appendix I) did not like the pictures that showed naked people.

Some of Memezelo Secondary learners (cf. Appendix G) had a problem with the pictures showing the anatomy of a pregnant woman. Perhaps they felt it is inappropriate, because a Zulu pregnant woman has a number of interdicts to observe, such as to make sure that she always puts on a leather apron (*isidiya* or *isigcayi*) to cover her breasts and abdomen. The reaction of these learners does not entail that Zulus still observe all their customs. This is what was observed from some of the learners (cf. Appendices F to K)– they were flexible when it came to the observance of their customs.

The preceding discussion on the use of illustrations in the four sets of texts demonstrated the applicability of Mobley's (1986) model in the texts selected for the present study. The placement of the illustrations received attention and the space available for them determined their placement, in certain texts. It was also suggested that culture seemed to have an effect on the acceptance of some of the illustrations. The last section of this chapter is the conclusion.

5.5 Conclusion

The study demonstrated that the translators of the health texts were faced with geographical, linguistic and cultural constraints in trying to make the texts accessible to the target readers. The discussion on linguistic constraints (at the vocabulary level) focused on those concepts which were not yet lexicalized or problematic in Zulu.

For physiological processes and other related concepts, the translators used strategies such as indigenised loan words, 'pure' loan words (transference), transference plus an explanation, paraphrasing, general words with extended meaning, coinage and familiar words. The use of indigenised loan words and 'pure' loan words is problematic, since it suggests that the target readers have pre-knowledge of the source language term. If that is not the case, the use of these strategies would lead to inaccessibility, particularly in the case of semi-literate readers. The use of a paraphrase, general word with extended meaning and familiar words seem to be effective as indicated by the examples. But the use of coinaging in Zulu translations like health material will not always be acceptable to the target readers. It is also noted that Zulu writers use the term igciwane ('germ') for 'bacterium', 'germ' and 'virus'. This strategy would be a problem in scientific texts where accuracy is crucial.

To translate names of diseases and related concepts the translators' strategies included the following: paraphrasing, paraphrasing plus omission, paraphrasing plus 'pure' loan word, cultural substitution, paraphrasing plus indigenised loan word, indigenised loan word, 'pure' loan word, synonyms and general words. Like in translating body organs and physiological process concepts, the use of a paraphrase is aimed at solving the problem of non-lexicalisation and problematic disease terms as well as other related terms. It is noted that the translators further used this strategy in combination with strategies like omission, 'pure' loan words and indigenised loan words. This illustrates an attempt by the translators to solve the problem of inaccessibility. Different strategies were also used for one disease term, for example, for the term 'cholera': *ikholera* (indigenised loan word), i-cholera ('pure' loan word) and *isifo sohudo* (paraphrasing). Since the texts were translated by different translators, the use of these 'optional' strategies suggests the translator's preference and his knowledge of the target readers. The use of synonyms by the translators

further suggests a translator's preferred term.

For drugs /ointments and related conepts the Zulu translators used strategies such as transference, transference preceded by an explanation, paraphrasing and indegenised loans words to solve the problem of lack of equivalence at word level. It is noted that, for drugs/ointment and related concepts, the translators mainly transferred them, used indigenised loan words or paraphrased them. This is understandable because names of products may not be changed at will. The present study further revealed that, though there are Zulu terms for the source language terms like vaccine, vaccination and immunization, one translator decided to use one term for the three terms (*ukugonywa* > being vaccinated), perhaps in an attempt to reach his/her readers. Another translator would have opted for the Zulu term *umgomo* for 'vaccine' and *ukugonywa* for 'immunization' and perhaps *ukugonywa* again for 'vaccination'. Perhaps the translator thought that the use of *umgomo* in written texts would confuse readers as it also refers to the English term 'principle'.

Furthermore, the translators had to deal with cultural issues/constraints in the translation process. Terms referring to sex and sexual organs, in particular, are generally avoided in written texts. These terms are substituted for indirect terms and the Zulu translators generally avoided such terms, apparently for the sake of acceptance of their translations.

The Zulu translators were also expected to deal with how to transfer sentence patterns to the target texts. The strategies they used to solve this problem included simplification and explicitation strategies. In the present study cohesive and coherent devices were given attention in studying the way sentence patterns contributed to the accessibility of the texts.

Other related and relevant examples received attention. For example, dialect markers demonstrated the geographical constraints under which Zulu translators work. Another aspect to be considered is the use of abbreviations/acronyms in the health texts. It seems that the translators did not hesitate to transfer them to the target texts if, to their mind, they were known by their target readers, for example the acronym 'HIV'.

Mobley's (1986) model was then used to describe the use of illustrations in the health texts. This model was found to be useful and it was mentioned that the two main functions

of the illustrations was to develop motivation and to add information. The cultural constraints were also taken note of in the use of illustrations in health texts.

The following chapter presents a summary of the aims and issues dealt with in the present study, the techniques used and the findings as presented in the present study.

CHAPTER 6

CONCLUSION

6.1 Aims of the study

The primary aim of the study was to analyze the strategies and devices used in translating vocabulary that is not yet lexicalized, and sentence patterns as extracted from the English-Zulu Health Corpus (EZHTC). That is, the focus was on how potentially problematic vocabulary and sentence patterns were simplified – in an attempt to make the text easier to read and more accessible to the target readership. The study was triggered by the realization that translated Zulu health texts in South Africa were produced under geographical, linguistic and cultural constraints. I therefore compiled the EZHTC for analysis in order to examine the accessibility of the health texts to the Zulu target readership. The study was also aimed at uncovering the extent to which the translated Zulu health texts reached the target readership, by focusing on four areas selected for the present study, namely two areas in Gauteng and two in KwaZulu-Natal, which were regarded as representing the regions of the country where Zulu is spoken. The question was: Do these translated texts reach the target readers of these areas?

6.2 Overview of the chapters

Chapter 2 focused mainly on the two health care systems coexisting in South Africa in order to give a background to the research problem. This was done by adopting principles from the discipline of medical anthropology. The key principles were defined, and for the present study the most relevant were the definition of the concepts of health, disease and illness, medical systems and medical pluralism. It was stated that a medical system is created by human societies in response to disease and illness. It was also explained that in South Africa medical pluralism (coexistence of medical systems) manifests itself by the fact that the western and traditional health care systems coexist. This was important because the translated Zulu health texts that were collected for the present study were distributed to readers who used traditional medicine either by choice or because it was a

cheaper alternative.

The coexistence of these health care systems is important in a discussion of South Africa's disease profile and the manner in which the government responds to the various diseases and illnesses. Common communicable diseases in South Africa include HIV/AIDS, TB, malaria, measles and sexually transmitted infections. Some of the health texts collected for the present study dealt with these diseases. Others dealt with other problems such as polio, woman abuse and pregnancy.

Chapter 2 dealt, in detail, with the traditional health care system in South Africa. Unlike the disease-oriented approach of the western health care system, patients are not treated as individuals by traditional healers, but holistically, firstly as members of a specific kin-group, and secondly, as members of a larger community. I explained that health beliefs and behaviour relate to the cultural history of the people concerned. Zulu rural communities who live far away from modern health care facilities find the traditional health care services useful if and when they choose to make use of them.

The scholars cited in chapter 2 acknowledge the services of traditional healers. Furthermore, the government recognises the services of traditional healers by advocating co-operation between western and traditional healers. This entails that translated Zulu health texts are targeted to readers who normally use traditional medicine instead of the methods advocated by the western system.

Finally, chapter 2 provided language statistics of the areas selected for the present study: Thembisa and Soshanguve (in Gauteng) and Mpophomeni and Mtulwa (in KwaZulu-Natal). The statistics showed that Zulu speakers in Thembisa, Soshanguve, Mpophomeni and Mtulwa comprised 25%, 14%, 98% and 99% respectively, according to Census 2001. The dialect markers identified in Chapter 5 of the present study indicate that the other spoken languages influence the Zulu of Gauteng speakers.

The main aim of Chapter 3 was to discuss the use of corpora as a research methodology in translation studies, as adopted for the present study. The chapter covered aspects of the use of corpora such as types of corpora for translation research, corpus design issues as

well as tools for data extraction and analysis. I used a bilingual concordancer called ParaConc to extract data from EZHTC for analysis. Data was also collected for analysis from respondents selected for the present study (Grade 10 to 12 learners in the selected areas) during the first phase of the pilot study.

The data of the first phase of the pilot study was collected by using the reader focused method as discussed in Chapter 3. The distinction, by de Beaugrande and Dressler (1981), between seven constitutive principles of texual communication and three regulative principles that control texual communication is widely known. The researcher, instead, followed scholars like Hubbard (1989) in considering the seven principles of textual communication and the three regulative principles as components of text communication. For the present study, two components of text communication were regarded as important, namely cohesion and coherence. Accessibility or aspects of readability (as advocated by Mobley (1986) were introduced as the eleventh component of text communication by the researcher. The researcher also analysed the use of illustrations in the health texts in the EZHTC, seeing that illustrations is an important aspect of readability and accessibility of texts.

Chapter 4 dealt with the analytical framework as well as techniques used to address the aims of the study. During the first phase of the pilot study, a self-administered questionnaire was used to gather data on the distribution of health texts in Gauteng and KwaZulu-Natal. The results of the pilot study (cf. Appendix C) showed that more than two thirds of the selected high school learners had already seen health texts before the interview. This suggested that the health texts produced by the Department of Health and the NGOs are indeed distributed to the intended target readership. It was also noted that a large percentage of respondents who said they had seen the texts were from rural areas. Ironically, the rural community which was visited in January 2003 (at Loteni (in KwaZulu-Natal), at the time of the interview) said a mobile clinic visited the area only once a week.

During the second phase of the pilot study, which began in 2003 and culminated in the semi-structured interviews conducted between April and August 2007, I visited four secondary schools, each representing the four areas in the two provinces selected for the present study: Gauteng schools - Memezela Secondary School (at Soshanguve) and

Thembisa High School (at Thembisa); KwaZulu-Natal schools – Muzikawuthandwa Secondary School (at Mtulwa) and Mpophomeni High School (at Mpophomeni).

To collect data from these learners, I used De Jong and Schellens's (1997) model which gave the learners an opportunity to evaluate the translated Zulu health texts. That is, focus groups combined with semi-structured interview schedules were used to ask students questions on different aspects of the health texts. The data collected from the learners is provided as Appendices F to K. Part of this data was analyzed by means of ParaConc. For example, the list of translated terms which learners were expected to respond to, in the form of the semi plus-minus method, were searched in the relevant parallel texts to analyse their use in content.

ParaConc tools were largely used to extract and analyze most of the data from the EZHTC. Parallel texts from the EZHTC were selected and aligned in order to analyze the use of cohesive and coherent devices. Furthermore, frequency lists were used to identify possible problematic non-lexicalized concepts for analysis. I selected possible problematic words from the list of 'difficult' words as provided in the four Soul City parallel booklets. The parallel booklets are entitled:

- Aids in our community */Ingculazi emphakathini;*
- Help stop women abuse*/Siza ukunqanda ukuhlukunyezwa kwabesimame;*
- Living positively with HIV and AIDS*/Phila ngokuzethemba ne-HIV ne-AIDS; and*
- The mother and child hand book*/Incwadi yomama kanye nokukhuliswa kwabantwana.*

The aim of Chapter 5 was to present the findings. The study demonstrated that the translators of the health texts were faced with geographical, linguistic and cultural constraints in trying to make the source texts accessible to the readers they were translated for. Dialect markers were identified in the Gauteng and Soul City texts. KwaZulu-Natal's texts predominantly used standard Zulu. That is, the Gauteng texts, with at least three dialect markers identified, would be expected to incorporate these markers in the target readers. This dialect would not be acceptable to KwaZulu-Natal readers. The one example

of a dialect marker identified in the Soul City texts (*amagidigidi* for *izigidigidi* (millions), suggests the option used by an individual.

The discussion on linguistic constraints (at the vocabulary level) focused on those concepts which were not yet lexicalized or 'not acceptable' in Zulu. The translators used different strategies to solve this problem, which included simplification and explicitation strategies. Cohesive devices were also given attention to study the way sentence patterns contributed to the accessibility of the texts.

Mobley's (1986) model was then used to describe the use of illustrations in the health texts. This model was found to be useful and it was mentioned that the two main functions of the illustrations were to develop motivation and to add information. The cultural constraints were also taken note of in the use of illustrations in health texts.

6.3 Contribution of the present study

The use of ParaConc in extracting and analyzing data from the English-Zulu Health corpus demonstrates that it is possible to use it in other fields of study, like the development of terminology. In the present study, ParaConc was used to study vocabulary and sentence patterns. It showed how Zulu translators deal with problematic terms such as those that are not yet lexicalized in Zulu and described the possibility of reproducing or adding cohesive devices in target texts, which benefit practising translators. Therefore the study can equip translators with translation strategies which are aimed at making texts accessible to target readers as well as help them avoid those that lead to inaccessible texts.

The study also showed that health texts in which illustrations are often used need to be treated differently when the information they provide as well as their function are considered. Illustrations provide information and they are also used to develop interest by the writers. It was therefore decided to add the aspects of readability (accessibility) as the eleventh component of text communication so as to accommodate the illustrations as used in the health texts. The analysis of the corpus by ParaConc alone would leave out this important aspect of the health texts. That is, the manual analysis of the illustrations helped in understanding their use in making health texts easier to read. Therefore, at a theoretical

level, it helps to consider accessibility as one of the components of text communication.

6.4 Recommendations

The recommendations presented in this section are based on Nord's (1997:45) statement that "different communicative functions may require different translation strategies". That is, the translator would require specific translation strategies to achieve the purpose of the translation process. The purpose of a translation may be informative, persuasive or expressive. Downing and Bogoslaw (2003) take the communicative function a step further by suggesting that in a multiethnic and multilingual society such as South Africa, the linguistic diversity of the population has important implications for the provision of health care, and especially for oral and written communication with patients and clients.

Following Downing and Bogoslaw's (2003) guide in assisting individuals responsible for written communication from health care organisations to their patients and clients whose native language is not English, effective communication "must always be done with a purpose and an audience in mind". In the present study, the four clear options for a given communicative purpose, as presented by Downing and Bogoslaw (2003), are used to make recommendations on how Zulu target readers could be reached by health care organisations in South Africa. The options are discussed below.

6.4.1 Direct translation

In this case we find all source-oriented translation on text types such as enrolment forms, health history and patient information leaflets. In other words, the product of the translation process is a semantic translation. That is, the function and target readers that the source language author had in mind is essentially the same as that of the Zulu translation. Strategies such as 'pure' loan words and indigenised loan words, as discussed in Chapter 5 of the present study, would be allowed in this type of translations.

6.4.2 Adaptation

This category implies that, in order to create the desired text in Zulu, the health

organisations could start with an existing English text, and, with appropriate modifications, produce a translation that serves the communicative purpose. The options for the modifications include making them in the English text before translation, by the translation vendor during translation, or by a subject specialist, in Zulu, after the basic document is translated. The adaptations may include adding background information, explaining terms, making the text more explicit or simpler or adding content specific to the new audience and communicative purpose.

6.4.3 An original Zulu health text

In this category it is assumed that, after analysis, the translator/translation vendor found that there is no appropriate English health text, or that a translation, even after adaptations made for a new purpose/and/or audience, is not effective. The best approach would then be to draft a totally new document in Zulu. This would solve a translation problem where, for example, a translation on cholera, with an instruction such as boiling the water before drinking, is produced and distributed to urban readers. Such a translation would obviously be relevant for the rural people who have no access to running water.

6.4.4 Non-text (visual/audio) media

Target population with low literacy levels like those in the rural areas of South Africa may not rely on the print media. Visual and/or audio media may be the best way of appealing to the target readers, especially with health information and promotion, where cultural appropriateness and acceptance by audience is important. Radio stations like Ukhozi (for a Zulu audience) would be useful in this case.

The four options, regarding communicative purpose of the health material as produced for the different target readers, as listed above, illustrate the need to reconsider the needs of the different Zulu audiences in South Africa. If the needs of the various Zulu readers are catered for, the health organisations would have ensured that the health material as produced by the health department and the NGOs is accessible to this audience.

The following section deals with the limitations of the study.

6.5 Limitations of the study

The health texts which were available for collection were limited in number. This suggests that it is valid to query some of the findings on the basis of the representativeness of the data. For example, the texts collected from Tshwane did not show any dialect markers, which means that the Municipality used only one translator who preferred not to use Gauteng Zulu. Another limitation is observed by Moropa (2005) who states as follows:

As Xhosa is an agglutinating language, there is at present no reliable tool available which can be used to conduct quantitative analyses similarly to those conducted in non-agglutinating languages.

This observation applies to Zulu, as Xhosa is a closely related Nguni language.

6.6 Future research

The possibility of compiling and analyzing parallel health corpora in Zulu suggests that the same can be done in other fields of study, such as terminology development. The study showed that such a compilation could enable researchers to extract and analyze data according to their needs. Furthermore, it was also demonstrated that ParaConc tools can be used in combination with other techniques, such as using models which accommodate illustrations in health texts. Researchers can therefore add other complementary procedures to enrich corpora as a research methodology.

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APPENDIX A

A PILOT STUDY ON THE READERSHIP OF ISIZULU HEALTH TEXTS: FOR TEENAGERS

Hello. My name is Manqoba Victor Ndlovu and I am from the University of South Africa. I am doing research on health booklets. Solving health problems is very important in our lives. The Department of Health and NGOs produce a lot of health booklets in order to inform people about health issues. In this survey you will help me by answering questions about some of these health booklets and what you think of them. You have been selected because I think your input can make a contribution to this study. It will take around 25 minutes to answer the questions and any replies you give will be totally confidential. Only the pooled analysis will be passed to the promoters of this study.

Section A

1. Gender:
   Male ☐
   Female ☐

2. Age (of the respondent): ..... years

3. Grade (of the respondents):
   10 ☐
   11 ☐
   12 ☐

4. How many adults do you stay with at your home?
   One ☐
   Two ☐
   More than two ☐

5. How many of these adults can read and write?
   One ☐
   Two ☐
   More than two ☐

6. How would you rate your knowledge of and fluency in the following languages?

	Very Good	Good	Average	Not Good
English				
Zulu				

7. Which of the following areas would you say represents your place of residence?
   Urban ☐
   Rural ☐

8. How far do you have to travel to reach a clinic?
   0 to 5 km ☐
   5 to 10 km ☐
   10 to 20 km ☐
   20 + ... km ☐

9. How much would it cost?
   R1 to R5 ☐
   R5 to R10 ☐
   R10 to R20 ☐
   more than R20 ☐

10. How far would you travel if you were to visit a doctor?
- 0 to 5 km ☐
- 5 to 10 km ☐
- 10 to 20 km ☐
- 20 + ... km ☐

11. How far do you have to travel to reach a traditional healer?
- 0 to 5 km ☐
- more than five ☐

12. How much would it cost?
- R1 to R5 ☐
- R5 to R10 ☐
- R10 to R20 ☐
- more than R20 ☐

Section B

1. Have you ever seen a health text written in English before today?
(The interviewer should show the texts to the respondents.)
- Yes ☐
- No ☐

2. Have you ever seen a health text written in Zulu before today?
- Yes ☐
- No ☐

3. Are Zulu health texts available in your immediate environment?
- Yes ☐
- No ☐
- I do not know ☐

4. If you have read these texts, would you like to read more of them?
- Yes ☐
- No ☐

5. When did you last visit a medical doctor?
- In the past three months ☐
- In the past twelve months ☐
- In the past three years ☐
- In the past ten years ☐
- More than ten years ago ☐
- I have never been to a medical doctor ☐

6. When did you last visit a traditional healer?
- In the past three months ☐
- In the past twelve months ☐
- In the past three years ☐
- In the past ten years ☐
- More than ten years ago ☐
- I have never been to a medical doctor ☐

7. Who do you visit most often when you are ill?
- A doctor ☐
- A traditional healer ☐
- A clinic ☐
- A faith healer ☐
- Other (specify) ..... ☐

8. Who takes decisions about who will treat you if you are ill?
- My father ☐
- My mother ☐
- My parents ☐
- My grandfather ☐
- My grandmother ☐
- Family doctor ☐
- Traditional healer ☐
- Faith healer ☐
- Other (specify) ..... ☐

9. How many, at your home, visit a medical doctor?
- One ☐
- Two ☐
- More than two ☐
- All of us ☐
- No one ☐

10. How many, at your home, visit a traditional healer?
- One ☐
- Two ☐
- More than two ☐
- All of us ☐
- No one ☐

11. Do you have a family medical doctor?
- Yes ☐
- No ☐

12. Do you have a specific traditional healer who treats you when you are ill?
- Yes ☐
- No ☐

13. If you are ill, who is first to know about your illness?
- Mother ☐
- Father ☐
- Sister ☐
- Friend ☐
- Brother ☐
- Grandfather ☐
- Grandmother ☐
- Uncle ☐
- Aunt ☐
- Other (specify) ... ☐

14. Do you read health texts to know more about health issues?
- Yes ☐
- No ☐

15. In which language are the health texts that you read?
- English ☐
- IsiZulu ☐
- Afrikaans ☐
- Other (specify) ... ☐

16. In which language do you think the health texts should be produced for your benefit?
- English ☐
- IsiZulu ☐
- Afrikaans ☐
- Other (specify) ... ☐

Section C

1. Read the following statements. Please encircle the number of the statements which best describe the way you feel about English or Zulu health texts which you have read.

I have never seen an English health text	1
I have never read an English health text	2
I have never seen a Zulu health text.	3
I have never read any Zulu health text.	4
The Zulu health texts are not for the Zulu.	5
The Zulu health texts cannot be understood by the Zulu.	6
The Zulu health texts do not consider our culture.	7
The Zulu health texts do not consider our traditional healers.	8
These texts are written by those who do not understand our culture.	9
These texts do not reach our place of residence.	10
These texts do not help those who cannot read.	11
Traditional healers would not benefit from the information contained in these texts.	12
Faith healers would not make use of the information contained in these texts.	13
These texts give us more information about our health.	14
The information contained in these texts should also reach those who cannot read.	15
Other (specify)	16

2. Would you say the information contained in Zulu health texts I have read is:

Very helpful	1
Just helpful	2
Neither helpful nor useless	3
Useless	4
Very useless	5

3. Do you find that there are terms you do not understand?

Yes	☐
No	☐

4. Why don't you understand these terms?

They are new to me	☐
They are English terms	☐
They are just difficult to understand	☐

5. Do you think traditional healers have a role to play in health issues?

Yes	☐
No	☐
I do not know	☐

6. Do you think people do understand the role of traditional healers?

Yes	☐
No	☐
I do not know	☐

If your answer is NO, please answer questions 7 and 8 below.

7. Do you think people need more information about the role of traditional healers?

Yes	☐
No	☐
I do not know	☐

8. If your answer to question 6 above is YES, how should people be informed about the role of traditional healers?

The traditional healers will inform them	☐
Zulu health texts should cover their role	☐
There is no need	☐

Thank you for your help. It is much appreciated.

APPENDIX B

A PILOT STUDY ON TRADITIONAL HEALERS AND THEIR PATIENTS AND MEDICAL SYSTEMS

Hello. My name is Manqoba Victor Ndlovu and I am from the University of South Africa. I am doing research on the role of traditional healers in our communities. Solving health problems is very important in our lives. Statistics released in 1997 showed that over 60% Africans, 40% Indians and 30% Whites utilise or consult traditional methods of healing. In this survey you will help me by answering questions about some of the important health issues. You are expected to express your opinions freely, which may include the real everyday problems you encounter in your attempt to help patients. The questions are few and only serve as a checklist rather than formal questions on which the answers are written down. If some of the questions are not clear, additional questions may be asked to clarify certain issues. You have been selected because I think your input can make a contribution to this study. Please allow me to record the interview on tape in order to enable me not to lose the conversation. Be assured that your answers to the questions and any replies you give will be totally confidential. Only the pooled analysis will be passed to the promoters of this study.

1. How would you explain your role in your community?

2. How do your patients usually show their satisfaction with your service?

3. Would you sometimes refer your patients to a western medical doctor? If so, please give an example of when you would do so.

4. Do you have patients who first consult a western medical doctor before they visit you? If so, please give an example.

5. Do you think there is something you do not understand about the western medical doctors? Please explain.

6. Do you think there is something western medical doctors do not understand about your service? Please explain.

7. How should western medical doctors help you understand those aspects of their service you do not understand?

8. How can you make western medical doctors understand your service better?

9. How would you say your patients rate your service?

10. How would you say your community rates the service of western medical doctors?

Thank you for your help.

APPENDIX C
RESULTS OF THE PILOT STUDY

1. Questionnaires

I compiled three questionnaires: one for teenagers, one for adults, and one for traditional healers. The main aim of these questionnaires was to investigate the extent of the distribution of the health texts and to examine their reception by the target readers.

My respondents were approximately 200 high school learners (Grades 10, 11 or 12) in Gauteng and KwaZulu-Natal. These respondents can read both English and Zulu. I visited the 5 schools in these provinces personally in order to clarify certain issues, which could have lead to incorrect responses. I obtained samples of health texts in English and Zulu from the Department of Health and NGOs (e.g. *Soul City*) to show to the respondents.

Results:

Tables 1 & 2 show that more than two thirds of the high school learners had already seen health texts before the interview, which entails that the health texts produced by the Department of health and the NGOs are distributed to the target readership. It is interesting to note that a larger percentage of the respondents who said they had seen the texts lived in the rural areas. Ironically, the rural community which was visited in January 2003 (at Loteni - in KwaZulu-Natal)), said (at the time of the interview) that a mobile clinic visited the area only once a week (on Thursday).

TABLE 1

NUMBER OF RESPONDENTS WHO HAD ALREADY SEEN AN ENGLISH HEALTH TEXT BEFORE THE INTERVIEW (%)

Loteni (KZN) *Rural*	Impendle *Semi-urban (KZN)*	Howick *Urban (KZN)*	Soshanguve/Tembisa *Urban (Gauteng)*
73	68	82	66

Table 1 shows the availability of the English health texts in the different communities interviewed.

TABLE 2

NUMBER OF RESPONDENTS WHO HAD ALREADY SEEN A ZULU HEALTH TEXT BEFORE THE INTERVIEW (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)	Howick Urban (KZN)	Soshanguve/Tembisa Urban (Gauteng)
94	84	93	70

Table 2 shows the availability of the Zulu health texts in the different communities interviewed, which also proves that the Department of health tries to make such texts available to the communities.

TABLE 3

THE AVAILABILITY OF ZULU HEALTH TEXTS IN THE IMMEDIATE ENVIRONMENT OF THE RESPONDENTS (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)	Howick Urban (KZN)	Soshanguve/Tembisa Urban (Gauteng)
67	58	69	63

Table 3 shows that, although the respondents do come across health texts, the availability of these texts in their immediate environment is not satisfactory. *Tables 4 & 5* show that the rural community interviewed makes use of traditional healers more than the other communities.

TABLE 4

NUMBER OF RESPONDENTS WHO HAVE AT LEAST ONE FAMILY MEMBER WHO MAKES USE OF THE SERVICES OF A TRADITIONAL HEALER (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)	Howick Urban (KZN)	Soshanguve/Tembisa Urban (Gauteng)
68	58	56	29

TABLE 5

NUMBER OF RESPONDENTS WHOSE FAMILY IS TREATED BY A SPECIFIC TRADITIONAL HEALER (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)	Howick Urban (KZN)	Soshanguve/Tembisa Urban (Gauteng)
48	26	31	24

It is also interesting to note that more than 40% of the respondents felt that health texts should cover the role of traditional healers. This is shown in *Table 6*. This proves the value of the services of the traditional healers among Africans.

TABLE 6

NUMBER OF RESPONDENTS WHO FELT THE ZULU HEALTH TEXTS SHOULD COVER THE ROLE OF TRADITIONAL HEALERS (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)	Howick Urban (KZN)	Soshanguve/Tembisa Urban (Gauteng)
42	52	62	41

Apart from the data obtained from the high school learners, I also interviewed teachers and adults at Lotheni (rural) and Mpendle (semi-urban), and filled in the questionnaire prepared for them so as to obtain further data, especially their attitude towards the health texts. Though I interviewed only a limited number of these respondents, it was clear that they do read health texts. More than three quarters of the adults interviewed do read the health texts (*Table 7*).

TABLE 7

NUMBER OF ADULT RESPONDENTS WHO READ HEALTH TEXTS IN ORDER TO KNOW MORE ABOUT HEALTH ISSUES (%)

Loteni (KZN) Rural	Impendle Semi-urban (KZN)
76	100

I also visited some traditional healers in Mpumalanga. The aim was to find out to what extent they cooperate with the Department of Health, as well as the number of patients who made use of their service. It is interesting to note that they are very proud of the effectiveness of their medicine. I also had an appointment with the Chairperson of the Gauteng Traditional & Faith Medical Practitioners to find out about their situation. The Chairperson was happy to inform me that there is now co-operation between the Department of Health and the traditional healers. It was also interesting to see posters from the Department of Health hanged on the walls. I was also shown a room where traditional healers get lectures on, inter alia, human physiology.

Furthermore, I interviewed two traditional healers in KwaZulu-Natal at Lotheni (a rural area) and one at my home (a relative) and filled in the questionnaire to obtain more data from these respondents. It is important to report on the responses of the interviewees to the questionnaires, since part of the aim of this research is to examine the attitude of the Zulu speakers towards health texts, modern medical practitioners, as well as traditional healers.

The two traditional healers I interviewed offer their services to the rural area I visited. The discussion revealed that they are proud of their services since many of their patients come back to thank them. However, the two differed in their attitudes towards modern medical science. One of them said she had nothing to do with trained medical doctors and said that she does not believe that there is something that these modern medical doctors know. She said most of her patients come to her after having failed to get help from these doctors. She also pointed out that some of the diseases were brought into this country by the whites. I suspect that she just finds it difficult to acknowledge that medical practioners' services are effective.

The second traditional healer seemed to take modern medical doctors seriously. She agreed that these doctors have an important service to offer. She even agreed that she does refer her patients to trained medical doctors, especially if their problems required physical examination. She said she would like to work together with modern medical practitioners. One patient she is proud of having helped is, according to her, a white woman who could not conceive.

The traditional healer I interviewed at my place of residence seemed to acknowledge the contribution of the western medical practitioners. However, she seemed not to trust them as she emphatically said that they are just there to steal knowledge from traditional healers.

It was noted that the three traditional healers were not really worried about the patients who do not pay them. They all said that they do treat patients who had not paid for the previous service rendered. They believe that the service they render is in the form of an instruction from the ancestors. This is an interesting difference between them and Western doctors, because the latter do make a profit from the service that they deliver. Perhaps this is the reason why our government, which would complain of financial constraints, should make use of our traditional healers in an effective way. The *traditional health practitioners Bill*, 2003, may be an indication that the government is moving towards that goal.

APPENDIX D

IMIBUZO YOCWANINGO

I.
Isethulo

A.
Mina nginguManqoba Victor Ndlovu kanti njengomsebenzi waseNyuvesi yaseNingizimu Afrika kulindeleke ukuba ngenze ucwaningo ngezinkinga ezikhungethe imiphakathi yethu ukuze zixazululeke.

B.
(Inhloso) Ngithanda ukukubuza imibuzo ethile ngezincwajana ezikhiqizwa zisatshalaliswe wuMnyango Wezempilo, umasipala kanye nabakwa*Soul City*.

C.
(Isizathu) Ngethemba ukuthi lolu lwazi luzosiza ekwamukelekeni kwalezi zincwajana ngabafundi bazo.

D.
(Isikhathi sokuphendula le mibuzo) ukuphendula le mibuzo kungadonsa imizuzu engama-30 kuya kwengema-45?
(Ake siqhubeke: Ake ngiqale ngokukubuza imibuzo ngawe uqobo kanye nangeziphathelene nolimi.)

Ingqikithi Yocwaningo

A.
(Isihloko) Mina kanye nolimi

1. Ubudala (Iminyaka) (……)
2. Grade (……)

3. Ubulili
   - Owesilisa
   - Owesifazane

4. Yiluphi ulimi othanda ukufunda ngalo izincwajana zezempilo?
   IsiNgisi (……)
   IsiZulu (……)
   Olunye (Yiluphi?) (……)

5. Nikeza isizathu sempendulo yombuzo 4.

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(Manje ngizokubuza imibuzo ngezincwajana ezikhiqizwa zisatshalaliswe wuMnyango Wezempilo nomasipala kanye nabakwa*Soul City*.)

B.
1. Wake wazibona yini izincwajana zezempilo zalaba bakhiqizi, ezikhuluma ngalezi zihloko ezilandelayo? Uma kunjalo faka uphawu maqondana naleso sihloko owake wabona incwajana ekhuluma ngaso.

(a) Ucansi
(b) Ukukhulelwa

(c) Isifo sengqondo
(d) Izidakamizwa
(e) Udlame
(f) Ukudla okunomsoco
(g) Ukuzalwa nokukhubazeka
(h) Ukunakekelwa kwamazinyo

2. Kulezo zinincwajana owake wazibona yiziphi izihloko owake wafunda ngazo? Bhala izihloko kuphela.

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3. Kulezo zincwajana owake wafunda ngazo yini ocabanga ukuthi usizakele ngayo? Chaza.

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4. Kulezo zincwajana owake wazifunda yini ocabanga ukuthi ayicaciswa kahle? Chaza

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5. Yini ocabanga ukuthi ayikusizi ngalutho yize kubhaliwe ngayo? (Chaza)

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6. Yimiphi imiyalelo (instructions) ebhalwe kulezi zincwajana ozifundile ocabanga ukuthi kunzima ukuyisebenzisa?

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7. Yimiphi imiyalelo ebhalwe kulezi zincwajana ocabanga ukuthi ngeke uze uyisebenzise, ngisho noma ngabe abanye beyisebenzisa ezimpilweni zabo? Nikeza izizathu zalokho.

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…………………………………..………………………

8. Yini ocabanga ukuthi kufanele kubhalwe ngayo ezincwajaneni zezempilo, okungabhalwa ngayo manje? Chaza

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9. Yini ocabanga ukuthi kuyabhalwa ngayo ezincwajaneni zezempilo, ocabanga ukuthi akufanele kubhalwe ngayo? Chaza

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10. Yimaphi amazwi asetshenziswa ezincwajaneni zezempilo, ocabanga ukuthi asetshenziswe ngokungafanele? Sebenzisa uhlu lwamatemu anikeziwe (Bheka Isithasiselo A) ukufaka uphawu X kulawo ongavumelani nawo. Nikeza isizathu sokungavumelani nalawo magama asetshenziswa ezincwajaneni zezempilo.

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11. Ziyathandeka yini izincwajana zezempilo ozifundile? Cabanga ngengaphandle lazo kanye nemifanekiso esetshenziswayo.

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12. Ungamkhuthaza yini omunye umuntu omusha ukuba azifunde lezi zincwajana zezempilo? Chaza.

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13. Ngabe ezinye zalezi zincwajana ziqukethe okushayisana namasiko akho njengomZulu, noma okushayisana nenkolo yakho? Chaza.

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14. Uma kungukuthi uthe *Yebo* embuzweni 13 yini ocabanga ukuthi kufanele kwenziwe ngababhali balezi zincwajana ukuxazulula leyo nkinga?

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15. Ucabanga ukuthi abelaphi bendabuko bawusizo yini ekwelashweni kwabantu?

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16. Uma ucabanga ukuthi bawusizo abelaphi bendabuko, uyacabanga yini ukuthi kufanele basebenzisane nodokotela besilungu? Chaza.

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(Ake ngibonge ukuthola imibono yakho maqondana nezincwajana zezempilo ezisatshalaliswa wuMnyango Wezempilo , omasipala kanye nabakwa*Soul City*.)

Ukusonga

A.
Ngionga isikhathi senu eningiphe sona. Uma kukhona okunye enicabanga ukuthi kungenziwa ukuze izincwajana zezempilo zamukeleke kangcono kubafundi ningakusho manje noma ningithinte enombolweni yocingo ethi (012) 429 8651 ngezikhathi zokusebenza?

B.
Ngicabanga ukuthi senginayo yonke imininingwane ebekade ngiyidinga.

Ngiyabonga.

APPENDIX E

INTERVIEW SCHEDULE FOR GRADE 12 LEARNERS – ENGLISH VERSION

I.
Opening

A.
(Establish Rapport) [shake hands] My name is Manqoba Victor Ndlovu and as a Unisa employee, the university expects academics, inter alia, to interview people like you, whenever there is a need to do research in problems that affect our communities in order to address such problems.

B.
(Purpose) I would like to ask you some questions about the selection, comprehension, application, acceptance, appreciation, and the relevance and completeness of information of the health texts which are produced and distributed by the departments of health as well as NGOs.

C.
(Motivation) I hope to use this information to help in improving the accessibility of the health texts to the target readership.

D.
(Time Line) The interview should take about 30 minutes. Are you available to respond to some questions at this time?
(Transition: Let me begin by asking you some questions about the acceptance of the health texts)

Body

A.
(Topic) Language Preference

1. Age (……..)
2. Grade (……)

3. Sex
   - □ Male
   - □ Female

4. Which language do you think should be used to produce health texts?
   English (……)
   IsiZulu (…….)
   Other (Specify?) (…….)

5. Give reasons for your answer in question 4.
   (I will now ask you questions on the health texts produced by the Department of Health, the municipalities and *Soul City*.)

B.
1. Have you ever seen health texts by these producers, which deal with the following topics? If that is the case put a tick against such a topic.

   (a) Sex
   (b) Pregnancy
   (c) Mental health
   (d) Drug abuse
   (e) Violence
   (f) Nutrition
   (g) Birth defects
   (h) Oral health

2. Write down ONLY those topics you have seen and read. Write down the topics only.

3. Which of those texts you have read do you think helped you? Explain.

4. In those texts you have read, which issues do you think are not clear? Explain.

5. What do you think does not help you, even if it is written in the health texts? (Explain)

6. Which instructions contained in the texts do you think are difficult to apply?

7. Which of those instructions and information do you think you will never apply, even if people do so in their lives? Give reasons for your answer.

8. What do you think should be included in the health texts, which is excluded in the health texts you have read? Explain

9. What do you think should be excluded in the texts you have read? Explain..

10. Which of those terms or expressions as used in the health texts you have read do you think are inappropriate? Use the list of terms and expressions provided as Appendix A to indicate your positive or negative reaction to the isiZulu version of the English term or expression by putting a plus or negative mark for a positive or negative reaction respectively.

11. Do you appreciate the health texts you have read? Think of the outer cover and the pictures used.

12. Would you encourage another young person to read these health texts? Explain.

13. Are some of these health texts in conflict with Zulu culture or your religion? Explain.

14. If your answer to question 13 is *Yes*, what to you think should be done by the authors to solve this problem?

15. Do you think traditional healers are helpful in dealing with health problems?

16. If you think traditional healers are helpful, do you think they should collaborate with doctors trained in western methods? Explain.

Closing

A.
(Summarize) You believe that the health texts produced and distributed by the health departments as well as NGOs are _____ and that you think that you _____. You also think that they are credible/incredible. You feel that they are relevant/irrelevant to your situation. You think the way the texts are presented is interesting/not interesting. You like/do not like the illustrations, and overall you appreciate/do not appreciate the texts.

B
(Maintain Rapport) I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know so that we can successfully contribute towards the accessibility of the health texts?

C.
(Action to be taken) I have all the information I need. Would it be all right to call you at home if I have any more questions? Thanks again. I look forward to presenting the results of the interview to the relevant people.

APPENDIX F: HEALTH TEXTS TERMINOLOGY

A EZOCANSI

- STI > isifo esithathelwana ngocansi
- sexual partner > oya naye ocansini
- penis > isitho somuntu wesilisa sangasese/ipipi
- vagina > isitho somuntu wesifazane sangasese/imomozi
- anus > indunu
- testicles > amasende
- condom > ijazi lomkhwenyane/ikhondomu
- erect penis > isitho sangasese wowesilisa esivukile
- foreskin > ijwabu
- base of the penis > isiduku sesitho sangasese sowesilisa
- ejaculate > chitha isidoda
- petroleum jelly > i-petroleum jelly

B BIRTH DEFECTS/DISABILITY

- albinism > ukuba nebala elikhanyayo/ubunkawu
- pigment > indlala yebala/okwenza umbala
- sterilise > ukuvalwa inzalo
- disability > ukukhubazeka
- inherited > ufuzo
- genes > ufuzo
- victim > isiZulu
- albino > inkawu
- amino acid > isakhi esiyiphrotheni
- strabismus > istrabismus (ukuphambana kwamehlo)
- photophobia > iphotophobia (ukwesaba ilanga)
  nystagmus > inystagmus (ukuhamba kwamehlo ehamba kanye kanye, okusheshayo okuvundla nobuso)
- genetic condition > isimo sofuzo
- melanin > okwakha umbala okubizwa ngemelanin
- tyrosine > into esemezimbeni ebizwa ngetyrosine
- carrier > umethwali

C NUTRITION

- nutrients > umsoco
- energy > amandla
- diabetes > isifo sikashukela
- hypertension > ihayihayi
- overweight > -khuluphele
- normal blood sugar level > ushukela osezingeni elifanele
- body weight > isisindo (somzimba)
- right body weight > isisindo esifanele (somzimba)
- starch > isitashi
- insulin > i-insulin
- snacks > amas'nekh'si
- balance > bhalansisa
- vegetables > amaveji
- (use) sparingly > sebenzisa kancane
- stroke > is'trokhi
- margarine > imajarini
- sandwich > isemishi
- toast > enza uthosi
- herbs > amaheb'zi
- spices > izipay'zi
- waste products > ubuthi emzimbeni

- lentils > amalenthil'zi
- soya products > ukudla okunesoya
- legumes > amalegum'si
- balanced meal > ukudla okubhalansile
- fibre > umhhadlahhadliso
- constipation > ukusongela
- blood pressure > i-BP
- alcohol > utshwala
- a tot > ithothi
- spirits > ugologo
- nutrition > ukudla ngendlela efanele
- active > -zivocavoca

D PREGNANCY

- HIV blood test > hlolelwa igciwane lesandulela-ngculazi
- counselling > ukwelulekwa
- childbirth > ukubeletha
- breastfeeding > ukuncelisa
- infected with HIV > -ngenwe yigciwane lesandulela-ngculazi
- anti-HIV medicines > imithi elwisana negciwane lesanmdulela-ngculazi
- abortion > ukukhipha isisu

E DRUGS

- drugs > izidakamizwa
- drug free > awunazidakamizwa emzimbeni wakho
- make choices > khetha izinto
- self-esteem > ukuzethemba
- bully > qhwaga
- chemicals > amakhemikhali
- illegal drugs > izidakamizwa ezingavunyelwe/ezingekho emthethweni
- mandrax > i-mandrax
- ecstacy > i-ecstacy
- heroin > i-heroin
- dagga > insangu
- legal drugs > izidakamizwa ezivunyelwe/ezisemthethweni
- cigarettes > ugwayi
- alcohol > utshwala
- cough mixture > umuthi womkhuhlane
- hepatitis > ihepatitis
- affect people > phazamisa abantu
- drug addict > isigqila sezidakamizwa
- cocaine > i-cocaine
- LSD > i-LSD
- sleeping tablets > amaphilisi okulala
- inhalants > okuhogelwayo
- glue > iglu
- benzine > i-benzine
- methylated spirits > i-methylated spirit
- paint > upende
- thinners > amanzi okuhlambulula

APPENDIX G

SOSHANGUVE DATA

NAME OF SCHOOL: MEMEZELO SECONDARY SCHOOL

TOTAL NO OF STUDENTS WHO PARTICIPATED IN FOCUS GROUPS: 24

THE RESEARCH QUESTIONS

SECTION A

1. AGES: 16 – 20
2. GRADE: 11
3. GENDER:
   Male: 8
   Female: 16

4. Preferred language for the health texts
   English (11)
   IsiZulu (9)
   Both English and isiZulu (4)

5. Reasons for preferred language
   English: (11)

(a) Used to reading English texts
(b) Parents buy English books for me
(c) English is easy to understand
(d) International language
(e) Difficult concepts easy to understand in English
(f) Like English
(g) Language of communicating with people who do not know isiZulu
(h) Business language

IsiZulu: (9)

(a) It is my mother-tongue
(b) Understand it because it is my language
(c) English have terms/words not easy to understand
(d) Like speaking isiZulu
(e) Understand better than English

English & isiZulu: (4)

(a) English is important; with regard to isiZulu I make use of my parents if there is something I do not understand
(b) Understand the language (English or isiZulu?)
(c) Read mainly English books, but English is my other language though it is not my mother-tongue
(d) Can communicate with everybody in English

SECTION B

1. Health texts already seen

(a) On sex (15)
(b) Pregnancy (16)
(c) Mental illness (3)
(d) Drug abuse (20)
(e) Violence (11)
(f) Nutrition (15)
(g) Birth defects (8)
(h) Oral health (7)

2. Themes read
(a) Sex (15)
(b) Pregnancy (9)
(c) Mental illness (0)
(d) Substance abuse (15)
(e) Violence (2)
(f) Nutrition (5)
(g) Birth defects (3)
(h) Oral Health (1)

3. Read useful texts
(a) Drug abuse (10)
(b) Sex (10)
(c) Nutrition (2)
(d) Pregnancy (2)
(e) Violence (1)

4. Health texts with unclear information
(a) Sex (e.g. origin of Aids and that it cannot be cured)
(b) Why drugs are illegal
(c) The age when you are allowed to have sex
(d) Whether a condom ensures that one does not get Aids
(e) Whether drugs kill or just make one sick

5. What is not helpful:
Nutrition – because though poor people do not have access to nutritious food, they still live;
Sex – it promotes promiscuity instead of reducing HIV infection;
Drugs – I do not use them.

6. Difficult instructions to apply
Abstinence
To avoid fatty food: this is delicious food, e.g. fatty meat;
To use a condom with your lover.

7. Instructions and information not to be applied
To use a condom;
Abstinence

8. Information to be included
Partying by children;
Children under 18 yrs drinking alcohol;
Parents raping their children;
Changes in the body of a young person as he/she grows up – about things which he/she might not have expected to happen.

9. Information to be excluded
That 12 year-olds can make their decisions;
Young children having sex – children should know that they will do this after marriage;
Oral health – everybody knows that he/she must take care of his/her teeth;
Rape – this make children not to trust their uncles.

10. Inappropriate terms
English words in a Zulu text;
Swearing expressions;
Vague expressions/difficult words;
Words on sex do not show respect.

11. Appreciated texts

* Yes (19)

i. attractive;
ii. beautiful pictures;
iii. Like their message;
iv. Enocouraging.

* No (2)

v. not beautiful;
vi. they show how a pregnant woman looks like.

12. Encouraging others to read the health texts

* Yes (21)

vii. only those who have a problem;
viii. to get information;
ix. to avoid Aids;
x. especially those who want to quit drugs and other bad behaviour;
xi. to concentrate on important things.

* No (1)

xii. People should decide what to read.

13. Texts in conflict with culture

* Yes (4)

xiii. We should respect, follow our culture and behave well and not sleep around when we are still young;
xiv. We, amaNdebele, must first go to Equdeni before we can have sex;
xv. There are other things which should not be revealed to children.

* No (8)

xvi. Abstinence is encouraged in our culture;
xvii. They contain important information;
xviii. They are about what happens in life;
xix. Many are on health in general.

14. What authors should consider

They should tell people how different cultures deal with health issues;
The should start respecting cultures because the latter build people;
They should promote different cultures;
They should use language which is easy to understand.

15. Role of traditional healers

* Yes (15)

xx. They save people's lives;
xxi. We use their medicines;
xxii. Doctors trained in western methods sometimes have problems when traditional solutions are required.

* No (2)

xxiii. Do no believe in traditional healers

16. Collaboration between western doctors and traditional healers

* Yes (5)

xxiv. There is nobody who knows everything;
xxv. Western doctors do not know diseases which are culture-based; likewise traditional healers do not know what western doctors are experts in;
xxvi. To fight the many diseases we suffer from.

APPENDIX H

THEMBISA DATA

NAME OF SCHOOL: TEMBISA SECONDARY SCHOOL

TOTAL NO OF STUDENTS WHO PARTICIPATED IN FOCUS GROUPS: 24

THE RESEARCH QUESTIONS

SECTION A

1. AGES: 15 – 20
2. GRADE: 10 & 11
3. GENDER
   Male: 11
   Female: 13

4. Prefered language for the health texts
   English (8)
   IsiZulu (11)
   Both English and isiZulu (5)

5. Reasons for prefered language
   English: (11)

(i) Used to reading English texts
(j) English is easy to understand
(k) International language
(l) Everybody can read English
(m) Loved by the youth

IsiZulu: (9)
(f) It is my mother-tongue
(g) Understand it because it is my language
(h) Like speaking isiZulu
(i) Proud of my language

English & isiZulu: (4)
(a) Use both languages in learning
(b) Though isiZulu is my mother tongue, I also understand English

SECTION B

1. Health texts already seen

(i) On sex (21)
(j) Pregnancy (17)
(k) Mental illness (0)
(l) Drug abuse (23)
(m) Violence (12)
(n) Nutrition (12)
(o) Birth defects (7)
(p) Oral health (5)

2. Themes read

(i) Sex (21)
(j) Pregnancy (18)
(k) Mental illness (0)
(l) Substance abuse (19)

(m) Violence (9)
(n) Nutrition (9)
(o) Birth defects (2)
(p) Oral Health (1)

3. Read useful texts

(f) Drug abuse (11)
(g) Sex (13)
(h) Nutrition (2)
(i) Pregnancy (9)
(j) Violence (2)
(k) Oral Health (2)

4. Health with unclear information
(f) Cause of violence
(g) When allowed to fall pregnant
(h) That violence is not only against women
(i) That contraceptives have side effects to the bodies of girls

5. What is not helpful:
Nutrition – I am not the one who cooks food at home; not important to tell us to drink water;
Sex – there are texts who encourage the youth to have sex; it does not help to talk about abstinence;
Violence – the information is not comprehensive.

6. Difficult instructions to apply
Abstinence;
To stop drinking;
To use a condom when I have sex with my partner;
To go to the clinic when I have a cold;
To tell me when to fall pregnant;
To use contraceptives;
Not to use drugs;
Instructions on sex – I am still young to think about sex;
Poor people cannot buy nutritious food.

7. Instructions and information not to be applied
To use a condom;
Contraceptives – have side-effects (like causing big buttocks);
Instructions on safe sex – believe in sex when married
(Female respondent);
To take an injection as a contraceptive (have side-effects).

8. Information to be included
Reason for abstinence not convincing;
Masturbation – because this is wrong;
About self-control/self-restrain/moral fibre – young people should not rush into things;
Young people who fall pregnant because they want the government grant.

9. Information to be excluded
Sex – children like sex; young people are shown what they are not supposed to be shown; we have heard enough of sex;
Drugs – people would like to experience it themselves (it is not right to talk about it)

10. Inappropriate terms
testicles > amasende (should be amaqanda)
erect penis > isitho sangasese sowesilisa esivukile (ukuvukelwa)
mandrax > i-mandrax (ibonga)
heroin > i-heroin (ikhanda)

blood pressure > i-BP
hepatitis > i**hepatitis**
methylated spirit > i-methylated spirit
thinners amanzi okuhlambulula
anus > indunu (bad word/too explicit)
albino > inkawu (they do not like to be called like that)
penis > ipipi (induku)
herbs > amaheb'zi (this is not isiZulu)
vegetables amaveji
insulin > i-insulin
snacks > amas'nekh'si (not isiZulu)
balance > bhalansisa
stroke > is'trokhi (not isiZulu)
margarine > imajarini
toast > enza uthosi
spices > izipay'zi (not isiZulu)
lentils > amalenthil'zi (not isiZulu)
legumes > amalegum'si (not isiZulu)
affect people > phazamisa abantu
cocaine > i-cocaine
LSD > i-LSD
benzine > i-benzine
waste products > ubuthi emzimbeni (ukungcola)
balanced meal > ukudla okubhalansile (should be ukudla okufanele)
nutrition ukudla ngendlela efanele (umsoco)
petroleum jelly > i-petroleum jelly)
carrier > umethwali
active > -zivocavoca
spirits > ugologo

11. Appreciated texts

* Yes (13)
- attractive;
- beautiful pictures;
- They reveal everything we need to know;
- Encouraging.

No (2)
- people with an albinism condition do not like to be called albinos.
- some pictures are not good young people.

12. Encouraging others to read the health texts

* Yes (22)
- He/she will become wiser;
- to get information;
- to make informed decisions;
- the texts are encouraging;
- some of the texts are helpful.

No (0)

13. Texts in conflict with culture

* Yes (13)
- Some cultures maintain that one should not engage in sex before marriage, so the use of a condom is not imporatant;
- My culture teaches me about umemulo; not about sex before marriage;

* No (10)
    - They are about general issues;
    - They mention that you are free to choose;

14. What authors should consider
They should include the Zulu culture in their writings;
They should write more about our culture and our religion;
They should write about the co-operation between health providers and initiation schools.

15. Role of traditional healers
* Yes (9)
    - I you have been bewitched;
    - They do help because in the hospitals we do not get proper care;

* No (11)
    - They cannot cure certain diseases;
    - Do not believe in what they do;
    - My father does everything they can do;
    - They are not available to us, people who live in the townships;
    - They would, for example administer enema, where it is not required.

16. Collaboration between western doctors and traditional healers
* Yes (8)
    - Traditional healers are not informed like white people;
    - Western doctors do not know diseases which are culture-based;
    - Certain diseases do not require western medicines;
    - Traditional doctors are also wise.

APPENDIX I

MPOPHOMENI DATA

NAME OF SCHOOL: MPOPHOMENI SECONDARY SCHOOL

TOTAL NO OF STUDENTS WHO PARTICIPATED IN FOCUS GROUPS: 24

THE RESEARCH QUESTIONS

SECTION A

1. AGES: 17 – 22
2. GRADE: 12
3. GENDER
   Male: 8
   Female: 15

4. Preferred language for the health texts
   English (11)
   IsiZulu (9)
   Both English and isiZulu (3)

5. Reasons for preferred language
   English: (11)
6. The youth knows English;
7. Will not be able to understand difficult concepts when I use isiZulu;
8. Like English;
9. An international language;
10. IsiZulu may have difficult words;
11. I want to know English.

IsiZulu: (9)

a. It is my mother-tongue
b. Understand it because it is my language
c. Like speaking isiZulu
d. Proud of my language

English & isiZulu: (3)

a. Understand both languages and ca find a job with these languages;
b. Understand isiZulu better because it is my language;
c. I use English at school.

SECTION B

1. Health texts already seen
   a. On sex (20)
   b. Pregnancy (17)
   c. Mental illness (4)
   d. Drug abuse (17)
   e. Violence (7)
   f. Nutrition (18)
   g. Birth defects (11)
   h. Oral health (6)

2. Themes read
   a. Sex (17)
   b. Pregnany (14)
   c. Mental illness (1)
   d. Substance abuse (13)

e. Violence (7)
f. Nutrition (14)
g. Birth defects (10)
h. Oral Health (5)

3. Read useful texts

a. Safe sex;
b. HIV test;
c. Drug abuse dangerous;
d. Nutrition;
e. Avoiding pregnancy;
f. Stopping drug abuse;
g. About people with birth defects (now better informed);
h. Eating healthily;
i. Stopping alcohol abuse;
j. Not to drink when pregnant;
k. Taking care of my teeth.

4. Health with unclear information
   a. Sex – everything must be said explicitly because people are dying;
   b. Where to get this healthy food they are talking about because we have no money; we are not working.

5. What is not helpful:
Violence – non-existent in our area;
Sex – we do not need information about this/information about people having sex;
Drug abuse – people don't care, they continue doing drugs;
Pregnancy – as a boy I do not need this information;

6. Difficult instructions to apply
Doing exercises;
Using a condom when sexual partners are drunk;
To stop drinking;
To stop smoking;
Abstinence;
Using gloves to help an injured person- gloves not always available.

7. Instructions and information not to be applied
To use a condom (some of them are not safe – I better abstain);
Abstinence.

8. Information to be included
Abstinence to avoid pregnancy and abortions;
To avoid being raped.

9. Information to be excluded
Encouraging use of contraceptives by young children – young people should be taught to abstain;
Birth defects – it is just the will of God;
Family violence – it is just a family problem; no outsider should interfere (female respondent).

10. Inappropriate terms
STI > isifo esithathelwana ngocansi x
sexual partner > oya naye ocansini x
penis > ipipi (comm.. brings shame to children)
vagina > imomozi x
anus > indunu x
testicles > amasende (comm.. brings shame)
erect penis > isitho sangasese sowesilisaivukile x

foreskin > ijwabu x
base of the penis > isiduku sesitho sangasese sowesilisa x
ejaculate > chitha isidoda x
petroleum jelly > i-petroleum jelly x
albinism > ubunkawu x
pigment > indlala yebala x
sterilise > ukuvalwa inzalo x
disability > ukukhubazeka x
inherited > ufuzo x
genes > ufuzo x
victim > isisulu (prefer umhlukunyezwa)
albino > inkawu x
amino acid > isakhi esiyiphrotheni x
strabismus > istrabismus (ukuphambana kwamehlo) x
photophobia iphotophobia (ukwesaba ilanga) x
nystagmus > inystagmus (ukuhamba kwamehlo ehamba kanye kanye, okusheshayo okuvundla nobuso) x
genetic condition > isimo sofuzo x
melanin > okwakha umbala okubizwa ngemelanin x
carrier > umethwali (prefer umphathi)
hypertension > ihayihayi x
overweight > -khuluphele (prefer ondlekile)
normal blood sugar level > ushukela osezingeni elifanele x
body weight > isisindo (somsindo) x
snacks > amas'nekh'si x
balance > bhalansisa x
vegetables > amaveji x
(use) sparingly > sebenzisa kancane x
stroke > is'trokhi x
toast > enza uthosi x
herbs > amaheb'zi x
spices izipay'zi x
waste products > ubuthi emzimbeni x
lentils > amalenthil'zi (prefer ilenteli)
legumes > amalegum'si x
balanced meal > ukudla okubhalansile x
fibre > umhhadlahhadliso x
blood pressure > i-BP x
spirits > ugologo (prefer isipirithi)
nutrition > ukudla ngendlela efanele (prefer izakhamzimba)
active > -zivocavoca (prefer nomdlandla)
HIV blood test > hlolelwa igciwane lesandulela-ngculazi x
counselling > ukwelulekwa x
childbirth > ukubeletha x
breastfeeding ukuncelisa x
infected with HIV > -ngenwe yigciwane lesandulela-ngculazi x
anti-HIV medicines > imithi elwisana negciwane lesandulela-ngculazi x
abortion > ukukhipha isisu x
drugs > izidakamizwa x
make choices > khetha izinto x
bully > qhwaga x
mandrax > i-mandrax x
ecstacy > i-ecstacy x
heroin > i-heroin x
dagga > insangu x
legal drugs > izidakamizwa ezivunyelwe/ezisemthethweni x
cigarettes > ugwayi x
cough mixture > umuthi womkhuhlane x
hepatitis > ihepatitis x
affect people > phazamisa abantu x

drug addict > isigqila sezidakamizwa x
cocaine > i-cocaine x
LSD > i-LSD x
sleeping tablets > amaphilisi okulala x
inhalants okuhogelwayo x
glue > iglu x
methylated spirits > i-methylated spirit x
paint > upende x

11. Appreciated texts

* Yes (5)
- They tell the truth;
- But the pictures reveal even what should not be shown, like female bodies and their private parts (response – female);
- But they should not show people having sex as well as private parts.

No (0)

12. Encouraging others to read the health texts

* Yes (20)
- The texts are educative;
- to get information;
- some of the texts are helpful;
- Because we cannot talk to our parents about certain issues.

No (0)

13. Texts in conflict with culture

* Yes (8)
- They are against my culture because sometimes they show people having sex whereas amaZulu believe that sex is for adults;
- Because having sex is against virginity testing;
- Showing naked people is against our culture;
- They encourage the use of a condom – our culture encourages young people to abstain until they are fully grown;
- They encourage western methods of dealing with health problems.

* No (11)
- I agree with their contents as long as certain issues are corrected;
- Usually they are about the life of an individual;
- These texts are for solving problems; they complement culture and religion;
- They are instructive.

14. What authors should consider
- The authors should write about using both the western and traditional methods of healing;
- They should encourage people not to forget their culture because culture is about respect;
- They should encourage young people to abstain and respect their culture;
- Ensure that the texts are not in conflict with culture and religion;
- They should not write about just what they believe in;
- They should not reveal young people having sex..

15. Role of traditional healers

* Yes (9)
- Because certain diseases are culture-based – which require traditional methods;
- Some traditional healers know how to cure these diseases;
- Because traditional medicines are cheaper.

* No (4)

- Some of their medicines can infect people with germs;
- They cannot cure certain diseases.

16. Collaboration between western doctors and traditional healers

* Yes (10)
  - They both heal people;
  - Traditional healers help where western doctors fail and vice versa;
  - Western doctors cannot cure bewitched people.

No (4)
  - Traditional healers kill people;
  - Western doctors examine people before they give them medicines, unlike traditional healers.

APPENDIX J

MTULWA DATA

NAME OF SCHOOL: MUZIKAWUTHANDWA SECONDARY SCHOOL

TOTAL NO OF STUDENTS WHO PARTICIPATED IN FOCUS GROUPS: 24

THE RESEARCH QUESTIONS

SECTION A

1. AGES: 16 – 21
2. GRADE: 11 & 12
3. GENDER
   Male: 9
   Female: 15
4. Preferred language for the health texts
   English (0)
   IsiZulu (24)
   Both English and isiZulu (0)

5. Reasons for preferred language

IsiZulu: (9)
   a. It is my mother-tongue
   b. Understand it because it is my language
   c. Like speaking isiZulu
   d. Proud of my language

SECTION B

1. Health texts already seen
   a. On sex (19)
   b. Pregnancy (17)
   c. Mental illness (4)
   d. Drug abuse (15)
   e. Violence (6)
   f. Nutrition (16)
   g. Birth defects (6)
   h. Oral health (3)

2. Themes read
   a. Sex (18)
   b. Pregnancy (17)
   c. Mental illness (0)
   d. Substance abuse (13)
   e. Violence (4)
   f. Nutrition (13)
   g. Birth defects (1)
   h. Oral Health (3)

3. Read useful texts
   a. Drug abuse leads to crime
   b. Avoid drug abuse because they are dangerous
   c. What to do when raped
   d. Safe sex
   e. Preventing pregnancy

f. Eating healthy food
g. Sex is for adults
h. Avoid bad company
i. Children with birth defects because of drug abuse
j. Rape survivors should immediately go to the clinic
k. Brush teeth before going to bed

4. Health with unclear information
   a. Whether I can fall pregnant when I have sex when menstruating
   b. Whether one can fall pregnant when having sex in a standing position
   c. At what age can I start having sex
   d. What happens in the mind of a person doing drugs
   e. We are not taught about how to have sex

5. What is not helpful:
   Oral health – everybody knows that she/he should keep he/his teeth clean;
   Drug abuse – I will never use drugs;
   Nutrition – I am not the one who cooks food at home; not important to tell us to drink water;
   Safe sex – I trust my partner;
   Falling pregnant – it is just a mistake;
   Using a condom – it breaks easily;
   Birth defects – it is not a problem;
   Violence – non-existent in our area.

6. Difficult instructions to apply
   Junk food is delicious – cannot be avoided;
   Waiting until marriage before falling pregnant;
   Abstinence – it is not easy;
   To use a condom – not always easy to carry;
   Brushing my teeth – not easy to always carry a tooth brush;
   To use contraceptives;
   Poor people cannot buy nutritious food.

7. Instructions and information not to be applied
   Abstinence – one needs a family/I love my partner/eventually one will have sex after marriage;
   Abortion;
   No need to do exercises when pregnant;
   Using a condom – we love each other/it does not feel good to use it and it is not natural;
   Not practical to drink a lot of water in a day.

8. Information to be included
   Stress among the youth;
   About using traditional medicine;
   About dangers of very young persons having sex;
   That we should also consult traditional healers; not only doctors trained in western methods;
   At what age should a person start having sex.

9. Information to be excluded
   Sex – this topic teaches young people bad things/pictures depicting sex should not be shown; it is for adults;
   Abortion – it just has to be stopped because it is bad;
   Contraceptives for the youth – family planning is not for young people.

10. Inappropriate terms
   anus > indunu (should be ingquza)
   base of the penis > isiduku sesitho sangasese sowesilisa (should be ikhingqi)
   ejaculate > chitha isidoda (should be uvuthondaba)
   albinism > ubunkawu (comment: refers to an animal/discriminatory – prefer ukuba yisishaywa)
   albino > inkawu (prefer isishaywa)
   melanin > okwakha umbala okubizwa ngemelanin x

tyrosine > into esemzimbeni ebizwa ngetyrosine x
energy > amandla (prefer umfutho)
hypertension > ihayihayi x
overweight –khuluphele x
insulin > insulin x
snacks > amas'nekh'si (prefer amashibusi/oncamnce)
vegetables > amaveji x
stroke > is'trokhi x
margarine > imajarini x
toast > enza uthosi (prefer ithosti)
herbs > amaheb'zi (prefer amakhambi/amahlamvu okulapha esintu)
spices > izipay'zi (prefer izinongo/izinandisi)
waste products > ubuthi emzimbeni (prefer ukudla okungadingeki emzimbeni)
legumes > amalegum'si x
fibre > umhhadlahhadliso
spirits ugologo (prefer isiphilithi)
active > -zivicavoca (prefer ukuba nomdlandla)
abortion > ukukhipha isisu (prefer ukuhushula isisu)
ecstacy > i-ecstacy x
heroin > i-heroin x
affect people > phazamisa abantu (prefer ukuba uhlupho)

11. Appreciated texts

* Yes (19)
- Pictures show things as they are;
- Pictures clarify things;
- They are about what happens in real life;
- But some pictures are to explicit – not good for children (some show naked people);

No (0)

12. Encouraging others to read the health texts

* Yes (23)
- To get information;
- They are educative;
- They are helpful.

No (0)

13. Texts in conflict with culture

* Yes (11)
- A Zulu does not have sex before marriage;
- Parents do not talk about sex with their children in our culture.

* No (12)
- They accommodate everybody.

14. What authors should consider

They should not write about what is not supposed to be known by children;
They should write about abstinence until marriage;
They should not use abusive language;
These texts should be targeted to different age groups;
They should first do research because they do write about things which are not acceptable;
They should take note of the fact that we amaZulu are not for contraceptives and abortion;
They should not write about what is against culture and religion.

15. Role of traditional healers

* Yes (20)
- Western doctors cannot cure/diagnose certain diseases;
- Traditional healers can heal people;

- Certain diseases require traditional medicine;
- Traditional healers are helpful.

* No (3)
- They cannot cure certain diseases;
- Certain diseases require specific equipment traditional healers do not have.

16. Collaboration between western doctors and traditional healers

* Yes (17)
- To get a cure for AIDS;
- To share knowledge;
- Bewitched people are diagnosed by traditional healers;
- Western doctors do not know diseases which are culture-based;

*No (6)
- Some traditional healers make untrue claims;
- The two healing systems are not the same.

APPENDIX K

DATA COLLECTED FROM THE RESPONDENTS

1. The language preference can be illustrated as follows:

	English	isiZulu	English & IsiZulu
Memezelo	11	9	4
Tembisa	8	11	5
Mzikawuthandwa	0	24	0
Mpophomeni	11	9	3

2. Health instructions difficult to apply:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
Abstinence; Avoiding fatty food (it is delicious, e.g. fatty meat); using a condom with a lover.	Abstinence, doing exercises; using a condom when sexual partners are drunk; to stop drinking; to stop smoking; using gloves to help an injured person (gloves not always available).	Abstinence (until marriage); junk food is delicious (cannot be avoided); using a condom; brushing my teeth after a meal (not practical to always carry a tooth brush); using contraceptives; poor people cannot buy nutritious food.	Abstinence; to stop drinking; to use a condom; to go to the clinic when I have a cold; instructions on when I should fall pregnant; using contraceptives; to stop using drugs; instructions on sex (I am still young to think about sex); poor people cannot buy nutritious food.

3. Instructions (information) not prepared to use:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
To use a condom; abstinence	To use a condom (some of them are not safe – I better abstain); abstinence	Using a condom (we love each other/it does not feel good to use it and it is not natural; abstinence (one needs a family/I love my partner/eventually one will have sex after marriage; abortion; no need to do exercises when pregnant; not practical to drink a lot of water in a day	To use a condom; to use contraceptives (have side-effects – like causing big buttocks)

4. Themes which had to be covered by the health texts:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
Partying by children; children under 18 years drinking alcohol; parents raping their children; the growing up of young people and what they should expect.	Abstinence to avoid pregnancy and abortions; to avoid being raped.	Stress among the youth; about traditional medicine; about dangers of very young persons having sex; that we should also consult traditional healer – not only doctors trained in western methods; the prescribed age to start having sex.	Reasons for abstinence not convincing; masturbation – that it is wrong; moral fibre/self-control/self-restrain – young people should not rush into things; young people falling pregnant because they want government grant.

5. Reasons for encouraging other young people to read the health:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
For only those who have a problem; to get information; to avoid AIDS; to concentrate on important things in life.	The texts are educative; to get information; some of the texts are helpful; because we cannot talk to our parents about certain issues.	To get information; they are educative; they are helpful.	To get information; they are educative; they are helpful.

6. Health texts in conflict with Zulu culture:

MUZIKAWUTHANDWA	MEMEZELO	MPOPHOMENI	THEMBISA
A Zulu does not have sex before marriage; parents do not talk about sex with their children in our culture.	We should respect, follow our culture and behave well and not sleep around when we are still young; we amaNdebele, must go to *Equdeni* (female initiation school) before we can have sex; there are many things which should not be revealed to children.	They are against my culture because sometimes they show people having sex whereas amaZulu believe that sex is for adults; because having sex is against virginity testing; showing naked people is against our culture; they encourage using a condom – our culture encourages young people to abstain until they are fully grown; they encourage western methods of dealing with health problems.	Some cultures maintain that one should not engage in sex before marriage, so the use of a condom is not important; my culture teaches me about *umemulo* (necessary ceremonies for a girl who has reached marriageable state) – not about sex before marriage.

7. Health texts not in conflict with Zulu culture:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
Abstinence is encouraged in our culture; they are about what happens in life; many are on health in general.	I agree with their contents as long as certain issues are corrected; Usually they are about life of an individual; these texts are for solving problems; they complement culture and religion; they are instructive.	They accommodate everybody.	They are about general issues; they mention that you are free to choose.

8 Recommendations to improve the health texts:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
Authors should tell people how different cultures deal with health issues; they should start respecting cultures because the latter build people; they should promote different cultures; they should use language which is easy to understand.	The authors should write about using both the western and traditional methods of healing; they should encourage people not to forget their culture because culture is about respect; they should encourage young people to abstain from sex and respect their culture; they should ensure that the texts are not in conflict with culture and religion; they should not write about just what they believe in; they should not reveal young people have sex.	The authors should not write about what is not supposed to be revealed to children; they should write about abstaining until one is married; they should not use abusive language; these texts should be targeted to different age groups; they should first do research because they do write about things which are not acceptable; they should take note of the fact that we, amaZulu, are not for contraceptives and abortion; they should not write about what is against culture and religion.	The authors should include the Zulu culture in their writings; they should write more about our culture and religion; they should write about the co-operation between health providers and initiation schools.

9. Usefulness of the services of traditional healers:

MEMEZELO (63%)	MPOPHOMENI (39%)	MUZIKAWUTHANDWA (83%)	THEMBISA (38%)
They save people' lives; we use their medicines; doctors trained in western methods sometimes have problems when traditional solutions are required.	Certain diseases are culture-based and therefore require traditional methods; some traditional healers know how to cure diseases; traditional medicines are cheaper.	Western doctors cannot cure/diagnose certain diseases; traditional healers can heal people; certain diseases require traditional medicine; traditional healers are helpful.	If you have been bewitched; they do help because in the hospitals we do not get proper care.

10. Co-operation between traditional healers and doctors trained in western methods:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
There is no body who knows everything; doctors trained in western methods do not know diseases which are culture-based – likewise traditional healers do not know what western doctors are experts in; to fight the many diseases we suffer from.	They both heal people; traditional healers help where western doctors fail and vice versa; western doctors cannot cure bewitched people.	To get a cure for AIDS; to share knowledge; bewitched people are diagnosed by traditional healers; western doctors do not know diseases which are culture-based.	Traditional healers are not informed like white people; doctors trained in western methods do not know diseases which are culture-based; certain diseases do not require western medicines; traditional doctors are also wise.

11 There should be no co-operation:

MEMEZELO	MPOPHOMENI	MUZIKAWUTHANDWA	THEMBISA
	Traditional healers kill people; doctors trained in western methods examine people before they give them medicines, unlike traditional healers.	Some traditional healers make false claims; the two systems are not the same.	

12. Appreciation of illustrations:

MEMEZELO (79%)	MPOPHOMENI (22%)	MUZIKAWUTHANDWA (79%)	THEMBISA (54%)
Attractive; beautiful pictures; like their message; encouraging.	They tell the truth (but the pictures reveal even what should not be shown like female bodies and their private parts) – they should not show people having sex as well as private parts.	Pictures show things as they are; pictures clarify things; they are about what happens in real life (but some pictures are too explicit – not good for children as some show naked people).	Attractive; beautiful pictures; they reveal everything we need to know; encouraging.