TABLE OF CONTENTS

LIST OF TABLES PAGE

LIST OF FIGURES PAGE

List of abbreviations

AIDS	Acquired immune deficiency syndrome
CBO	Community-based organisations
DMSAC	District Multi-Sectoral AIDS Committee
HBM	Health Belief Model
HIV	Human immuno-deficiency virus
IEC	Information, education and communication
SMC	Safe male circumcision
NGO	Non-governmental organisation
STIs	Sexually transmitted infections
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

List of annexures

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The global pandemic of the Human immuno-deficiency virus/Acquired immune deficiency syndrome (HIV/AIDS) and its consequences on human life has reached an alarming state, with all demographics being either directly or indirectly affected. According to the World Health Organization's (WHO's) Gender and Health Report of November the number of people living with HIV/AIDS stood at 42 million by the end of 2002, 5 million of whom were newly infected during the course of that year. It is further stated that globally 3.1 million people had died by the end of 2002, and that 2.4 million of these deaths had occurred in Africa (WHO 2003:1). By 2006 the estimate by the Joint United Nations Programme on HIV/AIDS (UNAIDS) was that approximately 38.6 million people worldwide were living with HIV/AIDS, while more than 4 million people were newly infected in 2005, which equates to about 11,000 new infections each day (National Institute of Health 2006:1). According to the same report, 2.8 million deaths had occurred worldwide due to HIV/AIDS by 2005.

Sub-Saharan Africa (SSA) remains the most affected region in the global AIDS epidemic, with Southern African countries being affected on a larger scale than any other part of Africa (UNAIDS 2007:15). The same report further states that more than two-thirds (68%) of all people that are HIV-positive live in this region, and more than three-quarters (76%) of all AIDS deaths in 2007 occurred in this region, bringing the total number of people living with the virus to about 22.5 million. The Southern African region accounted for 35% of all people living with HIV and almost one-third (32%) of all new HIV infections and AIDS deaths globally in 2007. In 2005, the adult HIV prevalence exceeded 15% in eight countries in the Southern African Development Community (SADC).These countries included Botswana, Lesotho, Mozambique, Zimbabwe, Namibia, South Africa, Swaziland and Zambia.

There is growing consensus that the HIV epidemic is undermining development efforts and progress in the region, as the infection continues to have strong negative effects on

the quality of life and life expectancy, as well as social stability and economic growth (SADC Framework for HIV and AIDS Mainstreaming 2005:5). In view of the above, HIV/ AIDS prevention, care and treatment have continued to be high priority. This perspective led to the treatment of people living with HIV/AIDS and the scaling up of prevention, care, and support being prioritised as imperative interventions (Global Health Council of 2000-2010:1) The interventions include:

- The "ABCs": These programmes seek to promote healthy behaviour that reduces the risk of HIV infection. The meaning of "ABC" is explained below:
  A – Abstain from sex until marriage
  B – Be faithful to your partner
  C – Consistent and correct use of condoms
- Prevention of mother-to-child transmission (PMTCT): This intervention is based on the premise that without antiretroviral (ARV) treatment, 25-40% of HIV-positive women in developing countries transmit HIV to their children during pregnancy, childbirth, or breastfeeding.
- Harm reduction: This involves the reduction of specific prevention needs of injecting drug users (IDUs), including difficulties associated with complete abstinence from drug use.
- Blood safety and prevention in health care settings: An estimated 2-3% of HIV infections are associated with exposure to contaminated blood, hence this intervention being proposed.
- Prevention education: It is believed that half of men and women in many countries are unaware of or misinformed about how to properly prevent HIV transmission. Therefore, the use of radio, television and print campaigns has been identified as an effective measure in reducing stigma related to HIV/AIDS.
- Male circumcision: This proposed intervention is based on a series of recent rigorous clinical trials that have shown that male circumcision can reduce the risk of HIV transmission to males by at least 50% or, in some cases, 60%.

It is on the basis of male circumcision being proposed as an HIV intervention that the researcher was prompted to explore the perceptions of men regarding the introduction and use of male circumcision in Kweneng East District of Botswana.

1.2 BACKGROUND TO THE PROBLEM

Male circumcision is one of the strategies that have been tailored towards the prevention of HIV transmission. It is defined as the complete removal of the foreskin from the male penis (Mavundla, Netswera, Toth, Bottoman & Tenge 2010:931).

1.2.1 Source of the research problem

It has generally been observed that HIV prevalence is lower in populations that practise male circumcision (MC) (UNAIDS 2007:2). This has stimulated much interest in circumcision among non-circumcising populations. This observation has been made and it has now been confirmed through three randomised and controlled trials conducted between 2005 and 2006 in Uganda, Kenya, and South Africa. According to UNAIDS (2007:2), the studies revealed that circumcision reduces the transmission of HIV from infected women to circumcised men by up to 60%. This led to the adoption of male circumcision (MC) as an additional prevention strategy by the United Nations (UN) (WHO 2007:2). This intervention was introduced in the context of the failure of HIV prevention efforts in the SSA to successfully curb the spread of the epidemic.

It is a fact that MC cannot on its own provide complete protection against HIV, unless it is used in combination with other preventive measures (Lazarus, Giordano & Matic 2008:1). This is based on the understanding that the inner lining of an uncircumcised penis has a high density of Langerhans cells, which makes it prone to HIV infection (CDC HIV/AIDS Science Facts 2008:1). The skin of a circumcised penis, on the other hand, becomes keratinised, which means that it becomes like the regular skin of a person's arms and legs (PATH Fact Sheet 2009:1). As a result, it is less likely to get small tears during sexual intercourse, which can create access for HIV to enter the bloodstream. Research has shown geographical correlations of high HIV prevalence where male circumcision is rare (Wilson & De Beyer 2006:1).

However, male circumcision (MC) as an intervention in the prevention of HIV has not gained ground without controversy. Various writers vigorously claim that there is not sufficient evidence to substantiate its effectiveness in HIV infection prevention (Connolly, Simbayi, Shanmugam & Nqeketo 2012:1). The WHO argues that MC does not provide complete protection against HIV infection. As a result, the WHO is of the

opinion that MC should not be implemented as a sole alternative to existing preventive behavioural strategies, such as correct and consistent use of condoms (Lazarus et al 2008:1). Furthermore, the UNAIDS (2007:3), because of the fact that the protective effect of MC is partial, not total, recommends that MC be promoted in combination with other methods of HIV infection prevention.

There is growing evidence that genital ulcer disease and other sexually transmitted infections increase the risk of transmission of HIV infection (Piot 1989:623-624). According to the National Circumcision Dialogue Forum (2007:3), a study conducted on MC in Uganda revealed that MC reduces the prevalence of genital ulcer disease, gonorrhoea, and herpes simplex virus type 2, which reduces susceptibility to HIV infection.

1.2.2 Study setting

According to the Ministry of Health (2009:5), the National Guidelines: HIV Testing and Counselling, Botswana is one of the countries in the SSA with the highest HIV prevalence rates. As a result, HIV/AIDS has become the greatest health and development challenge to the nation. The country has a total population of approximately 2 million people, and it is estimated that 270,000 adults and children are living with HIV. In February 2008 the number of orphans in the country was estimated to be 137,805, with the majority having been orphaned by HIV and Aids (Ministry of Health 2009:5). The prevalence rate of HIV infection in Botswana is 17.6% of the general population, which constitutes an increase of 3% from the rate reported by the Botswana AIDS impact survey of 2004 (Central Statistics Office 2009:1). This places a tremendous burden of care and cost on the health sector and social welfare services. In an endeavour to curb the epidemic, the government of Botswana is committed to fighting the spread of HIV.

In view of the high prevalence of HIV infection, the government of Botswana developed and implemented a series of response plans, which included a broad multi-sectoral response to HIV/AIDS for both health and non-health sector-based HIV/AIDS interventions, in order to achieve the goal of zero new HIV infections (Botswana Partnerships for HIV Research and Education [Sa]:2). A number of programmes which were aimed at combating the epidemic were implemented. These included the

prevention of mother-to-child transmission (PMTCT), prevention education, which includes, among other things, the promotion of abstinence, being faithful, and condom use (the ABC of HIV prevention), antiretroviral therapy, and routine HIV testing (Ministry of Health 2009:5).

In addition to the above prevention programmes, the Botswana National AIDS Council recommended male circumcision as an additional HIV prevention strategy. The country set a target to circumcise at least 80% of its HIV-negative males between the age of 0 and 49 years within five years. The programme is set to have a gradual scale-up rate, and will require 464,970 circumcisions over the course of its five-year plan (Campbell 2009:8). Under the current National Strategic Framework for HIV and AIDS, the intervention is aimed at 0-49-year-olds. However, as the circumcision target has been set at 80% over a five-year period, this is a very ambitious goal, which may place much burden on the current health system. Hence, an alternative is to focus the intervention on those males between the age of 15 and 49 that have the greatest risk of becoming infected with HIV and other sexually transmitted infections (Campbell 2009:8).

In Botswana, not all ethnic groups practise male circumcision as part of their culture, except for the Bakgatla tribe of the Kgatleng District, and the Balete and Babirwa tribes (BOTUSA 2009:1). Male circumcision in Botswana has been documented as far back as 1874. A person with skill was chosen by the chief to perform operations on a whole regiment of boys, using a sharp knife. During surgical procedures there was no attempt to stop bleeding, and the incised pieces of the foreskin were simply thrown away. Frequent baths and the use of white clay and fat were applied to the body, with no documented evidence that these measures actually helped to heal the wounds caused by the surgical procedure. As these practices were deemed to be cruel, barbaric, and unhygienic, the High Commissioner passed a proclamation on 19 December 1917 to prohibit initiation ceremonies in the then Bechuanaland Protectorate. Persons under the age of 16 were not to be initiated without the consent of their parents or guardians (Botswana Partnerships for HIV Research and Education [Sa]:8). Since then, the practice of male circumcision has gradually declined over the generations until today. As a result, the majority of the Batswana people today do not practise MC as part of their culture.

The Kweneng District of Botswana is one of 10 districts in the country. It is located in the south-eastern part of the country. It is divided into two districts, namely Kweneng East and Kweneng West. According to 2011 population projections, Kweneng East District has a population of 217,819 people, of which 107,535 (49.4%) are males and 110,294 (50.6%) are females (Population Projections for Botswana 2001-2013:78).It has Molepolole as its administrative and largest village. The district consists predominantly of members of the Bakwena tribe of Botswana, who do not practise male circumcision as part of their culture.

According to the District Multi-Sectoral AIDS Committee (DMSAC) report for Kweneng East District Profile (2010:6), HIV prevalence by age group ranged from 3.6% in the 15-29-year age group to 43.8% in the 30-35-year age group. Female prevalence is reported to be the highest, at 49% in the 30-35-year age group, while male prevalence is 36.9% for the same age group. Apart from high HIV prevalence, Kweneng East has had many cases of sexually transmitted infections in the years 2007 to 2009, as is reflected in Figure 1.1.

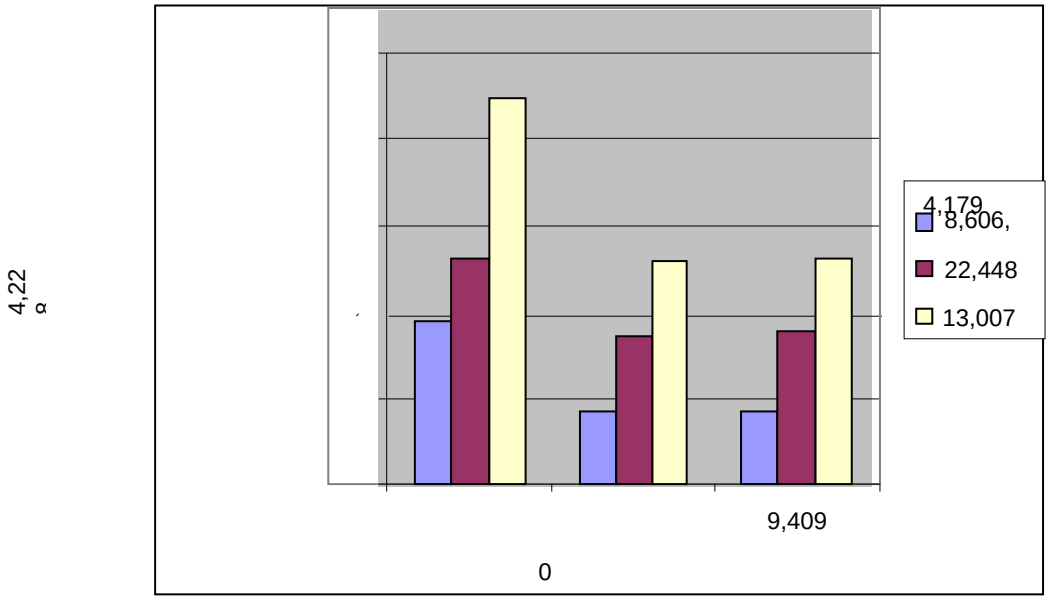

Figure 1.1 Number of sexually transmitted infections in Kweneng East by gender from 2007 to 2009

As with other districts in Botswana, the high prevalence of HIV/AIDS and other sexually transmitted diseases was the reason that MC was introduced to reduce the rate of infection in Kweneng East.

1.3 STATEMENT OF THE PROBLEM

Despite the introduction of MC, the response rate to its utilisation is only 11% (Kweneng East District Profile 2010:6). The continued rise in HIV/AIDS and other sexually transmitted infections, low utilisation of MC, and the absence of an MC national policy prompted the researcher to investigate the perceptions of MC among men of reproductive age (18-49 years old). No previous research was found that explores the perceptions of men regarding MC in Botswana.

1.4 RESEARCH QUESTIONS

In order to provide a brief version of the problem statement, the researcher formulated the following research questions:

- What are the perceptions of men in Kweneng East District regarding MC in the prevention of HIV infection?
- What can be done by health practitioners to reduce the spread of HIV infection in Kweneng East?

1.5 AIM AND OBJECTIVES OF THE STUDY

The purpose of the study was to develop and describe a model for HIV infection prevention for men in Kweneng East, using MC as an intervention strategy.

To achieve the above aim, the study objectives were carried out in three phases of theory generation, in the following manner:

- **Phase 1:** To explore and describe the perception of men in Kweneng East regarding the use of male circumcision as a strategy for HIV prevention
- **Phase 2:** To develop and describe a model for male circumcision service delivery using the research findings as the basis
- **Phase 3:** To develop and describe guidelines for providers to facilitate the utilisation of MC by men in Kweneng East District of Botswana

1.6 PARADIGMATIC PERSPECTIVE OF THE RESEARCH

Human science as a discipline has beliefs and philosophies about the nature of phenomena. The identification of values and any shared beliefs of the discipline during its growth process provides the direction (model) for research. According to Mouton (1996:15), the identification of a paradigm dictates the agenda, assumptions, problems, and acceptable solutions of the research.

Barker (2003:312) defines a paradigm as a model or pattern containing a set of legitimated assumptions and design for collecting and interpreting data. Mouton (1996:204), defines a paradigm as one or more scientific achievements acknowledged and accepted by a specific scientific community as a basis for further research within that science. Lastly, Guba (1990), as cited in Brink and Wood (2001:28), defines a paradigm as assumptions about reality (ontology), knowledge of that reality (epistemology), and the way of knowing that reality (methodology). The following sections explain the assumptions adopted by the researcher in this study.

1.6.1 Meta–theoretical (ontological) assumptions

According to humanistic theory, as proposed by George (1995:304), human beings are viewed as an existential framework of becoming through choices. Human beings are characterised as being capable, open to options, have values and unique manifestations related to their past, present and future. It is through these relationships that the human being becomes, which, in turn, allows for each person's individuality to become actualised. The implication is that people act on choices, which are determined by what they value from what they have learned from the constellation of their cultural beliefs. George (1995:304), suggest that health is more than the absence of disease, and that we become healthier by being in relationships with others. According to George (1995:304), health can be found in the person's willingness to be open to the experiences of life, regardless of a person's physical, social, spiritual, cognitive or emotional status. In the context of the phenomenon investigated in this study, the relationships that men engage in any defined cultural setting affect decisions that are considered appropriate by men, based on their beliefs and values. Consequently, men's behaviour will be directly affected by their perceptions based on the beliefs of their culture (Bowling 2000:35). To appreciate the domain of care implies meeting people's

needs, with the goal of nurturing well-being. According to George (1995:306), this can be realised through dialogue, meeting, relating, and the presence of caregivers through openness to a range of ideas.

1.6.2 Theoretical (epistemological) assumptions

Theoretical (epistemological) assumptions are the researcher's reflections of what is regarded to be true as the theoretical framework to address the questions raised in the study and indicates the relationship between the inquirer and what is being studied (Polit & Beck 2008:13). In this study the perceptions of men were examined within the parameters of the Health Belief Model, which is discussed in the subsection below.

1.6.2.1 The Health Belief Model

The Health Belief Model postulates that health-seeking behaviour is influenced by the person's perception of the threat posed by the problem and the value associated with the action aimed at reducing that threat. The main components of this model include perceived susceptibility, perceived benefits and cost, motivation, and enabling or modifying factors (Polit & Beck 2008:150).

In this study, the desire to seek male circumcision services by men of reproductive age was based on perceived benefits and the costs incurred, enabling or modifying factors that affect access and utilisation of male circumcision services.

This model deals with illness behaviour. However, it also deals with health behaviour. Glanz, Rimer and Lewis (2002:52) define health behaviour as any activity undertaken by an individual who believes himself or herself to be healthy, for the purpose of detecting or preventing a disease in any asymptomatic stage. In the context of this study, the health behaviour is the activity undertaken by the men in Kweneng East District to seek male circumcision for the purpose of preventing HIV infection transmission. According to Glanz et al (2002:52), the Health Belief Model has the following three components, or distinct phases, that lead to an action-related health behaviour.

Individual perception: Glanz et al (2002:53) categorises individual perception into two types, namely the individual subjective perception of the risk of contracting the health condition (perceived susceptibility), and the perceived severity of the condition.

Modifying factors: These include demographic variables (age, gender, and level of education) and socio-psychological factors (personality and structural variables, such as knowledge about the condition) that influence the health behaviour.

Likelihood of action: Glanz et al (2002:53) define likelihood of action as follows: "An individual's action is determined by the balance or imbalance between the individual's perceived positive and negative forces affecting his or her health behaviour."

1.6.2.2 Definition of key concepts

In this study the following key concepts or terms were used to mean the following, unless indicated otherwise in the text:

- ***Perception:*** Perception is the way of understanding or regarding something (Plotnik 2002:124). In the context of this study, it is the means by which men form impressions and understanding of male circumcision.
- ***Acceptability:*** Acceptability is the consideration of something as appropriate and necessary (Concise Oxford Dictionary 2003:20).
- ***Prevalence:*** The term "prevalence" refers to the relative burden of HIV/AIDS disease, and it is a measure of the combined number of old and new (recent) infections within the population exposed to the risk of HIV infection (Clark 2008:63).
- ***Incidence:*** The term "incidence" refers to the rate of new cases that appear during a specific period of time (Fallon, Eric & Zgodzinsk 2005:89).
- ***HIV:*** HIV is the organism that causes AIDS disease (Clark 2003:785).
- ***Epidemic:*** An epidemic is the occurrence in a community or region of cases of an illness that are clearly in excess of expectancy (Clark 2008:807).
- ***Utilisation:*** Utilisation means to make practical use of something (Concise Oxford Dictionary 2009:1546). In the context of this study, it refers to the ability to access and make use of, in an appropriate manner, the male circumcision services that are available.

- ***Male circumcision:*** Is the full removal of the foreskin covering the penis (Mavundla et al 2010:931).

1.6.3 Methodological assumptions

Methodological assumptions relate to the way the researcher obtains knowledge (Polit & Beck 2004:145). The methodological assumptions that were applied in this study were based on the understanding that knowledge is maximised when the distance between the inquirer and the participants in the study is minimised (Polit & Beck 2008:15). The researcher considered the importance of the perceptions of men of the Kweneng East District of Botswana regarding male circumcision utilisation for prevention or control of HIV infection. To achieve this, the researcher had to subjectively interact with the participants in their natural settings to gather contextual data. These assumptions were applied to the study using the research design described below.

1.7 RESEARCH DESIGN

A research design is a blueprint for conducting a study that maximises control over variables that could interfere with the validity of the findings (Burns & Grove 2001:223). According to Burns and Grove (2001:223), a research design guides the researcher in planning and implementing a study in a way that it is likely to achieve the intended goal. LoBiondo-Wood and Haber (1994:193) state that the word “design” implies the organisation of elements in a masterful work of art which incorporates the processes and techniques that are used. In this study, a theory-generating research design which is qualitative, exploratory, descriptive, and contextual was used.

In line with a theory-generating design, Phase 1 of this study was qualitative, exploratory, descriptive, and contextual in nature. This means that the researcher entered the real world, the natural setting of the participants, where the phenomenon of interest occurs, to conduct observations with the aim of creating conceptual meaning. The focus of this phase was to increase understanding of the phenomenon (the use of MC as a strategy for prevention of HIV by men), and not necessarily to make predictions. As indicated in this section, this phase also enabled the researcher to conduct in-depth exploration of those aspects of the phenomenon that are judged to be

salient (Polit & Beck 2008:221). With this design, the interest was to learn more about the phenomenon within the context of participants' own world (Bailey 1997:39).

To understand the views of men of reproductive age (18-49 years old) regarding male circumcision as an additional strategy in the prevention of HIV infection transmission, the researcher spent time with informants from Kweneng East District of Botswana in various natural settings (the field), observing and talking to participants, and gathering and analysing data. As a result, a theory-generating design, that is, a qualitative, exploratory, descriptive and contextual design, was deemed relevant in exploring men's perceptions regarding the utilisation of male circumcision, and hence the development of the model proposed by the researcher in this thesis. Once the model was developed using the findings from the study and the literature as a basis, Phase 2 involved model process and structure description. Lastly, Phase 3, the phase of theory development, aimed to provide guidelines to operationalise the model in the practice of health care professionals.

1.8 RESEARCH METHODS

In order to develop a culture-congruent model for HIV-infection prevention among men in Botswana, the researcher addressed the phenomenon in three phases of theory development, as described below:

1.8.1 Phase 1: Creation of conceptual meaning

Phase 1 of this research involves three steps, namely (1) concept identification, (2) concept definition, and (3) concept classification, in an attempt to create conceptual meaning. These steps are described briefly below.

1.8.1.1 Concept identification

The concepts of the model were identified through exploring the perceptions of men regarding the use of MC as a strategy for HIV prevention. This was done by the researcher to understand the phenomenon of MC in the Kweneng East District of Botswana by adhering to the following:

- ***Gaining entry and access to the research field***

The researcher could not go into the field without authorisation from the University of South Africa (Annexure A), the Botswana Ministry of Health, and the traditional rulers of the Bakwena tribe of Botswana. Therefore, permission was sought from the Health Research Unit in the Ministry of Health (Annexure B), which enabled the researcher to undertake the study. Where interviews needed to be conducted in specific facilities, such as an office, or any other facility that was deemed appropriate, permission was obtained from the relevant authorities.

- ***Research population***

A population is the entire aggregation of cases that meet the designated set of criteria (Polit & Beck 2008:278). Strydom, Fouche, Poggenpoel and Schurink (2001:190) define a universe as all the potential subjects that possess the attributes in which the researcher is interested, while the term “population” sets boundaries to the study units, and refers to individuals in the universe who possess specific characteristics. According to Bailey (1997:45), a population is the entire group of people or items that meet the criteria set by the researcher.

With male circumcision in Botswana, the focus of intervention currently is on those males between age 15 and 49 that are at greatest risk of infection from HIV and other sexually transmitted infections (Campbell 2009:8). In this study, however, the researcher excluded all men in the reproductive age group of 15-17 years, owing to the fact that participation in research studies for subjects below the age of 18 years is dependent on the receipt of parental consent (Tubatsi 2010. Personal interview, 29 December. Gaborone). The involvement of parents in the study could have inhibited the free expression of views by this age group, and the likelihood for bias could have been high. Hence the inclusion criteria for this study were as follows:

- Informants for the focus group discussions (FGDs) included men, either circumcised or not, of the age range of 18-49 years. Every participant needed to be part of the Kweneng East population.
- Informants for the in-depth interviews included uncircumcised men aged 18-49 years, identified from the focus group demographic interview.

- ***Sample, and sampling technique***

According to Polit and Beck (2008:765), a sample is the smallest subset of the population that has been selected to participate in the project, or the study. In this study, the following techniques were used.

Purposive sampling was used. Purposive sampling, or judgemental sampling, is a non-probability type of sampling that is based on the belief that the researcher's knowledge about the population can be used to hand-pick cases to be included in the sample (Strydom et al 2001:198). The researcher sampled informants among the men who met the criteria for both the focus group discussions and the in-depth interviews. This depended on decisions made by the researcher, using his judgement, with the assistance of ward leaders in various village kgotlas (wards), and from leads from informants.

- ***Data-gathering technique***

Data gathering is the process of selecting subjects and gathering data from the subjects (Burns & Grove 2001:460). The processes that the researcher used to gather data in the study are briefly explained below.

Two methods of data collection were used, namely focus group discussions (FGDs) and face-to-face in-depth interviews. A focus group discussion is a purposive discussion of a specific topic taking place between six to 10 individuals with a similar background and common interests (De Vos, Strydom, Fouche & Delport 2011:366), while an in-depth interview is an exchange between one interviewer and one respondent (Ulin, Robinson & Tolley 2005:85). The focus group method was used to gather data from men that were either circumcised or not and of the age range 18-49 years in Kweneng East. During both the focus group discussions (FGDs) and the in-depth interviews, the researcher asked one grand question, namely "*Could you please explain to me in detail what your perceptions are regarding the use of male circumcision in the prevention of HIV infection?*"

- ***Data-analysis technique***

Data that was gathered from the field, in the form of notes and tape recordings, was analysed using Tesch's (1990) process of analysis, as explained by Creswell (2009:186). The steps that were followed in this process are described in section 2.7.2.

1.8.1.2 Concept definition

According to Meleis (2005:12), concepts are used to describe a phenomenon or a group of phenomena, and they provide a concise summary of thoughts related to the phenomenon. Once the concepts of the model had been identified, the researcher continued with the creation of conceptual meaning, by defining the concepts that make up the structure of the model.

1.8.1.3 Concept classification

Concept classification involves the delineation and description of concepts central to the model (Meleis 2005:130). In order to form the structure of a male circumcision model for HIV infection prevention, the researcher used a survey list, as approved by Dickoff, James and Wiedenbach (1968:425-433), to arrange the concepts in relation to one another in a way that is meaningful to the reader, by mapping the structure and process of the model.

1.8.2 Phase 2: Description of the model structure and process

A model is described as a symbol that tries to represent empirical experiences (Chinn & Kramer 2011:185). According to Polit and Beck (2008:758), a model is used to denote a symbolic representation of conceptualisations of a phenomenon. In other words, a model is not a real thing, but a way of representing a concept or a phenomenon in an objective manner. It can be represented by means of words, or by materials which are physical in nature, which can be used in the planning and intervention of specific health problems. In this study, a culture-congruent male circumcision model for HIV infection prevention was developed and described, with the purpose of enhancing utilisation of male circumcision services among the men of Kweneng East District of Botswana.

1.8.3 Phase 3: Description of guidelines to operationalise the model in the practice of male circumcision among men

Guidelines are referred to as set standards, criteria, or specifications to be used or followed in the performance of certain tasks (Compact Oxford Dictionary, Thesaurus and Power Guide 2002:140). In this study the development of guidelines to operationalise the model for MC utilisation for HIV infection prevention was done. This was based on research findings and literature identified during this phase of research.

1.9 MEASURES FOR ENSURING TRUSTWORTHINESS

The researcher sought to evaluate the quality of the data obtained through the procedures proposed by Lincoln and Guba (1985), as cited in Polit and Beck (2008:539). Four criteria to ensure trustworthiness of the data were applied. These were truth value, applicability, consistency, and neutrality. The measures for ensuring trustworthiness of the theory-generating process are discussed in Chapter 2, the chapter about the research methodology used.

1.10 ETHICAL CONSIDERATIONS

Ethics is a branch of philosophy that deals with morality. The problems of ethics relate to obligations, rights, right and wrong, conscience, justice, choice, intentions, and responsibility, that reflect respect for the other person (Burns & Grove 2001:76). The researcher in the study addressed ethical issues focusing on the rights of the participants, the rights of the institutions concerned, and the scientific integrity of the research. The ethical considerations involved in this study are discussed in Chapter 2.

1.11 SCOPE OF THE STUDY

The study was conducted in the Molepolole and Lentsweletau villages of Kweneng East District of Botswana among men of reproductive age (18-49 years). The results from the study may not be representative of all the districts in the country. A purposive sampling method was used in the study.

1.12 STRUCTURE OF THE THESIS

The report has been presented in form of chapters. Each chapter contains a detailed description of activities that were conducted. The content of each chapter is as indicated below:

Chapter 1: Overview of the study

Chapter 2: Research design and methodology

Chapter 3: Discussion of research findings, with specific literature control

Chapter 4: Development of a culture-congruent male circumcision model for HIV infection prevention

Chapter 5: Description of the culture-congruent male circumcision model for HIV infection prevention

Chapter 6: Conclusions, limitations and recommendations

1.13 SUMMARY

In this chapter the situation with regard to the global epidemic of HIV infection was outlined, and it was stated that sub-Saharan Africa (SSA) is the most affected region in the world. The background to the research problem was discussed, and studies were cited which have been conducted on safe male circumcision as an additional strategy for the prevention of HIV infection transmission. The position of the country of Botswana on the introduction of male circumcision in the prevention of HIV infection was described. A statement of the problem was given, with the focus on the response to male circumcision in the context of a high prevalence of HIV and sexually transmitted infections in Kweneng East District. The aim and the objectives of the study were also outlined. The paradigmatic perspective and assumptions adopted in the study were described. The researcher further explained the theory-generating design used, the research methods employed, and ethical considerations related to the study, the scope of the study, and the structure of the research report.

CHAPTER 2

RESEARCH DESIGN AND METHODS

2.1 INTRODUCTION

Chapter 1 presented the introduction and background to the study. In this chapter the researcher discusses the theory-generating design used and the methodological decisions that were taken in the development of a culture-congruent male circumcision model for HIV prevention among men. The purpose of the study was to develop a model that would promote the utilisation of male circumcision services in the Kweneng East District of Botswana. To achieve this, the researcher utilised a theory-generating research design that is qualitative, exploratory, descriptive, and contextual. A three-phased theory-generating approach was followed by the researcher in the development of the model. These phases involved (1) creation of conceptual meaning, (2) description of the model structure and process, and (3) description of the guidelines to operationalise the model. The three-phased approach of theory generation was outlined in Chapter 1 and is comprehensively discussed in this chapter.

2.2 PURPOSE OF THE STUDY

The purpose of the study was to develop and describe a model for the promotion of male circumcision utilisation among the men of Kweneng East District of Botswana. To accomplish this, a theory-generating research design was used. The phases of this design are explicated below.

2.3 OBJECTIVES AND STEPS OF THEORY GENERATION

In order to achieve the purpose of developing a model for HIV infection prevention using male circumcision, the following three phases were adhered to by the researcher.

2.3.1 Phase 1: Creation of conceptual meaning

Under this phase the objectives were to:

- Step 1. Identify the concepts on which the model is based by exploring and describing the perceptions of men regarding the use of male circumcision as a strategy for HIV infection prevention in Kweneng East District in Botswana;
- Step 2. Define the concept(s) that inform the model, in order to give them meaning; and
- Step 3. Classify the concepts in relation to one another in a way that gives the model structure and process.

2.3.2 Phase 2: Description of the model structure and process

The objectives for the description of the model development process were to:

- Describe the model structure and process
- Evaluate the model

2.3.3 Phase 3: Description of guidelines to operationalise the model for the practice of health practitioners

The main objectives in this phase were to:

- Describe guidelines to operationalise the model
- Evaluate the guidelines for the promotion of male circumcision utilisation

To realise the above objectives with their steps required the adoption of a theory-generating qualitative research design, which is explained below.

2.4 A THEORY-GENERATING RESEARCH DESIGN

Different authors define the term “research design” in different ways. Brink and Wood (2001:99) assert that a research design provides a plan for answering the research questions, and serves as a blueprint in which the control mechanisms are contained that will be used in the study, so that the answer(s) to the question(s) will be clear and valid.

A theory-generating qualitative design which is exploratory, descriptive, and contextual was used by the researcher to develop a culture-congruent male circumcision model for HIV infection prevention. It required that the researcher go into the real world, the natural setting of the participants, to collect data in order to identify the key concepts for the proposed model. This was done to understand perceptions on male circumcision from the perspective of men, and also to derive key concepts from the research findings, to develop the proposed culture-congruent male circumcision model.

According to Chinn and Kramer (1999:258), in theory-generating research, the research design must be consistent with the theory-generating orientation, in order to discover and describe relationships of empirical reality to construct the theory. “Empirical” evidence is described as evidence rooted in objective reality and gathered using one’s senses as a basis for generating knowledge (Polit & Beck 2008:752).

As has been mentioned, the research design used in the study was qualitative, exploratory, descriptive, and contextual. These aspects of the design are discussed in detail below.

2.4.1 The qualitative aspect of the design

Burns and Grove (2009:51) define qualitative research as a systematic subjective approach used to describe life experiences and give them significance, to gain insights through discovering meanings through a comprehension of the whole. Platton (2001), as cited in Golafshani (2003:600), defines qualitative research as research that uses a naturalistic approach that seeks to understand the phenomenon of interest in a context-specific setting, such as a “real world setting”, where the researcher does not attempt to manipulate the phenomenon.

According to Polit and Beck (2012:48), the qualitative aspect of the design often involves merging together various data-collection strategies, and it is flexible, capable of adapting to new information. These authors assert that qualitative research requires that the researcher become intimately involved in the research, so as to understand the phenomenon, and that the researcher applies ongoing data analysis, so as to determine subsequent strategies for gathering data and whether data saturation has been

reached. Regarding data collection during the study, the researcher becomes the research instrument.

This aspect of the design enabled the researcher to understand the “emic” perspective, or the views of insiders, regarding utilisation of male circumcision for prevention of HIV infection. An emic perspective is the way members of a particular culture view their world (Andrews & Boyle 2003:509).

2.4.2 The exploratory aspect of the design

The exploratory approach is aimed at investigating the full nature of the phenomenon, the manner in which it is manifested, and other factors with which it is related. This aspect of the study is intended to shed light on the various ways in which the phenomenon is manifested, and on underlying processes (Polit & Beck 2008:20). The need for such an approach arises from there being a lack of basic information about a new area of interest (De Vos et al 2011:95). It also enables the researcher to conduct an in-depth exploration of those aspects that are judged to be salient (Polit & Beck 2008:221). This aspect of the design was used to explore the perceptions of men regarding the use of male circumcision as a prevention strategy for HIV infection.

2.4.3 The descriptive aspect of the design

According to Burns and Grove (2001:248), descriptive research designs are usually used in conjunction with exploratory approaches to explain and describe explored aspects within the current practice. The authors further state that the description is presented in an audit trail and the success of a descriptive approach is based on how well phenomena are presented. The objective of a descriptive research study is to accurately portray the characteristics of persons, situations, or groups, and/or the frequency with which certain phenomena occur (Polit & Beck 2008:752). This is done to generate more understanding about the characteristics of entities within a particular field of study, by providing a clear picture of the situation as it occurs naturally (Burns & Grove 2001:248).

This aspect of the design enabled the researcher to:

- Describe the perceptions of men regarding the use of male circumcision in the prevention of HIV infection
- Describe the structure and process of a culture-congruent model
- Develop and describe guidelines to operationalise the model in practice

2.4.4 The contextual aspect of the design

The greatest interest with this approach is to learn about participants within the context of their own world (De Vos et al 2011:335). Thus the aim of a contextual aspect of the design is to describe and understand events within concrete, natural contexts in which they occur, in order to understand the dynamics of human meanings as fully as possible.

Since exploring the perceptions of male circumcision as a strategy for prevention of HIV infection was the primary interest, participants were observed and spoken to in their natural setting. The context also referred to specific cultural perceptions, which were important for an understanding of the phenomenon, as well as the meanings that participants give to it.

Building on the premise of the above design, the researcher structured steps, procedures and strategies, determined by the lens of this design, to select an appropriate sample, gather data, and analyse information systematically. A full description of the processes undertaken is given in the study methodology, in the following section.

2.5 RESEARCH METHODS

The process of developing a model for HIV infection prevention using male circumcision as a strategy was carried out in a systematic manner. To accomplish this, the researcher made methodological decisions and explored with an open mind as much as possible, in an attempt to see things in a new way (Chinn & Kramer 2011:216). According to Polit and Beck (2008:328), research methods include the steps,

procedures, and strategies for gathering and analysing the data in a research investigation.

To develop the model, the researcher undertook the theory-generating processes of concept analysis, model development process, description of the model, and the formulation of guidelines to operationalise the model (Dickoff et al 1968:415).

2.5.1 Phase 1: Creation of conceptual meaning

As mentioned in section 1.8.1, in creating conceptual meaning, the researcher followed three steps of theory development, namely (1) concept identification, (2) concept definition, and (3) concept classification. These steps are described below.

Step 1: Concept identification

This subsection provides a comprehensive discussion of research methods that were used by the researcher to identify concepts of the model. The discussion of qualitative research methods used for concept identification begins with a description of the population and sampling procedures, as discussed in the subsections below.

2.5.1.1 Population

According to Burns and Grove (2001:366), a study population is the entire set of individuals or elements that meet the sampling criteria. Strydom et al (2001:190) describes a population as the setting of boundaries on the study units, where the term “population” refers to individuals in the universe who possess specific characteristics.

Currently in Botswana the focus of intervention is on those males that are at greatest risk of infection from HIV and other sexually transmitted infections. In terms of inclusion criteria, they should be between the ages of 15 and 49 (Campbell 2009:8). However, in this study the population included men of Kweneng East District aged between 18 and 49 years. The exclusion of males aged 15-17 years was based on the premise that participation in research studies by subjects below the age of 18 years is dependent on the receipt of parental consent (Tubatsi, G. 2010. Personal interview, 29 December. Gaborone). Taking this into consideration, the involvement of parents in the study could

have inhibited the free expression of views by this age group, and the likelihood for bias could have been high. Hence this age group was excluded from the study population.

2.5.1.2 Sampling

Sampling is a research procedure that involves the selection of some part of an aggregate or totality, on the basis of which a judgement is made (Kothari 1997:187). It means taking a smaller number of units of the population that has characteristics of the larger population (Denscombe 2008:141; Kerlinger & Lee 2000:164). During sampling, the researcher employed the following techniques to select appropriate participants for the study.

- ***Purposive sampling technique***

Creswell (2007), as cited in De Vos, Strydom and Delport (2011:392), defines purposive sampling as a type of sampling where participants and sites are selected on the basis that they can purposively inform an understanding of the research problem of the study. A sample chosen by this technique is selected purely judgementally. The composition of the sample is based entirely on the judgement of the researcher, in that the sample is composed of elements that contain the characteristics and typical attributes of the population that serve the purpose of the study, as determined by the researcher (De Vos, et al 2011:392).

In this study, the search for data was guided by processes that provided rich detail, to maximise the amount of specific information about the context of the study. This technique is strategic, in that the selection of informants is mainly for the cases that will most benefit the study. However, knowledge of the study setting is critical, and the identification of participants is vital to assist in the implementation of purposive sampling strategies (Polit & Beck 2008:356).

- ***The process of sampling***

The process of sampling involves the selection of people, events, behaviour, or other elements with which to conduct the study (Burns & Grove 2001:365). The selection of men for the expression of their world views as they relate to the phenomenon under

investigation took into consideration ability and willingness to speak about the phenomenon. Such decisions are made in the field on the basis of what has been learned and in response to the context of previously collected data and ongoing interpretations (Polit & Beck 2008:220).

From the demographic data obtained before the focus group discussions were conducted, the uncircumcised men were also identified for participation in in-depth individual interviews for further exploration of the phenomenon. These interviews were essential in order to obtain an “emic” view, or insider’s perspective, regarding the utilisation of male circumcision in the prevention of HIV infection (De Vos et al 2011:348). Arrangements were made telephonically to negotiate a suitable time and venue to conduct the interviews with the identified men.

- ***The sample used in this study***

A purposive and adequate sample of participants expressed their views on the subject during focus group discussions (FGDs) and in-depth individual interviews. These participants were identified among the men that met the criteria through voluntary participation. Each focus group discussion had a minimum of six and a maximum of eight participants. Recruitment of 6 to 8 participants from the identified village kgotlas (wards) was considered to cover for possible no-shows. Hence the sample size for each FGD session in this study ranged from six to eight participants. Interviews were conducted in accordance with the various age groups as stated in section 1.8.1.1. In addition, from the demographic data obtained before the focus group discussions were conducted, the uncircumcised men were also identified for participation in in-depth individual interviews for further exploration on their perceptions regarding the utilisation of male circumcision as a strategy for HIV infection prevention and control. Data gathering continued until data saturation was reached. Data saturation occurs when the researcher has gathered data to the point where no new information emerges, and subsequent information gathered is redundant (Polit & Beck 2008:357). Hence the total sample size was determined based on the level of data saturation.

2.5.1.3 Data gathering

Gathering of data enables the researcher to construct reality in a way that is consistent with the reality construction of the people that are being studied. Polit and Beck (2008:399) state that self-report data enables the researcher to fulfil such a purpose in qualitative research. In this study, the researcher employed two methods to gather data, namely interviews and field notes.

- **Interviews**

Interviews are one of the methods used to gather data, where the interviewer interacts directly and develops rapport with the participants. According to De Vos et al (2011:342), interviews conducted face to face are more intimate, allowing the interviewer to interact directly with the participants. This could be important if sensitive issues are being explored, as such interviews put participants at ease, and reassure and encourage them to give candid answers. Such interviews also provide the researcher with the opportunity to read non-verbal cues given by the participants.

In conducting the interviews, the researcher was assisted by an interviewer from the Botswana Defence Force (BDF) who was trained, skilled, and experienced in matters of male circumcision, and who was more fluent in Setswana than the researcher was, to interpret concepts with clarity to the participants. This individual assisted the researcher in conducting interviews with participants who could not express themselves in English, while the researcher took the role of an observer, to read the non-verbal cues given by the participants. The researcher, with the help of the assistant, ensured that the participants and the venue were identified, and that all necessary equipment was prepared before the interviews were conducted.

In this study, two interviewing techniques, namely focus group discussions (FGDs) and in-depth individual interviews, were used to explore the perceptions of men regarding the use of male circumcision in the prevention of HIV infection.

- ***Focus group discussions (FGDs)***

A focus group is the use of group interaction to produce data and insights that would be less accessible in a method that did not have the interaction found in a group. It encourages an exchange of ideas among members as they respond to specific questions from the interviewer (Ulin, Robinson, & Tolley 1995:89). With this approach, the interviewer assumes the role of a guide and facilitator in the group process. This method is a means to better understand how the participants feel or think about an issue.

In this study, this technique helped to promote self-disclosure among men who were circumcised or not, in order to determine what their thoughts and feelings are regarding the utilisation of male circumcision in the prevention of HIV infection. During the FGDs the researcher encouraged participants to interact with one another, where the researcher played the role of a moderator. The group interaction enabled participants to share ideas and experiences, to allow knowledge, attitudes, and behaviour to be explored. This technique also benefited participants who may have felt intimidated by the one-on-one interview, or may have felt that they had nothing useful to say. In other words, with FGDs, the group dynamics encouraged participants to engage in the discussion, so that multiple viewpoints on the subject under study could emerge.

- ***In-depth individual interviews***

An in-depth individual interview is an unstructured one-on-one interview. It is a conversation with the purpose of understanding the experience of other people and the meanings that they construct. It allows the researcher and the participants to explore an issue (De Vos et al 2011:348). This method of data collection enabled the researcher to construct reality from the world view of the participants, as it pertains to the use of male circumcision in the prevention of HIV infection. In addition, the use of this technique enabled the researcher to explore in depth the perceptions, knowledge, and opinions of the uncircumcised men, including their reactions to the initial findings. The aim was to elicit more information from the uncircumcised men regarding their opinions on the subject.

According to Ulin et al (2005:88-89), this type of interview takes place in a series of stages including the following, creating natural involvement, encouraging conversational competence, showing understanding, getting facts and basic descriptions, and asking difficult questions.

In this study the researcher made use of a natural environment that was conducive for the conducting of interviews. Other techniques were used in the FGDs and the in-depth individual interviews in order to explore in depth the perceptions of the male participants such as the ones described below.

- ***Communication techniques***

The communication skills used during data collection included verbal and non-verbal techniques. The techniques that were employed by the researcher during the fieldwork of this study, as recommended by De Vos et al (2011:345), included the following: (1) probing, (2) paraphrasing, (3) reflection, (4) clarification, (5) summarising, and (6) minimal verbal responses, such as “uhm”, “yes”, “no”, etc. These communication skills are discussed below.

- ***Probing***

The purpose of probing is to deepen the response to a question, to enrich the data being collected, and to give cues to the participant about the level of response that is desired. In this study the researcher used this technique to persuade participants to give more information about issues pertaining to male circumcision.

- ***Paraphrasing***

Paraphrasing involves a verbal response in which the researcher enhances meaning by stating the participant’s words in another form, but with the same meaning. In this study the researcher was able to clarify the questions, so that the participants could understand them, so that the desired response could be elicited.

- ***Minimal verbal responses***

Minimal verbal responses are responses that are the equivalent of occasional nodding, but accompanied by good listening. For example, in this study, responses such as “ooh-hoo”, “okay”, and “I see” were used to show participants that the researcher was listening.

- ***Reflection***

Reflection involves looking at important issues that participants might have raised, in order to get them to expand on the issues. In this study the researcher employed this technique to elicit elaboration of issues, by asking questions such as “Are you saying that male circumcision is appropriate?” and “So you believe that circumcision can prevent HIV infection?”

- ***Reflective summary***

The technique of reflective summary was used by the researcher to summarise the ideas, thoughts, and feelings that participants verbalised, to determine whether he had correctly understood the views of participants, and he stimulated them to give more information.

- ***Clarification***

The researcher embraced the technique of clarification so as to obtain clarity on statements that were unclear. He used questions such as “Could you shed more light on what you said?” and “Could you tell me more about that issue?”

- ***Tape recording***

Tape recording allows a much fuller record than notes taken during the interview. It allows the researcher to concentrate on how the interview is proceeding (Smith, Harre & Van Langenhoven 1995:17). In this study a tape recorder was used to capture the views of the participants, so as to allow the researcher to read the data as often as possible, in order to ensure full understanding. The tape recordings were captured on compact

disks (CDs) and USB drives, and they were labelled and numbered according to the number of the session for filing purposes.

2.5.1.4 Field notes

In addition to the techniques discussed above, field process notes were used in the data-collection process to enhance the data collected. The need for systematic data capturing in addition to the tape recordings was essential for the researcher. This is supported by Polit and Beck (2008:339), who assert that without systematic daily recording of observational data, a research project flounders. Polit and Beck (2008:339) mention the following types of observational records:

- ***A log (also known as a field diary)***

A log is a daily record of events and conversations in the field. It involves listing how the researcher has spent the time, and it can be used for planning. In this study the diary contained all field activities that the researcher was involved in during the process of data gathering.

- ***Reflective notes***

Reflective notes are notes that document the researcher's personal experiences, reflections, and progress while in the field. They serve a number of purposes, such as:

- Methodological notes, in the form of reflections on the strategies and methods used in the observations, in order to identify strengths and weaknesses. In this study the methodological notes reflected adherence to the research design and methods used by the researcher.
- Theoretical notes, which are analytical in nature. These notes document the researcher's thoughts about how to make sense of what is going on. These are the researcher's efforts to attach meaning to observations while in the field, and they serve as a starting point for subsequent analysis. In this study the theoretical notes enabled the researcher to make interpretations and to develop concepts, in order to make meaning of the observations.

- Personal notes, which involve the making of comments about the researcher's feelings while in the field. In this study the researcher made such notes to reflect on his feelings, because this was the only way to determine whether the researcher's feelings had an influence on what was being observed.

2.5.1.5 Testing of the data-collection approach (a pilot study)

The researcher's intention when developing a research plan is to ensure that his study yields high-quality evidence. Therefore, incorporation of a pilot study was necessary before the parent study could be undertaken. According to Polit and Beck (2008:213), the purpose of a pilot study is not to answer the research questions, but to prevent an expensive fiasco. It serves a number of important functions in planning a rigorous study. Denzin and Lincoln (1994), as cited in De Vos et al (2011:395), state that a pilot study in qualitative research allows the researcher to focus on specific areas that previously may have been unclear, or to test the research questions. By testing the nature of the research questions in an interview schedule of focus groups in the pilot study, the researcher was able to make modifications, with the aim of ensuring quality interviewing during the main study. One grand tour question was asked for both the focus group discussion and the face-to-face interview, namely "*Could you explain to me in detail what your perceptions are regarding the use of male circumcision in the prevention of HIV infection?*" In addition, a questionnaire was developed to assist in understanding the demographic characteristics of the sample, and it was filled in before the interviews were conducted. The pilot study was conducted in a village kgotla (ward) that was not one of the data-collection sites for the parent study. A sample of about six to eight men in the age group 30-39 years was used during data collection.

2.5.1.6 The data-collection process

The researcher performed some tasks which were interrelated, occurring concurrently, and not in a particular sequence during the data-collection process. These tasks, which were in accordance with recommendations made by Burns and Grove (2001:461), were:

- Subject selection
- Collection of data

- Maintaining total control over the research process (as indicated in the research design)
- Solving problems that could threaten to disrupt the study

Kgotlas (wards) in the largest village occupied by the Bakwena tribe in Kweneng East District were identified. Appointments were made with each kgotla (ward) leader in order to purposively select men who met the eligibility criteria for the interviews. The purpose of the study was explained to traditional leaders and the selected participants. It was emphasised that participation would be voluntary and that participants could be expected to be interviewed. Venues for the interviews were identified on consideration of convenience, to both the participants and the process itself.

➢ ***Conducting of interviews***

Preparations for the interviews were made. The researcher, with the involvement of participants, decided on a venue for the interviews. Equipment for the interviews was prepared. This included audiotaping devices, consent forms, note pads, pens, and demographic questionnaires.

During the interview sessions the researcher welcomed each participant and introduced himself, so as to put the participants at ease. This was done in consideration of Polit and Beck's (2008:400) assertion that small talk at the beginning of an interview helps to overcome nervousness, in both interviewers and participants. The seating arrangement was circular, where the researcher, as the moderator, was able to see all the informants. This enabled the researcher to have adequate eye contact with the participants. The participants were given demographic questionnaires and were allowed to freely express their views without interference from anyone. Polit and Hungler (1999:348) state that personal contact with participants by the researcher has been found to have a positive effect on the rate of completed questionnaires that are eventually returned. In this study the presence of the researcher ensured that assistance was given where necessary. After the demographic questionnaires were completed, the grand tour question was asked, namely "*Could you explain to me in detail what your perceptions are regarding the use of male circumcision in the prevention of HIV infection?*" All the information was captured in the form of tape recordings and field notes. The observations recorded were captured in the form of

logs. The logs (field diary) contain information on how the researcher spent the time during this phase, while the field notes have both descriptive and reflective information on the entire process of data collection.

All the data gathered by the researcher was later organised through a process of analysis. This is explained in the following section.

2.5.1.7 Analysis of the data

The data gathered during the study process, in the form of field notes and tape recordings, was analysed qualitatively. Qualitative analysis involves the non-numerical examination and interpretation of observations for the purpose of discovering underlying meanings and patterns of relationship (Babbie 2007:378). The researcher converted the vast amount of data gathered by processing the data through analytical procedures, in order to change it into understandable form. The eventual results were clear, insightful, trustworthy, and original in nature.

To achieve this, Tesch's (1990) method of analysis, as cited in Creswell (2009:186), was used by the researcher. The assistance of an independent coder was solicited during the data-analysis process. Data has been presented in narrative form. The narratives were derived from the description of the characteristics of the sample, as well as the major themes (categories) that emerged from the transcribed data.

The following steps were applied in the data-analysis process:

- Data from the tape recordings and field notes was transcribed.
- The researcher read all the transcripts carefully, in order to get a sense of the whole.
- Interview transcripts were read, and the researcher jotted down thoughts in the margin.
- A list of all topics was made, after which similar topics were clustered together in columns according to the categories "major topics", "unique topics", and "leftover topics".
- Topics were then abbreviated as codes, which were applied to appropriate segments of the texts.

- The most descriptive wording was decided on for the topic. It was then turned into categories or themes by grouping topics that were related to each other..
- A final decision on the abbreviation for each category was made.
- Material belonging to each category was assembled in one place, and preliminary analyses were performed.
- The results were then discussed within the universal categories of the Health Belief Model.

2.5.1.8 Literature control

The results from the findings of this study were discussed with reference to relevant literature from similar studies, in order to verify the findings. From the views and perceptions expressed by the male participants on the utilisation of male circumcision in the prevention of HIV infection, a model was developed (Phase 2), and guidelines were formulated to promote utilisation of male circumcision among the men of Kweneng East District (Phase 3).

2.5.1.9 Identification of key concepts

Once the data was analysed, the researcher applied deductive reasoning strategies to identify the main concepts of the model. During this intellectual process, the researcher became aware of the fact that men in Kweneng East District were concerned about the lack of adherence to culturally acceptable ways of implementing male circumcision, such as lack of consultation with men and the use of inappropriate strategies when promoting utilisation of male circumcision. As a result, "*culture congruence*" was identified as the main concept for the model.

According to Chinn and Kramer (1995:84), the identification of concepts is the first step in the process of creating conceptual meaning, and the concepts may change as meaning evolves. In this study the researcher identified the concepts that permeated the themes, from an analysis of the data to communicate what is intended in the model.

2.5.2 Step 2: Concept definition

Meaning was then created in terms of the core concept of the model. Chinn and Kramer (1999:74) state that identifying and defining the concepts of a theory specifies the idea on which the theory is built. According to Walker and Avant (1995:25), theoretical definitions are also referred to as conceptual definitions, and they are means by which theorists introduce to readers the critical attributes of the concept. Walker and Avant (2011:182) define operational definitions as definitions that specify the means for measuring and testing each scientific term within a theory. Definitions of concepts must be so precise that different scientists can use them successively and still obtain objective results. In this study, culture congruence is the main concept that emerged during interaction with the data. Upon defining the attributes of the core concept of the model applied in the study, using the synthesis strategy, the researcher formulated a definition of the core concept of the proposed model. To gain deeper understanding of the central concept, the researcher demonstrated its application by developing an ideal case, also known as a model case, and borderline cases as scenarios to explicate the attributes of the core concept (McKenna 1997:64; Walker & Avant 1995:42).

2.5.2.1 Defining attributes of the key concepts

Concepts as basic building blocks in theory construction contain in themselves defining characteristics that make them unique from other concepts (Chinn & Kramer 2011:157). In this study, the researcher identified various attributes in the process of realising the central concept "*culture congruence*" of the proposed model. To achieve this, the researcher used definitions from dictionaries, thesauruses, and other reviewed literature.

2.5.3 Step 3: Concept classification

To describe relational statements that predict the nature of interaction between the concepts of the theory, the researcher had to classify the concepts in a meaningful way (Chinn & Kramer 1995:35). The researcher applied to the model Dickoff et al's (1968:422-431) survey list, which includes six aspects of activities, namely agent, recipient, procedure, context, dynamics, and outcome. Using deductive reasoning to create relational statements, the researcher applied Dickoff et al's (1968:431) survey list to classify the concepts of the model, as follows:

- Agent (provider): Who performs the activities?
- Recipient (client): Who is the recipient or consumer of the activities?
- Context: In what context is the activity performed?
- Procedure (process): What is the technique of the activity?
- Dynamics: What is the energy source of the activity?
- Terminus (outcome): What is the outcome for the activity?

Refer to Figure 2.1 below for application of the survey list by Dickoff et al (1968:431).

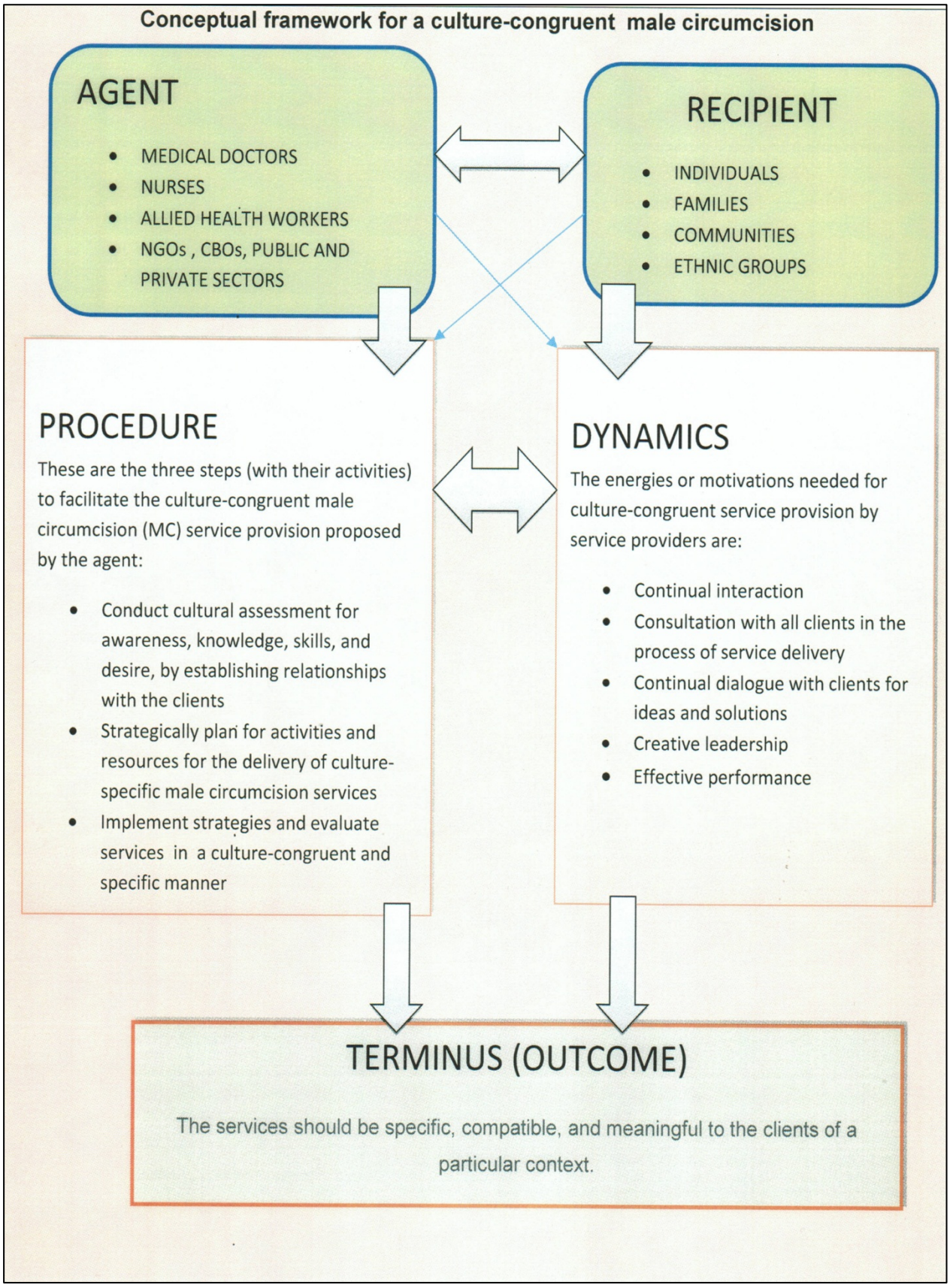

Figure 2.1: The process of a culture-congruent male circumcision

2.5.4 Phase 2: Description of the structure and process of the model

Once the researcher had organised the concepts in relation to one another, the structure and process of the model took shape. This helped the researcher to theorise by describing the model. In this section the researcher describes the structure and process of the model.

2.5.4.1 Description of structure and process

The researcher used the definition by Chinn and Kramer (2011:185), who state that describing a theory is the process of posing questions about the components of the theory suggested by the previous definition and then responding to the question "What is this?" This was done by considering the following:

- What is the purpose of the model?
- What assumptions underlie the model?
- What is the structure of the model?
- What is the nature of the relationships?
- What concepts inform the model?
- How are the concepts defined?

2.5.4.2 Evaluation of the model

After the model was developed, it was subjected to intense scrutiny by experts. This was carried out in accordance with Chinn and Kramer's (1999:100) stipulations that a model requires evaluation using the criteria of clarity, simplicity, generality, accessibility, and significance. Experts in model development and qualitative researchers subjected the model to intense scrutiny by looking at the following:

- **Clarity**

Clarity of a model refers to how well and easily understood the ideas in the model are in terms of semantics, structure, and consistency.

- **Simplicity**

Simplicity refers to how simple a model is to conceptualise.

- **Generality**

According to Chinn and Kramer (1999:106), the scope of a model answers the question of the extent to which the model accommodates all speciality areas of nursing practice.

- **Accessibility**

Accessibility of a model refers to the broadness or narrowness of the concepts, and the specificity or generality of the definitions, in the model in the context of whether the definitions used for concepts in the theory are a true reflection of the concepts, and whether the concepts are practical and reflect real nursing practice (Chinn & Kramer 1995:136).

- **Significance**

Significance of a model refers to how relevant the model is in achieving the goal of nursing practice, education and research in the prevention of HIV infection.

2.5.5 Phase 3: Development and evaluation of operational guidelines

Guidelines to support health service providers to deliver male circumcision services in a culture-congruent manner were developed and evaluated by experts. The guidelines are intended to play a central role in ensuring that services are efficiently and effectively provided in a culture-congruent context to ensure comfort to the recipient. Development of the guidelines was guided by Dickoff et al's (1968:425-433) stipulations related to the activities (procedure and dynamics) that need to be undertaken by agents.

In order to achieve the above activities in the study, several reasoning strategies were applied at various stages of theory development. These strategies are discussed in the following section.

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2.6 REASONING STRATEGIES

According to Burns and Grove (2001:8), reasoning is the processing of organising ideas before reaching conclusions. The application of reasoning enables the researcher to formulate logical arguments to assist with exploration and description of the phenomenon under investigation (Polit & Hungler 1999:9). The researcher applied the following reasoning strategies in the analysis and interpretation of the data.

2.6.1 Bracketing

Bracketing refers to the process of identifying and holding in abeyance any preconceived beliefs and opinions that one might have about the phenomenon under investigation (Polit & Beck 2008:748). However, Polit and Beck (2004:253) warn that bracketing can never be totally achieved, due to the close relationship that individuals have with the world. The researcher bracketed the world of male circumcision and any preconceptions that he had, in an attempt to confront the data in an unbiased manner.

2.6.2 Intuition

Intuition is when a researcher opens up to allow the use of senses and understanding of the phenomenon, based on what he or she knows, without the explicit use of scientifically acceptable forms of reasoning (Meleis 2005:149). It also occurs when the researcher remains open to meanings attributed to the phenomenon by those who have experienced it (Polit & Beck 2008:228). The researcher achieved intuition by immersing himself in the participants' world view to obtain their insights into the phenomenon. The researcher used ready and quick insights in the form of "gut feelings" in his interpretation of the phenomenon. This enabled him to apply inductive reasoning in an appropriate manner.

2.6.3 Inductive reasoning

With the approach of inductive reasoning, the researcher uses specific instances or occurrences to draw conclusions about something (Leedy & Ormrod 2005:32). The researcher begins with the general topic and some vague idea, which is then refined and elaborated into more exact and theoretical concepts (Neuman 2006:60). In other words, in this study the researcher moved from the particular to the general.

The insights derived from the sample of the informants, in the form of major themes and sub-themes, have been elicited in the discussion in order to create understanding of the phenomenon under investigation.

2.6.4 Deductive reasoning

The deductive form of reasoning was also used in the study. According to Babbie (2007:46), deductive reasoning moves from the general to the specific. This strategy, however, is not in itself a source of new information, but is rather an approach of illuminating relationships as one proceeds from the general to the specific (Polit & Beck 2008:13). In this study, the researcher applied this strategy by:

- Conducting a literature control after data had been gathered
- Identifying the main concept(s) of the model
- Identifying the assumptions on which the model was based
- Formulating guidelines to operationalise the model in practice

2.6.5 Analysis

According to Walker and Avant (1995:28), in the strategy of analysis the theorist engages in the activities of dissecting, breaking down, and reducing the complex whole into constituent parts, for the purposes of (1) clarity, refinement, and better understanding; (2) sharpening of concepts, statements, or theories; and (3) examining the relationships of each of the parts to each other and to the whole. In this study the researcher applied this strategy

- by breaking down the attributes of "**culture congruence**" as a concept by identifying its attributes
- identifying the research findings of this study during data analysis

2.6.6 Synthesis

Synthesis occurs when the researcher is able to connect already developed ideas, analyse them, and arrive at a new whole. Such new wholes make a more effective explanation and interpretation of already existing knowledge (Meleis 2005:177).

Synthesising involves sifting the data and putting pieces together (Polit & Hungler 1999:575). The researcher applied this strategy during analysis of the data and concept analysis to gain a sense of what was typical and to make statements with regard to male circumcision by connecting the ideas that had been developed, which made sense of the phenomenon as a whole.

To ensure trustworthiness of the conclusions from the analysis, the researcher applied several strategies of data verification.

2.7 MEASURES FOR ENSURING TRUSTWORTHINESS

Much attention was applied to strategies of verification during the entire process of the study in order to ensure trustworthiness and to avoid the risk of overlooking threats to the credibility and dependability of the findings. The researcher sought to evaluate the quality of the data obtained through procedures recommended by Lincoln and Guba (1985), as cited in Polit and Beck (2008:539). Procedures such as checking and confirming the study findings were employed. Four criteria to ensure trustworthiness of the data were applied, namely truth value, applicability, consistency, and neutrality.

2.7.1 Credibility of the study

To establish confidence in the truth of the data gathered, a number of strategies to enhance the credibility of the study were carried out. These included a pilot test of the grand question for the interviews that were conducted, and other strategies, which are explained below.

2.7.1.1 Pilot study

Conducting a pilot study enabled the researcher to determine the best sequence in which to pose the questions in the interviews, the duration of the interview sessions, and how to manage the entire interview process. The researcher engaged with the men in their natural settings in the various kgotlas (wards) selected in the villages of Kweneng East, which have the highest populations of Bakwena people in Botswana, and he undertook in-depth exploration of the phenomenon by conducting interviews and observations and taking notes over a prolonged period of about five months, until data saturation was reached. All the difficulties and limitations that were experienced by the

researcher in the process of data gathering, analysis and interpretation have been reported on in the final write-up.

2.7.1.2 Triangulation

Triangulation refers to the use of multiple data-collection methods or perspectives to collect and interpret data about some phenomenon, to converge on an accurate representation of reality (Polit & Beck 2008:548). In this study the consistency of the findings was established by triangulating through the use of three methods of data gathering, namely focus group discussions, in-depth face-to-face interviews, and field notes. The data was further validated through the use of multiple collection sources and sites. Sources included views from both circumcised and uncircumcised men, using the same question, and taking notes and observations, while the data-collection sites were Molepolole and Lentsweletau, as the villages with the highest populations of Bakwena people in Botswana.

2.7.1.3 Member checking

After each interview had been analysed, the researcher established the accuracy, fairness, and validity of the conclusions by having the participants respond to the analysis. The researcher continually returned to the data to confirm categories, patterns, themes, and linkages, and to examine any interpretation to see whether it reflected the participants' views before their reactions to the analysis. This procedure was done in accordance with Polit and Beck's (2008:545) assertion that member checking with participants can be conducted both informally, in an ongoing way as data is being collected, and more formally, after the data has been collected and analysed.

2.7.1.4 Bracketing

Bracketing involves suspending as much as possible the researcher's meanings and interpretations, and entering into the world of the unique individuals who are being interviewed. With reflection by the researcher on his predispositions and biases, these factors were bracketed by means of field notes, to inform readers about these factors. This enabled the researcher to understand the world view of the participants, in order to understand the meanings created by the participants.

2.7.1.5 Peer examination

One way that the researcher can corroborate the findings of his study with the findings of other researchers is by publishing his study, so that the material can be subjected to peer review and an interrogation of the findings (Bailey 1997:150). The researcher involved other experienced researchers in naturalistic inquiry, who counterchecked with the emerging findings, interpretations and participants' reactions.

2.7.1.6 Reflexivity

Reflexivity refers to the researcher's awareness of self as part of the data being collected (Polit & Beck 2008:384). Researchers need to be conscious of the part they play in their own study, and they need to reflect on their own behaviour and how it can affect the data they obtain. In this study, as in all qualitative studies, data analysis was done concurrently with data collection, compelling the researcher to continuously reflect on data collected and the methods used. Field notes reflecting the researcher's own feelings in the field also validated the findings of the study.

2.7.1.7 Peer debriefing

According to Polit and Beck (2008:182), debriefing means communication with study participants regarding various aspects of the study after participation is completed. It is the process that exposes the researcher to the searching questions of others who are experienced in the methods of naturalistic inquiry, the phenomenon being studied, or both (Polit & Hungler 1999:429). Debriefing ensures credibility of the research findings. In qualitative research, credibility of the information must be ensured. Credibility is regarded by Lincoln and Guba (1985), cited in Polit and Beck (2008: 539), as an overriding goal of qualitative research. In this study the researcher continuously sought the views of the experienced qualitative researchers to review the perceptions, insights, and analysis of the study.

2.7.1.8 Prolonged engagement

The researcher spent about 40 to 45 minutes with participants, for both the in-depth interviews and the FGDs, explaining the purpose of the study and ethical issues involved. The researcher had sufficient time (45-60 minutes) with the participants to

collect data, to have an in-depth understanding of the participants' views on the use of male circumcision in the prevention of HIV infection, and to ensure data saturation of the important categories, or themes.

2.7.1.9 Methodological coherence

The researcher's aim was to ensure congruence between the research question and components of the method, in order to match the data and analytical procedures (Morse, Barrett, Mayan, Olson & Spiers 2002:12). In this study the researcher documented any modifications to the data-collection process and analysis to allow for clear justifications for the modifications.

In addition to understanding the culture and the environment, which could influence the establishment of truth value, prolonged engagement was essential for building trust and rapport with the participants, so that it could be easier for them to reveal accurate and rich information. In this study the researcher engaged with the informants over a five-month period.

2.7.2 Dependability of the study

Having dependable findings is paramount to any research study. The researcher's concern is whether the research process is logical, well documented, and auditable (De Vos et al 2011:420). According to Polit and Beck (2008:539), dependability of a study refers to the stability of data over time and over conditions. Dependability of the current study was achieved as follows.

2.7.2.1 Appropriateness of the sample

According to Morse et al (2002:12), a sample must be appropriate and must consist of participants who best represent the topic, or have knowledge of the topic, in order to ensure efficient and effective data saturation of categories, or themes, with optimal-quality data and minimum dross. In this study, informants were chosen from Molepolole, the village with the largest population of Bakwena people, and another small village, Lentsweletau, also with a large population of Bakwena people, in Kweneng East. The Bakwena were the focus of this study, as they do not practise male circumcision as part of their culture.

Participation was voluntary and based on willingness to share personal views on the phenomenon under investigation. The following eligibility criteria were observed:

- Participants should be male and of reproductive age, whether circumcised or not
- Minimum age is 18 years
- Maximum age is 49 years
- Participants should be members of the Bakwena tribe of the Kweneng East villages

Data was gathered according to the categories (age groups) developed by the researcher for males of reproductive age. These categories were 18-29 years (young adults), 30-39 years (middle-aged adults), and 40-49 years (old adults). This was done in cognisance of the sensitivity of the subject of study and to allow for free disclosure with peers. Interviews were conducted in neutral spaces, which were perceived as conducive to audio recordings and free discussion, and as collectively agreed upon by the researcher and the informants. The face-to-face individual interviews were conducted in natural settings, which included the homes of participants, while other participants opted to be interviewed in places other than their homes, for the sake of privacy. Data was gathered in the form of audio recordings, field notes, and observations. The recordings for every interview were kept in a file and were analysed using Tesch's (1990) method of data analysis, as cited in Creswell (2009:186). A full description of the process of data analysis is presented in Chapter 3.

2.7.3 Confirmability/neutrality of the study findings

The question of whether the findings of the study will be able to be confirmed by another person (an independent person) and whether that person will be able to determine the meaning or relevance of the data was considered in earnest by the researcher. Confirmability as may be comprehended refers to how objective or neutral the data is, such that two or more independent people will agree on the relevance and the meaning of the data (Polit & Beck 2008:539). In this study the researcher made use of an audit trail to ensure neutrality of the study findings.

2.7.3.1 Audit trail of the study

With the focus being on confirmability of the data, as opposed to the tradition of focusing on the characteristics of the researcher, it required provision of evidence to corroborate the findings and interpretations, in the form of auditing. With this understanding, the researcher developed an audit trail. An audit trail is a systematic collection of research material and a documentation process of critical analysis of all decisions and actions taken during the entire research process (De Vos et al 2011:422). The process of data discovery compelled the researcher to exercise reflexivity. Reflexivity refers to the researcher's awareness of being part of the data collected, and the need for the researcher to be conscious of the part that he plays in the study and to reflect on his behaviour and how it affects the data obtained (Polit & Beck 2008:364).

For this reason, records such as interview transcripts, observation notes in the form of logs describing daily events, field notes (containing descriptive notes, reflective notes, methodological notes, theoretical notes, and personal notes), pilot study information, and data-reconstruction products in the form of drafts of final report were developed by the researcher for reference purposes in order to ensure confidence in the findings of the study.

2.7.4 Transferability of the study findings

To ensure transferability, examination of the processes applied in a study is essential. Transferability is the extent to which findings from the data can be transferred to other settings or groups, and is more a consideration of the research design and sampling technique used than of the soundness of the data gathered (Polit & Beck 2008:539). Due to the fact that the researcher's concern is to investigate natural behaviour occurring in a natural and unique setting, which usually is never repeated, because it is unique, generalisation to other settings may be problematic (Bailey 1997:148). To counter this challenge, the researcher enhanced transferability by employing several strategies. Description of how the researcher collected and analysed the data within the theoretical parameters used to determine whether the cases are transferable is vital (De Vos et al 2011:420). In this study a full description of the data-collection process and analysis is given, and the researcher's position in terms of the role that he has played has been described in field notes.

Based on the attempts by the researcher to establish the trustworthiness of the findings, it can be said that an in-depth understanding of the perceptions of men will apply only to the context of Kweneng East. However, in the case of similar settings with the same attributes as defined in the study, application of the study findings will be appropriate.

While undertaking these activities, the researcher took cognisance of the ethical obligations required during the entire process.

2.8 ETHICAL CONSIDERATIONS DURING DATA GATHERING

The issue of morality when conducting research leaves no room for compromise. Researchers are expected to behave ethically in all areas of conducting research. The responsibility to ensure that rules are adhered to during the research study remains the responsibility of the individual investigator (Bailey 1997:182).

2.8.1 Gaining entry and access

Obtaining permission to gain entry into the field is paramount for the researcher. Van der Burgh (1988), as cited in De Vos et al (2011:333), states that granting of permission by the relevant authority, such as the head of a department or the leader of a tribe, is important. In order to gain entry to the study site, the researcher identified and sought permission from the gatekeepers responsible for circumcision in the area being studied. A letter requesting permission to conduct the study was composed and sent to the Health Research and Development Division (HRDC) of Botswana, as well as the District Health Management Team (DHMT). The letters from the HRDC and the DHMT (Annexure B), respectively, permitting the researcher to gather data, were presented to the village paramount chief and the kgotla (ward) chiefs (dikgosana) before any data was gathered. Further access was made possible through paying attention to various ethical procedures necessary, such as key principles that describe the system of ethical protection by the medical research establishment to try and protect the rights of research participants (Trochim 2006:3).

- **The right to voluntary participation**

One ethical principle that the researcher observed was *autonomy* which refers to the obligation of the investigator to respect each participant as a person capable of making their own decisions regarding participation in a research study. The researcher explained to the participants that the purpose of the study was to understand their perceptions with regard to the use of male circumcision in the prevention of HIV infection. It was also emphasised that the researcher would conduct interviews that would be recorded and transcribed in the form of field notes. The participants were informed of how the information would assist in planning and devising appropriate ways to implement the intervention of male circumcision in the prevention of HIV infection. This explanation was given in the light of the fact that people are more inclined to participate in a particular research investigation when they perceive that there are some benefits, direct or indirect, for them personally or for society in general (Polit & Beck 2008:171).

In this study, participation was entirely voluntary after the explanation was given to prospective participants.

- **The principle of beneficence**

Another principle that the researcher observed during the process of sampling was *beneficence*. Callahan and Hobbs (2007:5) state that the researcher/investigator is obligated to maximise benefits for individual participants or society, while minimising any possible risk or harm to the individuals or society. Polit and Beck (2008:170) refer to this principle as one of the most fundamental ethical principles, which encompasses the maxim “Above all, do no harm”. The intention of the study was to explore and describe the perceptions of men on the subject under investigation, and to develop a model and guidelines to promote the utilisation of male circumcision as a strategy for the prevention and control of the spread of HIV infection in the Kweneng East District of Botswana.

Avoidance of harm

The importance of the study to the health of both men and women in the prevention of HIV infection, and its impact on the development of the country of Botswana, was emphasised. The researcher explained how male circumcision is capable of reducing the risk of transmission of HIV and other sexually transmitted infections from an infected woman to a man. It was also explained how a reduction in the rate of HIV infection would benefit Kweneng District, and the Botswana nation as a whole. However, the researcher was aware of the fact that the subject was sensitive and could produce emotional trauma. The participants were informed that the interviewer would be a fellow man that they would be able to relate to. Where the need arose, arrangements would be made with psychologists to assist with counselling of the participants. Fortunately, no harm was done.

- **The principle of justice**

Another ethical principle relevant to research conducted with human subjects is *justice*. The principle of justice demands that there should be equitable selection of participants, and that participants should not be unfairly coerced into participating. Rubin and Babbie (2005:71) assert that participation should at all times be voluntary, and that no one should be forced to participate in a research project. Participants have the right to fair and equitable treatment before, during, and after their participation in a research study (Polit & Beck 2008:173).

The researcher refrained from treating with prejudice individuals that declined to participate, as well as participants that withdrew from the study after they had consented to participate. As Trochim (2006:2) states, “people should not be coerced into participating in the research”. For this reason, the researcher sampled participants purposively, based on freedom of choice to participate or not, after the importance of the study had been explained to them.

- **Informed consent**

With regard to participation in the study, an informed consent form was prepared (Annexure D). Each participant signed the form after an explanation of the purpose and

importance of the study was made, and before they participated in the interview (Polit & Beck 2008:172). The consent form contained the following information:

- Voluntary participation: The participants were informed that their participation in the study would be entirely voluntary.
- Freedom to withdraw from the study: It was emphasised that participants were allowed to withdraw from the study at any time if they wished to, and that no penalties would be imposed as a result of withdrawal from the study.
- Anonymity: Participants were assured that their names would in no way be linked to any of the information gathered.
- Confidentiality: Assurances were made to the participants that no names would be published in the report, that their information would be treated confidentially, and that no information would be made available to anyone who is not directly linked to the study.

Upon establishing that the participants had understood the purpose of the study, consent forms were distributed to be filled in by all who volunteered to participate. Issues that needed clarification were clarified before the demographic questionnaire was completed and participation in the interview commenced. The researcher further explained that the focus group discussions would be tape-recorded, so as to alleviate anxiety on the part of the participants, and to gain their cooperation.

The completed demographic questionnaires and consent forms were collected from the participants and kept separately, to prevent any direct association from being made between the demographic questionnaire and the consent form. A word of appreciation was extended to participants at the end of each interview. Permission to conduct further interviews should it be deemed necessary was sought from each interview participant.

2.9 SUMMARY

This chapter has described the purpose of the research and the theory-generating research design and methodology that the researcher employed in order to develop a culture-congruent male circumcision model for HIV infection prevention. The theory-generation process was described in accordance with the steps that the researcher applied to develop the model. The chapter also provided a full description of the ethical

obligations observed and the measures of trustworthiness that the researcher adhered to during the study.

The data obtained using the data-gathering process mentioned above is presented and analysed in Chapter 3.

CHAPTER 3

DISCUSSION OF RESEARCH FINDINGS, WITH SPECIFIC LITERATURE CONTROL

3.1 INTRODUCTION

The preceding chapter presented the methodology applied in this study. The purpose of this chapter is to present the findings in the form of themes, categories and subcategories covering the perceptions of men regarding the use of male circumcision in the prevention of HIV infection in Kweneng East District, Botswana. The findings were achieved using Tesch's (1990) analytical process, as cited in Creswell (2009:186). During the analysis process, the researcher coded the data manually to develop themes, categories, and subcategories. Where it was deemed necessary, the researcher sorted the data into some sort of order, by developing sub-codes from the main codes. The literature was reviewed deductively in the form of a literature control with regard to the themes that were identified from the data.

Therefore, the results of this study are discussed in form of direct quotes and edited format that reveal the perception of men regarding the use of male circumcision and applied within the assumptions of the Health Belief Model.

3.2 THE EXPERIENCE OF FIELDWORK BY THE RESEARCHER

The target population in this study was men of the Bakwena tribe of Kweneng East District, who, according to their culture, do not practise male circumcision. The district has Molepolole, Mogoditshane, Thamaga, and Gabane as the largest villages among other smaller villages. However, despite the population of the district being predominantly Bakwena, when he was in the field the researcher discovered that the district is also inhabited by other ethnic groups (although in the minority), such as the Bakgatla and Balete tribes. These tribes occupy the villages of Thamaga and Gabane, respectively, and practise male circumcision as part of their culture. In view of this fact, the researcher decided to concentrate on villages in Kweneng East that are predominantly inhabited by members of the Bakwena tribe, rather than all villages in Kweneng East, to avoid bias associated with the data gathered. For this reason,

Molepolole and Lentsweletau villages were used to conduct the study. The researcher established rapport with the traditional leaders and participants and gained their support. Most of the men were very keen to participate in the interview, while others did not show interest in the interviews. Such subjects were not included among the participants of the study. Overall, the researcher enjoyed overwhelming support from all stakeholders for the entire five-month period of data gathering.

3.3 REALISATION OF DATA

The demographic description given below is of the characteristics of the sample participants used in the study. Six FGDs and five in-depth individual interviews were conducted. The total sample size consisted of 38 participants in age groups 18-29 years (n=20), 30-39 years (n=8), and 40-49 years (n=10). The age range of 18-49 years used in the study was in accordance with the findings of central statistics as outlined in Botswana HIV/AIDS Impact Survey III (2009:4), which states that HIV prevalence increases sharply with age, peaking between ages 30 and 45, and gradually declining with age. This is the age range with the highest rate of new HIV infections, with the 45-49-year age group having the highest incidence rate, at 7.3%, and the 15-19-year age group having the lowest incidence rate, with a rate of 0.7%.

Of the participants, the majority (n=22) had obtained secondary school education, while only a few participants (n=3) had no formal education. Establishing participants' level of education enabled the researcher to gauge their level of understanding of the use of male circumcision in the prevention of HIV infection.

Regarding the marital status of the participants, only one participant (n=1) was married, while the rest (n=37) were single. Most of the participants, however, indicated that they had a sexual partner. This information was essential in order to understand the sexual patterns of the men in Kweneng East District, and the implications of these sexual patterns for the prevalence of infection with HIV and other sexually transmitted diseases. This is based on the understanding as stated by central statistics, in the Botswana HIV/AIDS Impact Survey III (2009:12), that males of all marital states except for "never married" have a higher prevalence rate than women have. Of the participants, all but one were single, but they had between one and three sexual partners each. With

regard to the use of condoms, the majority of the participants (n=31) indicated that they always used condoms during sexual intercourse.

Of the participants, the majority (n=37) expressed awareness of the HIV prevention strategy of safe male circumcision (SMC), with radio (n=21) and television (n=8) cited as the main sources of information from which they had heard about the procedure. Despite their awareness of the strategy of male circumcision, only a few of the participants (n=12) were circumcised, with the majority (n=26) indicating that they were not circumcised. In this study it was essential to determine the effectiveness of the mode of dissemination of information commonly used to raise awareness about male circumcision and the response of the men in Kweneng East to the strategy. The tables below present the characteristics of the participants according to the age groups used to collect the data.

Table 3.1 Demographic characteristics of participants aged 18-29 (n=20)

AGE	EDUCATION LEVEL	MARITAL STATUS	NO. OF SEXUAL PARTNERS	USE CONDOMS DURING SEX?	HEARD OF SMC?	SOURCE	CIRCUMCISED?
22	SS	S	1	ALWAYS	YES	R	NO
18	SS	S	NIL	ALWAYS	YES	R/TV	YES
24	SS	S	1	ALWAYS	YES	R	YES
28	SS	S	1	ALWAYS	YES	R	NO
19	SS	S	0	ALWAYS	YES	R	NO
22	SS	S	1	ALWAYS	NO	-	YES
21	SS	S	NIL	ALWAYS	YES	R	YES
18	SS	S	-	ALWAYS	YES	PR	YES
21	SS	S	NIL	-	YES	R	NO
26	PM	S	1	ALWAYS	YES	R	NO
18	SS	S	-	-	YES	TV	NO
29	SS	S	NIL	ALWAYS	YES	R/PR	YES
26	PM	S	-	ALWAYS	YES	TV	NO
23	SS	S	1	ALWAYS	YES	TV	YES
22	SS	S	1	ALWAYS	YES	R	NO
22	SS	S	-	ALWAYS	YES	TV	NO
22	SS	S	1	ALWAYS	YES	TV	NO
26	NA	S	-	ALWAYS	YES	R	NO
24	SS	S	2	ALWAYS	YES	R	YES
24	SS	S	3	ALWAYS	YES	R	NO

Table 3.2 Demographic characteristics of participants aged 30-39 (n=8)

AGE	EDUCATION LEVEL	MARITAL STATUS	NO. OF SEXUAL PARTNERS	USE CONDOMS DURING SEX?	HEARD OF SMC?	SOURCE	CIRCUMCISED?
30	PM	S	2	ALWAYS	YES	HOSPT	NO
35	NA	S	-	S/TIMES	YES	R/FRDs	NO
37	SS	S	1	ALWAYS	YES	TV	YES
38	SS	S	1	ALWAYS	YES	R/FRDs	NO
33	PM	S	1	ALWAYS	YES	R	NO
34	TERT	S	2	ALWAYS	YES	R	NO
31	SS	M	2	S/TIMES	YES	PR	YES
39	SS	S	1	ALWAYS	YES	PR	NO

Table 3.3 Demographic characteristics of participants aged 40-49 (n=10)

AGE	EDUCATION LEVEL	MARITAL STATUS	NO. OF SEXUAL PARTNERS	USE CONDOMS DURING SEX?	HEARD OF SMC?	SOURCE	CIRCUMCISED?
40	PM	S	-	ALWAYS	YES	PR	NO
46	NA	S	1	S/TIMES	YES	PR	NO
49	PM	S	1	ALWAYS	YES	R	NO
47	TERT	S	1	ALWAYS	YES	R	NO
47	TERT	S	1	S/TIMES	YES	R	YES
40	PM	S	1	ALWAYS	YES	R	NO
49	TERT	S	1	-	YES	-	YES
49	SS	S	1	ALWAYS	YES	PR	NO
41	TERT	S	3	ALWAYS	YES	TV	NO
49	PM	S	1	ALWAYS	YES	R	NO

Key:

Education level:

PM - Primary

SS - Secondary

TERT - Tertiary

NA - Never attended

Source:

PR - Parents

R - Radio

TV - Television

FRDs - Friends

HOSPT - Hospital

3.4 THEMES IDENTIFIED DURING DATA COLLECTION AND ANALYSIS

In this section the researcher presents the research findings in the form of themes, categories, and subcategories. Four themes were identified from the data. The discussion of research findings is authenticated by cases of verbatim quotes made by the participants and used as empirical data. A summary of the discussion of the themes, categories, and subcategories is presented in Table 3.1 below.

Table 3.4 Themes, categories, and subcategories that emerged

Theme	Category	Subcategory
1 Perceived effects of participants' value systems on the use of male circumcision among the Bakwena tribe in Kweneng East, Botswana	1.1 Value systems associated with stakeholder consultation in the community	1.1.1 Lack of consultation with men at the inception of male circumcision 1.1.2 Lack of involvement of village elders during the service delivery process 1.1.3 Involvement of women in male circumcision
	1.2 Value systems associated with cultural beliefs	1.2.1 Lack of openness between parents and children on sexual matters 1.2.2 Lack of traditional leadership support
	1.3 Value systems associated with religious beliefs	1.3.1 Those in opposition to the position adopted by government authorities to implement male circumcision 1.3.2 Those in support of the position adopted by government authorities to implement male circumcision
2 Perceptions of the source and provision of information	2.1 Mass media as a source of information	
	2.2 Peer information sharing as a source of information	
	2.3 The use of culture-incongruent campaign strategies	2.3.1 The use of young educators among elderly men 2.3.2 A lack of gender sensitivity during campaigns 2.3.3 The use of gumbagumbas (loud music systems on trucks) during campaigns
	2.4 Quality of information provided on male circumcision	2.4.1 Lack of depth associated with the mass media 2.4.2 Lack of quality associated with the user-unfriendliness of the print media 2.4.3 Lack of information available on the social media 2.4.4 Lack of quality associated with counselling services

Theme	Category	Subcategory
3 Perceived knowledge of the benefits associated with acceptance of male circumcision	3.1 Knowledge of the benefits of male circumcision	3.1.1 Awareness of the benefits associated with male circumcision
	3.2 Acceptance of male circumcision	3.2.1 Lack of awareness of the benefits of male circumcision 3.2.2 Acceptance associated with decision making 3.2.3 Acceptance associated with advocating for circumcision for children 3.2.4 Acceptance associated with fears that male circumcision promotes high-risk behaviours among men
4 Perceived risks of male circumcision among men	4.1 Psychological effects of male circumcision	4.1.1 Fears associated with HIV testing 4.1.2 Fears associated with economic deprivation 4.1.3 Fears associated with loss of the foreskin o Loss of sexual pleasure associated with the absence of the foreskin o Fears associated with the disposal of the excised foreskin tissues o Fear of future infection, which presence of the foreskin would prevent
	4.2 Sexual deprivation	4.2.1 Sexual deprivation associated with loss of a sexual partner 4.2.2 Sexual deprivation associated with penile deformities 4.2.3 Sexual deprivation associated with a period of abstinence
	4.3 Physical discomforts	4.3.1 Discomforts associated with pain due to surgery 4.3.2 Pain associated with service delivery

3.4.1 Theme 1: Perceived effects of participants' value systems on the use of male circumcision among the Bakwena tribe in Kweneng East, Botswana

Individuals have different value systems that govern their existence and dictate how they operate. These systems act as basement membranes upon which behavioural traits of a particular individual, family or community are brewed. They are the conduits for nurturing individuals and basis for measurement of behavioural acts.

According to Gibson and Mitchell (1990:206-208) values provide an integral reference for what people consider to be important and desirable in life. Values generate behaviour and help solve common human problems for survival and they provide the answers as to why people do what they do and chose to do them. The understanding of the parameters within the value systems of a particularised individual, family or

community pre-sets the entry points for knowledge derivation about what catalyses certain behaviours enveloped within a certain worldview. In this study the value systems have been categorised into those related to the need for consultations, culture and religion.

3.4.1.1 Category 1.1: Value systems associated with stakeholder consultation in the community

Consultation is a value that involves a two-way exchange of information. It is seen as an opportunity to add value to stakeholders' decision-making processes. Consultation means to appropriately inform stakeholders, inviting and considering responses from them before a decision is made. The opinions of stakeholders should not be assumed. Sufficient action must be taken to secure stakeholders' responses and to give their views proper attention (Comcare 2009:18). Consultation requires more than a mere exchange of information. Affected stakeholders must be able to contribute to the decision-making process, not only in appearance, but in fact. When done well, wide stakeholder consultation and participation in programme design and implementation leads to mutual benefits that encourage local ownership of development of activities (Griffiths, Maggs, & George 2007:10).

The theme of the value system of consultation is discussed according to the subcategories identified below.

- ***Subcategory 1.1.1: Lack of consultation with men at the inception of male circumcision***

According to Engender Health (2005-2012:4), stakeholder engagement is the process of involving those who have a role in or are interested in and/or affected by the activities and goals of a programme. This engagement can span a continuum of activities, including dialogue and consultation, collaboration in identifying problems and solutions, partnering in implementation and evaluation, and capacity building and empowerment.

This is an inherent characteristic of the entire process that requires partnerships to implement the project or the programme. For this reason, it is important to identify stakeholders that can play the role of influencing in order to achieve the goals set. In

addition to the need to identify major players in the implementation of any project is the need for engagement in the form of consultation with stakeholders, so as to promote a spirit of ownership and to identify value chains that are compatible with the prevailing value system framework. This is from the understanding that where there is a spirit of ownership, there is potential to influence (UNAIDS 2008:6-7).

In this study, most of the participants lamented the lack of consultation with men in Kweneng East from the inception of male circumcision programmes. The following are some of the views stated by the participants:

> "Many people [men] have not done it [undergone circumcision], because from the initial stages we were not consulted about the programme and told about the advantages of it."

> "Many people [men] do not know the advantages of the programme because of lack of consultation […] consultation should have been done first."
> "Government authorities should have discussed the whole issue with the nation, so that people get to know the advantages of the programme."

> "Government did not do thorough consultation over this issue […] it only considered the dangers of the foreskin."

According to the WHO (2007:6), in a document about the scaling up of male circumcision, it is cited that a wide range of sociocultural issues are to be considered in the context of introducing or expanding the availability of male circumcision services, which include broad community engagements in the form of consultations (WHO & UNAIDS 2007a:6).

- ***Subcategory 1.1.2: Lack of involvement of the village elders during the service delivery process***

The lack of involvement of the village elders, who could have an influence on men of reproductive age during service delivery, was identified as another obstacle. This was revealed by the participants, who, when asked what they thought the government authorities should have done, considering that men were not properly consulted before implementation commenced, responded as follows:

> "They should have started at the top [with the village elders] in the community, until it reaches the family […] because if you deal with the elders of the villages, they further go to discuss with the people in the village […] the village elders later take the information to the kgotlas [wards] […] from there the message will be able to reach the families, and finally individuals."

> "Right now they are not even involving the elders of the village!"

> "Even the health workers are not involving parents or even to reach them to give information so that they can support the young ones who intend to go for circumcision […] because if the health workers interact with the elders, then we shall be encouraged to do it."

According to the literature, participation and consultation with stakeholders at all levels of the implementation process of a community health programme enhances the value of the programme and increases people's ownership, reduces alienation, and mitigates the element of surprise among those involved. It helps to create an understanding of why something is happening and how the change might take place (WHO 2009:7). The WHO's (2009:34) situation analysis toolkit for male circumcision indicates that conducting stakeholder meetings facilitates understanding, which, in turn, facilitates participation in efforts to increase the rate of male circumcision and increase ownership of the programme as a whole.

- ***Subcategory 1.1.3: Involvement of women in male circumcision***

When the participants were asked whether women are involved in and supportive of male circumcision among men, most of the men had this to say:

> "Female partners should be consulted as well, as this will also benefit them […] because they play a role by encouraging us and giving moral support. But, in the final analysis, it is one's choice either to do it or not."

> "But how can women support us if you do not involve elders of the villages in order for the women to understand and support us?"

> "The good thing is that we do not think there are some female partners who discourage their men […] if there are some, then they are very few […] the government authorities did not just consult and involve people!"

> "The right thing to do is to discuss with the female partners and arrive at an agreement. They may also end up encouraging us to go for circumcision when they understand."

As regards the scaling up of male circumcision programmes, the World Health Organization in an information package on male circumcision, asserts that all communication strategies and outreach efforts need to engage a range of stakeholders, including women, in the development of key messages to address male circumcision (UNAIDS [Sa]:3).

Under this theme, the findings point to the importance of the aspect of engagement in the form of consultation at all levels within a continuum of service delivery. This is also essential for successful implementation of safe male circumcision. The identification of stakeholders at every level of activity and their involvement sets the ground for support to the providers of the service and the consumers. The views presented above validate the importance of engagement with individuals that are directly or indirectly affected by male circumcision. The implication is that the Bakwena men of Kweneng East feel no compulsion to utilise male circumcision due to lack of consultation and engagement with government authorities and service providers, right from the inception of the programme. This argument is based on the need for service providers to understand the value systems that govern their consumers.

3.4.1.2 Category 1.2: Value systems associated with cultural beliefs

The concepts of self and world view that an individual employs in mental processing are embedded in beliefs and values; and the results are measured basing on how they influence people's capabilities to exercise control over events that affect their lives (Byrne 1995:156-157). These cultural belief systems develop from shared experiences of a group in society and are expressed symbolically (Andrews & Boyle 2003:74). The category of cultural influence on the perception of male circumcision was discussed within the sub-categories stated below.

- ***Subcategory 1.2.1: Lack of openness between parents and children on sexual matters***

In the interviews with the Bakwena men, a salient issue that emerged was the lack of openness related to the use of male circumcision for the prevention of HIV infection. For example, when the men were asked how often discussions take place between parents and children (young people of reproductive age) on this subject, the following are some of the views that were articulated:

> "It is a taboo for parents to discuss sexual issues with us young people […] they don't interact with us regarding sexual issues. That is how it is."

> "But because of the taboos on sexual discussions we cannot share or be open with our parents."

> "It is a cultural norm for our parents not to discuss certain issues with us […] and it is not a sign of respect to ask elderly people about these issues."

These views correspond to the findings in a study on male circumcision conducted in Botswana by Kebaabetswe, Lockman, Mogwe, Mandevu, Thior, Exxex and Shapiro (2003:14), where a significant number of respondents cited cultural reasons as the reason for not circumcising their male child. Therefore, this predisposition by the parents or guardians, as well as the taboo in the Bakwena culture to openly discuss sexual matters makes it difficult for young people to voluntarily engage in male circumcision.

- ***Subcategory 1.2.2: Lack of traditional leadership support***

The participants also communicated that they experienced difficulties related to traditional leadership support. When asked about how much support they receive from the traditional leadership in the utilisation of male circumcision, these were the responses of some of the participants:

> "It is difficult to support us […] like we said earlier that it is a taboo […] so they cannot say much …] even if they talk about it, they just tend to limit the extent of

discussion. They can't get deeper […] maybe for only a short period of time, and quickly change the subject."

"Within the context of our culture here in Kweneng, it is very hard for people [men] just to go back to male circumcision […] it needs people to sit down […] they told us to stop it initially, but now they say it should come back. It is contradictory."

"There are conflicts in our culture […] we tend to copy what Westerners are doing, without a good understanding […] we seem not to be independent."

The factors embedded in the cultural value system of the Bakwena, as expressed above, clearly show how difficult it is for Bakwena men of reproductive age to take decisions on male circumcision. This conflict has impacted on the openness and support needed to motivate the governed (young men) and the self-governed (the elders) in decisions regarding the use of male circumcision.

3.4.1.3 Category 1.3: Value systems associated with religious beliefs

Obstacles related to religious beliefs were also cited in the interviews conducted. The responses reflected the impact that religious beliefs have on the use of male circumcision among men in Kweneng East District. In this study, the views of some of the participants show that the religious values of men of reproductive age have had a negative effect on the way they perceive the use of male circumcision in the prevention of HIV infection. Below are some of the sentiments expressed:

"Our culture here in Kweneng is that we are religious, and another thing is the impact of [our] religion [Christianity], as it is against circumcision."

"There is conflict between culture and religion […] religion may be a problem, since we go to different churches."

"When it comes to the Bible, circumcision is an old practice in the Old Testament. As such, going back to it will be like going back to the old practice."

> "The Bible teaches us not to please the flesh. Therefore, we should live as per God's expectation and stay away from earthly activities […] there is no way I can advise people to do male circumcision while I know that it is ungodly."

According to reports in the literature, religion has been found to influence how people regard male circumcision. For example, in a study conducted among a non-circumcising society in rural western Kenya, the participants expressed that many people look up to their religious leaders for direction, and most people trust the religious leaders (Francisco 2011:7). Andrews and Boyle (2003:433) state that religious beliefs could influence a client's explanation of a disease or a condition and the causes thereof, perceptions of the severity of the disease, and the choices made. The views on religious beliefs were looked at from two different perspectives.

- ***Subcategory 1.3.1: Those in opposition to the position adopted by government authorities to implement male circumcision***

When asked whether they believe in what the government is doing regarding male circumcision, these were the responses of some of the participants:

> "That now suggests that the government is contradicting itself. Why preach circumcision and use of condoms at the same time? We should be faithful and stay away from fleshly activities […] Again it will not make sense to circumcise after marriage, as one has to remain faithful to his wife […] instead the government should finance pastors to preach the Word of God and do away with circumcision."

> "It is not proper to do it, as this is an earthly practice. It is against spiritual life. Jesus Christ came for these things, and all problems were solved […] That is why at the end he said 'It is finished'."

> "Whether people are dying or not it is difficult to preach circumcision in church."

When the informants were asked "Don't you think the government is just reacting to the situation of HIV prevalence in the country, especially that people are dying, including those in churches?" different views were expressed. The following is one of the views that was articulated:

> "The government is committing a sin by encouraging people to use condoms and circumcision."

The above sentiments correspond to the findings of a study conducted by Rain-Taljaard (2003:3) in a town in South Africa with a high HIV infection rate and the potential for an intervention based on male circumcision. The participants communicated that they regarded male circumcision as a pagan practice, with many Christian churches opposing the practice and seeing it as a pagan tradition.

- ***Subcategory 1.3.2: Those in support of the position adopted by government authorities to implement male circumcision***

However, other participants had a different view regarding this issue, as they expressed appreciation at what the government is doing. These are some of the responses that were articulated:

> "Whether you are a believer or not, let us do what the government has asked us to do, otherwise we will perish, because the government is fighting a good cause. Some of us are alive because of ARVs [an intervention implemented by the government]. So let the government continue with this programme […] it is either believers take it or not. The government is doing things right. Take it or leave it."

> "The government has taken a right step […] my children and nephews have done it, and my partner also encourages me to do it."

> "It is upon an individual to choose between good and evil […] God gave us that choice."

The views expressed by the participants pertaining to religious beliefs and the use of male circumcision clearly indicate that the values embodied in religion do dictate people's perceptions. The wide spectrum of views expressed suggests that there is much diversity among the religious groups. It also indicates that the religious values that the various religious groups impart on their members have a direct effect on how men view the use of male circumcision as a strategy in the prevention of HIV infection. For this reason, religion can either promote or hinder the use of male circumcision among

men. From the above it would be appropriate to conclude that the religious beliefs of men have contributed to the low utilisation of male circumcision in Kweneng District.

Under the theme of value systems, it can be said that culture and religion have had an effect on how men perceive the use of male circumcision in Kweneng East District of Botswana. The lack of openness among parents and children regarding sexual matters and the lack of traditional leadership support in the form of motivation were some of the obstacles identified. Furthermore, the religious beliefs of the people also do not support the use of male circumcision, as it is regarded as an inappropriate practice for Christians to engage in.

3.4.2 Theme 2: Perceptions of the source and provision of information

Health communication is seen to have relevance for virtually every aspect of health and well-being, including disease prevention, health promotion, and quality of life. When conducting communication, it is important to think carefully about the channel through which the intervention message will be disseminated, who the message is being addressed to, how the target audience will respond, and the features of messages that have the greatest impact (Rimal & Lapinski 2009:2). The aim of information, education and communication (IEC) in health programmes is to increase awareness, change attitudes, and bring about a change in specific behaviours. The purpose is to assist people to live healthy lives by increasing people's awareness, which will enable them to take appropriate action to improve their health and make healthy choices (Zimbabwe National Family Council 1998:4). To determine the extent to which information, education and communication (IEC) can be developed, knowledge of the value system for a particular ethnic group is critical. This sets the basis for analysis of every adopted channel of communication in terms of appropriateness.

Under this theme, categories pertaining to the perceptions regarding the conduits used for acquisition of information and their effects on male circumcision utilisation in the Kweneng East District of Botswana were identified.

3.4.2.1 Category 2.1: Mass media as a source of information

In this study most of the men (n=37) indicated an awareness of male circumcision. When asked what their sources of information were, most of the men (n=21) responded that the radio was their main source of information on male circumcision, while the second-most cited source (n=18) was television. This position is supported by the views expressed in response to the investigation questions, which aimed to establish the sources from which information on male circumcision was acquired. In this study the following responses were common:

> "Mostly we hear about it on the media, especially radio."

> "We also hear of it on television."

These findings are confirmed by the literature. In a study conducted by Chikutsa (2011:3) in Zimbabwe on the adoption of male circumcision as an HIV prevention strategy, it was found that 90% of the participants had heard about male circumcision as a strategy for HIV infection prevention, and access to radio and newspapers was significantly associated with having heard of male circumcision as an HIV infection prevention strategy.

In this study, radio and television are the main sources of information on male circumcision in the district.

3.4.2.2 Category 2.2: Peer information sharing as a source of information

Peer sharing of information on male circumcision among men has been found to have an effect on the use of male circumcision. In a study on interpersonal influences in the scale-up of male circumcision services in a traditionally non-circumcising community in western Kenya, the participants described peer influence as having a positive influence on circumcision preferences. Most of the participants spoke of the kind of influence their peers had and how youth groups and peer norms could encourage them to seek male circumcision services (Obure, Nyambedha & Oindo 2011:2). In this study the following responses by participants confirm the above findings:

> "I have never heard anything, but I just hear people encouraging men to do it."
>
> "Some other times we hear of it from other people […] and we also talk in bars."
>
> "Sometimes you can be misled, because right now I cannot say that I know, because there are many reasons we are hearing around from people. Some of them we do not know if they are rumours or not."
>
> "There are so many rumours! Like others would tell you that if you have done male circumcision, you would not enjoy sexual intercourse. This is why many people maybe are lazy to do it."

The kind of information shared among men can directly influence men in their perceptions of male circumcision and its utilisation. Hence the need to ensure that accurate information is disseminated, so as to prevent misconceptions.

3.4.2.3 Category 2.3: The use of culture-incongruent campaign strategies

Concerns regarding various communication campaign strategies that have been adopted to operationalise the implementation of male circumcision as an HIV prevention strategy among the Bakwena tribe emerged in the study. According to Catalan-Matamoros (2011:400), communication campaigns consist of a designed set of organised activities whose messages are organised in terms of both form and content, and responsibility is taken by designers to select appropriate communication channels and media. The need for sound and operational plans is essential for decision makers, managers, and collaborating partners, because they serve as a means for coordinating efforts, working efficiently, mobilising and ensuring the necessary resources for scale-up, and communicating with stakeholders at various levels (WHO & UNAIDS 2008:28). Pearson and Robinson (2005:3) state that a strategy is a decision or a set of decisions and actions made that result in the formulation and implementation of plans designed to achieve a set objective.

The implementation aspect of any envisioned mode of health programme is crucial for achieving the goals set. The most significant feature during the process of implementation is the manner in which the activities are carried out to ensure that the ultimate objective is achieved. This hinges on the particular strategies adopted by the

implementers, and how they fit the domain of the consumer of the service in a particular setting.

During the focus groups and the individual in-depth interviews, a number of observations were made by the participants, who raised some salient issues of concern pertaining to the methods adopted in the implementation of male circumcision among the Bakwena tribe. Under this category, the views are interpreted according to the subcategories identified below.

- ***Subcategory 2.3.1: The use of young educators among elders***

Cultural knowledge in the context of implementation of health programmes is vital to all health care providers. In obtaining this knowledge base, the health care providers focus on the issues of health-related beliefs and cultural values that affect the communication patterns of a particular culture (Campinha-Bacote 2002:181).
Within the Bakwena culture of Kweneng East are the norms and values that dictate value chains of communication. When these norms and values were explored during the interviews, most of the participants expressed dissatisfaction with the adoption of culture-incongruent methods for conveying messages on male circumcision.

The following are some of the responses:

> "Traditionally, there are the ways that it is done. It is best to do it by the way of kgotla [ward] meetings […] say elders of the same age group would be gathered, and the educator should be of the same age group with the men, so that we are free to ask questions."

> "There are kgotla [ward] meetings that take place or used in our system […] but now what is happening is that we are taught by young ones [kids], contrary to our African culture or tradition […] they bring such programmes with little attention that some of us are elders […] hence people fear to go and be taught by kids […] at least if they bring our age mates to come and teach us and to demonstrate to us."

According to Andrews and Boyle (2003:343), cultural sensitivity is essential to meeting health needs that exist within diverse cultural groups. Leininger (1997:38) emphasises

the importance of rendering services in a culture-congruent manner, by adopting appropriate actions or methods related to the culture and specifically tailored to meet the needs of the clients.

- ***Subcategory 2.3.2: A lack of gender sensitivity during campaigns***

In this study some participants cited lack of gender sensitivity by service providers on the subject of male circumcision. The literature indicates that people prefer to communicate about certain subjects with someone of the same sex, and some men prefer to talk to a man, rather than a woman, about sexual behaviour or the use of condoms (Zimbabwe National Family Planning Council 1998:46). This was confirmed by the views that the men themselves expressed. Most men expressed that they were uncomfortable with the use of women health care providers in communication campaigns on the subject of male circumcision. Some of the views articulated are the following:

> "Nurses of the same age group with us can come to discuss these issues with us, and they should be men, and not women."

> "A woman cannot teach me what she does not have […] or if it is a young person or a nurse who is not of my age, how can he bring such topics to me? [...] It is an insult! [...] So the best are the kgotla meetings with the same age group."

UNAIDS (2007:6) asserts that all facilities, goods, and services used in a communication campaign related to HIV prevention should respect medical ethics and should be culturally appropriate. The implication is that services should respect the culture of individuals and communities and should be sensitive to gender and life cycle requirements (UNAIDS 2007:6-7). For this reason, gender sensitivity is one of the essential characteristics of facilities, goods, and services needed for realising the right to health by means of male circumcision.

- ***Subcategory 2.3.3: The use of gumbagumbas (loud music systems on trucks) during campaigns***

The participants expressed concern and dissatisfaction over the use of trucks with portable music systems as a way of reaching people in the villages with their message. The concern voiced was that this method of disseminating information is not culturally appropriate and may not be accessible to some residents.

One participant said,

> "But if you bring trucks with music at the supermarkets where everyone is passing, and you tell people to circumcise, we can't go there […] It is not good at all, because even if one has a question to ask, you can't, because there are children there who can laugh at you."

Another participant said,

> "They forget that not all the people from deep villages can afford to come to the supermarkets where they play their music […] this approach cannot reach people in the outskirts of the villages, lands [farms], and cattle posts […] it is only targeting the modern people in urbanised places."

UNAIDS defines strategic communication as an evidence-based approach linked to the design and implementation of communication interventions, which involves segregating key audiences, developing key messages, and targeting messages at key partners, who could be primary or secondary audiences (UNAIDS 2008:9).

The lack of segregation among audiences during campaigns where music is used was cited as another factor which is not culturally sensitive. This is evidenced in the following views voiced by some participants:

> "Imagine kids will just be going there to listen to gumbagumbas [loud music systems] at supermarkets at the trucks, without paying serious attention on what they are being taught."

> "If there is a crisis, you cannot teach it by entertaining […] but when you entertain like the way it is done, people think that you are joking."

> "With kgotla meetings, where you bring all the men to discuss, it shows seriousness, and we can look at it as war to fight."

The information in this category points to the fact that a lot has to be considered when implementing male circumcision in the district. The importance of cultural sensitivity and provision of services in a culture-congruent way cannot be ignored, as it is one of the dominant factors affecting the utilisation of male circumcision in Kweneng East District of Botswana.

3.4.2.4 Category 2.4: Quality of information provided on male circumcision

According to Sodani (2006:87), quality in the provision of health services is essential, and it is expected to have a significant effect on efficiency, client satisfaction, and utilisation of services. The quality of male circumcision services can be defined through the development of communication standards, which can be measured by determining whether the standards are being met or not (WHO 2008b:11). The realisation of positive health-related behaviour for the utilisation of male circumcision with the ultimate goal of preventing and controlling the spread of HIV infection depends to a great extent on the quality of the information provided. This plays an important role, which will either result in the expected health behaviour or not.

Under this category, concerns regarding the quality of information provided on male circumcision were divided into the following subcategories:

- ***Subcategory 2.4.1: Lack of depth associated with the mass media***

According to Catalan-Matamoros (2011:413), the mass media can be an effective tool in health promotion, given appropriate circumstances and conditions, such as when wide exposure is desired, there is an urgent time frame, and awareness is the main goal. However, the use of mass media is considered appropriate for communication campaigns that require limited involvement and interaction with individuals. With radio and television being the main sources of information of male circumcision, as explained

earlier, most participants expressed that there was a lack of adequate information due to a lack of opportunities to seek clarification on relevant issues on male circumcision. The result is that participants have experienced difficulties in accessing the information needed to make informed decisions.

This issue was articulated by some of the participants as follows:

> "From my point of view, I do not think the media is doing enough, because they just give us skeleton information […] we are only told about the removal of the foreskin, and nothing about the aftermath."

> "The way the media is doing it, it is like they are just dragging us, saying 'Go and do it', without showing us how it is done and the steps we need to take […] I don't think that is enough, because some people [men] ask themselves as to what one would do when he gets there."

> "Maybe this is why we [Bakwena] are dragging our feet to go for circumcision, because we don't get enough information […] if we get enough information and we understand, I do not think that we would drag our feet to go for it, because we would have known that this is a right thing."

The literature indicates that intervention efforts to change behaviours are communicative acts. By focusing mostly on the transmission function of information exchange, such efforts often neglect ritualistic processes that are automatically engaged through communication. In adopting the transmission view of communication, it is important to carefully consider the channel through which an intervention message will be disseminated, who the message is being addressed to, how the target audience will respond, and the features of messages that have the greatest impact. These considerations reflect the essential components of the communication process, namely channel, source, receiver, and message, respectively (Rimal & Lapinski 2009:2). The use of media messages can efficiently and powerfully increase individual awareness of a health topic, enhance knowledge of the facts on a topic, and influence people's attitudes and perception of self-efficacy to achieve healthy behaviour change. However, the media (particularly the mass media) are generally the least involving and least interactive way of reaching people. For this reason, the mass media are best suited to

the dissemination of simple and easily understood messages that do not require feedback (Health Communication Unit 2007:32-33).

- ***Subcategory 2.4.2: Lack of quality associated with the user-unfriendliness of the print media***

Another concern raised was that the print media are published mainly in English. Despite the fact that the participants expressed appreciation for the print media, their criticism was focused on the fact that their elders and their parents, whose responsibility it is to teach them the values of their culture, in many cases cannot read. They don't seem to understand the whole significance of male circumcision, as they are not able to read what is published in the print media. This view relates to the understanding that communication often presents the most significant problem in dealing with individuals from diverse cultures (Giger & Davidhizar 2002:185).

As regards the use of the print media, some men expressed concerns, as shown below:

> "Yes, you can put information on paper, but what we have realised is that not many people can read."

> "We young people are literate, such that when we read, we can share it with our age mates […] but because of the taboos on sexual issues, we cannot discuss or share with them [parents and elders] […] this is another way information is not able to reach them."

According to Andrews and Boyle (2003:21), communication barriers include differences in languages, world view, and values. It is important to research how people from different cultural backgrounds communicate with each another.

- ***Subcategory 2.4.3: Lack of information available on the social media***

In this study the participants, particularly the young adults, also cited lack of optimal utilisation of the electronic media as a source of information on male circumcision. Central to the argument was the failure by service providers to make available sufficient

quality information on the social media for young people. Social media mentioned in the discussions were Twitter, Facebook, and other similar websites.

One participant had this to say:

> "There is too much technology today, and us young people are mostly exposed to a lot of technology […] so there have to be some sites where information can be found so that if I want to search about something, I would just go to search or download […] right now many of us use Facebook, Twitter Extra […] but you cannot find the kind of information that you want [...] you only find little pieces of information […] I don't think young people will understand those bits of information."

Insufficient information repeatedly emerged as one of the factors resulting in low uptake of male circumcision.

- ***Subcategory 2.4.4: Lack of quality associated with counselling services***

Lack of quality associated with counselling services was another concern cited, which was mentioned by some of the men that had undergone circumcision. The literature indicates that counselling is an important form of interpersonal communication, where information is exchanged to clarify and resolve problems, and that health workers need to be able to counsel clients and help them to look at their problems, make informed decisions, and identify solutions (Francisco 2011:4).

In this study the concern with regard to counselling was articulated as follows by one participant:

> "We have not been educated adequately."

> "Although there is counselling, they [counsellors] only talk about how to take care of the penis afterwards, like staying for six weeks without having sexual intercourse […] But these issues are not strongly emphasised, such as advising people to avoid sex without condoms, and so on."

According to Byrne (1995:20), the position of counsellors is to apply their skills not only to help clients resolve current concerns, but also to enable them to make general progress in life, either as individuals or as a group. Hence the need to be clear when rendering services to clients is critical.

Regarding the theme of the source and provision of information in the promotion of male circumcision utilisation in Kweneng East District of Botswana, the sources of information that were cited the most were the media (radio and television) and peer information exchange among men in the areas in which they socialise, such as bars. It is worth noting that health workers and health facilities were not cited as the main source of information on the subject of male circumcision in the villages. This scenario points to a lack of involvement by health facilities in Kweneng East in promoting awareness of male circumcision among men in the district. Other obstacles identified related to the use of culturally insensitive and culture-incongruent methods, and a lack of quality in the information provided in counselling sessions and disseminated by the media, which led to inadequate information provision.

3.4.3 Theme 3: Perceived knowledge of the benefits associated with acceptance of male circumcision

Being knowledgeable puts an individual at an advantage in health situations, and it is a sure way to influence health behaviour. Being knowledgeable is important for men, to avoid default to subjects such as those of male circumcision. According to Egan (1999:281), people get into trouble or fail to get out of it because they lack the needed knowledge, or the needed life skills, or the necessary coping skills for a particular problem situation. Under this theme, the perceptions that men have regarding the benefits associated with the use of male circumcision will determine their response to its utilisation. These perceptions are discussed according to the two categories below.

3.4.3.1 Category 3.1: Knowledge of the benefits of male circumcision

Although possession of knowledge, in itself, is not predictive of behaviour change, it can be said that what men perceive as benefits of male circumcision will determine the kind of response they will have towards male circumcision. In this study participants

expressed different views. Some were aware of the benefits of male circumcision, while others were not.

- ***Subcategory 3.1.1: Awareness of the benefits associated with male circumcision***

The differences in understanding of the benefits of the use of male circumcision ranged from understanding of the fact that it controls infections such as HIV and other sexually transmitted infections (STIs) to hygiene considerations. Some participants expressed this awareness as follows:

> "It is a control measure of diseases such as HIV/AIDS."
>
> "It is helpful, because it will reduce chances of getting infectious diseases, like those through sex."
>
> "It is good, you know, because it prevents the accumulation of dirty in the foreskin."

The literature reveals similar awareness by other participants in other studies that have been conducted. For example, in a study conducted in Kenya one year after the launch of a national medical male circumcision campaign, it was found that the perceived benefits of safe male circumcision were improved hygiene, protection from sexually transmitted infections, and enhanced sexual pleasure and performance (Herman-Roloff, Nixon, Kawango, Ndinya-Achola & Bailey 2011:8). These findings are confirmed by the findings of a study conducted among plantation workers on the border of Zimbabwe. The findings revealed that despite male circumcision not being part of the men's culture or religion, the reasons cited for undergoing male circumcision included improvement of general hygiene, and protection against infection with HIV and other sexually transmitted infections (Taremeredzwa 2011:29).

3.4.3.2 Category 3.2: Acceptance of male circumcision

Acceptance of any therapeutic programme is paramount in achieving health promotion. To be an effective intervention, male circumcision must be acceptable to all local stakeholder institutions, including residents of a particular community. In the context of this study, most of the men expressed acceptance of the strategy of male circumcision.

From an analysis of the responses, it is evident that the men generally felt that male circumcision is appropriate, as they expressed sentiments of acceptance. This is what some informants had to say:

> "We do not have problems with male circumcision itself […] we should all do it."

> "People accept this programme […] we should all be encouraged to do it."

> "My view is that it is okay to do it […] You see? Ja, it is a good thing to be done […] I think it is okay to do it"

Numerous studies have indicated that there is general acceptance of male circumcision in sub-Saharan Africa and other parts of the continent, as well as in the world at large among various different ethnic groups. For example, studies conducted in Nyanza Province of Kenya reported that the primary reasons why men chose circumcision were protection against HIV and other sexually transmitted infections (STIs), improved hygiene, decreased risk of penile cancer, and improved sexual satisfaction for men and their sexual partners (Herman-Roloff et al 2011:8). Findings from a study conducted in Kampala, Uganda, reveal that most men and women support medical male circumcision as a strategy for lowering the risk of HIV infection, and that up to 62% of uncircumcised men would consider being circumcised (PlusNews 2009:2). A study in Zambia, where 34 focus group discussions were conducted – 17 with men, and 17 with women – in four districts chosen to represent urban and rural communities where circumcision either is or is not traditionally practised, found that acceptance of male circumcision for STI and HIV prevention was high (Lukobo & Bailey 2007:471).

The above findings from the literature confirm the views expressed by the participants in this study, who were of the opinion that circumcision reduces the chances of contracting venereal diseases. This is what the participants had to say:

> "In my opinion, circumcision is okay, as it reduces the chances of contracting venereal diseases […] I find it important that male circumcision is done at the national level, as it is a good measure of preventing diseases, including HIV/AIDS."

In another study conducted by Lagarde, Dirk, Puren, Reathe and Bertran (2003:85-95) in Westonaria in South Africa, more than 70% of the non-circumcised men (NCM) who participated in the study stated that they would want to be circumcised if male circumcision were proved to protect against the transmission of sexually transmitted diseases (STDs). 29% of the circumcised men and 22% of the non-circumcised men believed that male circumcision (MC) protects against infection with HIV and other STIs. In another qualitative study conducted among police officers in Dar es Salaam in Tanzania, informants perceived male circumcision as a health-promoting practice that may prevent transmission of HIV and other sexually transmitted infections (Tarimo, Francis, Kakoko, Munseri, Bakri & Sandstrom 2012:529).

The above research findings are consistent with the findings of this study, which generally indicate that male circumcision is acceptable among men in the Kweneng East District of Botswana, despite there being some differences in the responses of the informants. This is also validated by the findings in a cross-sectional survey conducted by Kebaabetswe et al (2003:14) among 602 people, which indicates that acceptance of the use of male circumcision in Botswana is high.

- ***Subcategory 3.2.1: Lack of awareness of the benefits of male circumcision***

In this study, however, despite the fact that an understanding of the benefits of male circumcision was indicated by the majority of the participants, a significant number of the participants seemed not to understand the benefits associated with male circumcision. This is evidenced in the following responses:

> "It is like there are so many answers, sometimes you can be misled. Right now I cannot say that I know, because there are many reasons I am hearing around."

> "I don't think that people in Kweneng understand it very well, because it existed a long time ago, and it has not been there again."

> "But even our parents, I don't think they even understand it!"

> "Others ask 'What is the reason of cutting the foreskin?'"

The findings of other studies also indicate that there is a need for more information on male circumcision education if men are to fully understand the benefits of being circumcised. This information is essential for acceptance of the use of male circumcision. In a study conducted on the acceptance of medical male circumcision in Kampala, Uganda, many respondents expressed the desire for more information about the procedure of medical male circumcision and its benefits, which health workers claimed indicated an urgent need for a widespread education campaign before a national male circumcision policy is implemented (PlusNews 2009:3).

The category of participants' knowledge of the benefits of male circumcision indicates that the men differ in the knowledge that they have, with some of the men being aware of the benefits, while others are not aware of them.

- ***Subcategory 3.2.2: Acceptance associated with decision making***

Acceptance of male circumcision, however, is not in itself a fulfilment of positive health behaviour. This issue is explained by the men with regard to their position in taking a decision to utilise available male circumcision services (or to be circumcised) for the prevention of infection with HIV and other sexually transmitted infections. For example, some of the men were undecided about whether to do it or not, and were therefore slow to actualise the desired behaviour of undergoing circumcision. One participant said,

> "People have not yet decided whether to do it or not […] as for me, I am still thinking about it."

- ***Subcategory 3.2.3: Acceptance associated with advocating for circumcision for their children***

The indecision to be circumcised observed among some men in Kweneng East has been attributed, among other reasons, to the fact that some of the men felt that they had passed the appropriate age for them to undergo male circumcision, and they therefore felt that male circumcision programmes should be focused towards the youth and children.

Studies conducted among men report that men feel strongly that circumcision should take place before the onset of puberty, and 7-13 years was considered to be the best age for undergoing the procedure, since the wounds heal faster than when circumcision is done post-pubertally, when there is perceived to be greater risk of complications and pain (Ngalande, Levy, Kapondo & Bailey 2006:3).

In this study, these sentiments were confirmed by the following responses:

> "They don't want to do it, because they say that they have already grown up to being men without it. So why should we do it now? I would rather convince my children than myself. For the younger generation, yes, but for our age it is very difficult."

> "Yes, men are supportive of male circumcision, especially for the children, but on their part they say 'What is the use?' Like for me, I don't indulge in sexual activities like before. I stick to one sexual partner that I have children with, and we use condoms as we have been taught."

> "I think it should be done to people under the age of 15 years, as doing it after this age may interfere with the size of the penis."

- ***Subcategory 3.2.4: Acceptance associated with fears that male circumcision promotes high-risk behaviours among men***

While some men attributed their indecision to be circumcised to fears that they were too old, asserting that they felt more comfortable using condoms as an HIV prevention strategy, others were undecided to undergo circumcision, as they feared that being circumcised would cause them to engage in unprotected sexual intercourse and high-risk behaviours among men. This was alluded to by one participant, who said,

> "The problem with male circumcision is that they start moving about, doing things, like in pornographic situation, where foreskins have been removed. They start sucking of penises and so on. These are the things they talk about as the benefits of male circumcision."

To confirm these sentiments, the researcher asked the participants to validate whether some circumcised men use their circumcised status as an excuse to engage in unprotected sexual intercourse. The following was the response:

> "It is true, because we talk in bars, and they say that they just do it because they are circumcised. They say that the 60% chance of not contracting the infection is a large percentage, and so they can just do it. The issue of percentage is also misleading men."

These views are consistent with the findings of the study of Bailey, Stephene, Quarke, Ago, Maclean, Krieger, William, Campbell and Ndinyana-Ackola,(2007:28), who conducted clinical trials at Orange Farm in South Africa, which revealed that circumcised men engage in more high-risk behaviours than do uncircumcised men. The study further states that circumcised men believe that they are protected from HIV infection and that they compensate for their risk reduction by engaging in higher-risk behaviours.

The findings under the theme of perceived knowledge of the benefits associated with acceptance of male circumcision among men are varied. Some of the men are aware of the benefits, while others are not aware. With regard to acceptance of male circumcision, most of the men accept it because of the history the tribe has with it. However, most of the men indicated that the procedure was best undergone at a younger age rather than post-pubertally. For this acceptance to translate into positive health behaviours in accordance with the aim of reducing the prevalence and incidence of HIV infection in this group of reproductive age, extra vigilance will be required to prevent high-risk behaviours. This argument is premised on the different interpretations attached to the use of male circumcision. For this reason, the need for adequate education to create the understanding needed for knowledge and acceptance of male circumcision is essential in the implementation of male circumcision programmes in the district.

3.4.4 Theme 4: Perceived risks of male circumcision among men

Perceived risk effects associated with male circumcision among men emerged as another theme. According to Burt (2001:3), a risk is a probability that an event will occur

following a particular exposure, and its associated aetiological chains. Typically, risk factors are surrogates for deeper causes, or can be predictors of a lack of expected positive health behaviour (Stampfer 2004:3). The goal in risk factor exploration is to approximate the possible causes of the phenomenon of low utilisation of male circumcision among the men in Kweneng East District of Botswana. A complementary goal under this theme was to identify emic factors which are more likely to affect the use of male circumcision among men. In the context of the findings of this study, factors that impacted on the use of male circumcision in the prevention of HIV infection were identified as those related to psychological effects, sexual deprivation, and physical pain.

3.4.4.1 Category 4.1: Psychological effects of male circumcision

Factors related to psychological stress in the form of fears associated with the use of male circumcision emerged in this study. Psychological effects in the form of stress are states in which the individual perceives that his well-being is endangered and that he should devote all his energies to the protection of his well-being (Vingoe 1981:90). Associated with psychological effects is the stimulus that produces the feeling of anxiety, fear, dread, or terror in an individual. Promotion of male circumcision among men in the Kweneng East District of Botswana has not occurred without feelings of fear having been induced. Under this theme, the subcategories of factors that have induced fear are discussed.

- ***Subcategory 4.1.1: Fear associated with HIV testing***

According to the WHO, as indicated in its information package on male circumcision, the scaling up of male circumcision programmes should ensure that all male circumcision services provide HIV testing and counselling as part of the recommended minimum package (UNAIDS [Sa]:3). This requires that an individual that decides to undergo male circumcision be administered an HIV test as a prerequisite before surgery.

In this study, much reservation was expressed by the participants with regard to the need for an HIV test. Some of the views that pointed to fears related to the HIV test were the following:

> "The main problem is HIV test. People are afraid to know their statuses."

> "HIV test is the main hindrance, and we are told that if one circumcises while positive, the wound would not heal."

> "I also agree that men fear HIV test […] Men do not do it because they are afraid of HIV test."

The literature confirms these findings of men being afraid of undergoing an HIV test. A study conducted in urban Swaziland on the perceptions of risk and sexual behaviour change following adult male circumcision points to the fact that the HIV test presents an obstacle among men in the use of male circumcision as an HIV prevention strategy (Grund & Hennink [Sa]:7). The same study reports that HIV counselling and testing displayed a complicated relationship to male circumcision. They described HIV counselling and testing as a difficult but necessary step in the process of becoming circumcised, and they reported that for most men the decision of undergoing an HIV test is very difficult and poses a challenge. Other literature indicates that the procedure of voluntary counselling and testing creates fear among the consumers of the service. A study conducted to determine the acceptability of voluntary counselling and testing (VCT) among youths in Kwara State in Nigeria found that ignorance, fear of being found to be HIV-positive, and stigma associated with HIV, among other factors, were obstacles to the utilisation of VCT (Yahaya, Jimoh & Balogun 2010:141).

In this study this position was confirmed by most of the participants, who said,

> "It is true, because you may find that 26 people may queue for circumcision, but by the time you come out of the testing and counselling room only to find few people remaining."

> "HIV testing is okay, but it reduces the number of people… I think it is better one gets tested and not told the results […] We can get tested, but we should not be informed of our statuses."

The views of the men during the focus group discussions revealed concerns with the uncertainties associated with results of the HIV test and the psychological effects of HIV

testing. This was cited as a barrier to the utilisation of male circumcision, as is evident from the following responses:

> "People cannot stand knowing their statuses, as this is associated with carelessness."

> "There is fear of not living well, as people think that when one is HIV-positive, it means the end of life."

In this study it is clear that men view HIV testing as one of the obstacles in the utilisation of male circumcision, due to the stigma associated with an HIV-positive status.

- ***Subcategory 4.1.2: Fear associated with economic deprivation***

According to the literature, men are influenced by various cultural norms in acting out their roles as men. Socially, culturally, and economically, men often have a stronger position than women. Owing to the fact that men are seen as providers, and they believe that they must fulfil this role, many men react negatively if they cannot find work or if they are unable to provide for their families (UNAIDS 2007:5). The assumption in the UNAIDS report cited above is that employment opportunities for men are a source of self-esteem and reduce the tendency to engage in high-risk behaviour. This position was expressed by the participants, who said,

> "When we look at the advantages and disadvantages of not doing male circumcision, we can say that it is better to do it, but the problem is to stay home doing nothing. How would one survive?"

> "My main issue is fear of how I would survive without anything to eat at home."

Bailey's (2007:5) views on studies conducted on the acceptability of male circumcision for prevention of HIV/AIDS in sub-Saharan Africa indicate that other obstacles to circumcision cited by research participants were lack of access to health care, and the time spent away from work while the circumcision wounds are nursed. These findings are in line with the views articulated by some of the men in this study, who said,

> "I have never thought of doing it. My fear comes from nursing the wound for a long time and to be away from work, while, on the other hand, I have to fend for myself and the family."

> "Some of us make our living through piece jobs, so what will one do if he undergoes male circumcision?"

> "My concern is to take long time nursing the wound, while other domestic duties are not done. Even at work nothing will be done. Then how do we survive?"

Another study conducted in Nyanza Province of Kenya confirms the above views. Participants reported that too much time spent away from work, particularly if the man is the sole provider for the family, is the most significant obstacle to seeking male circumcision services. This obstacle was observed among the older men in particular, and among men working in the informal sector, as either bicycle couriers, security guards, fishermen, or in other capacities (Herman-Roloff, Nixon, Kawango, Ndinya-Achola & Bailey 2011:11).

These findings indicate that men fear that they will fail to fulfil their social and economic responsibilities as providers. Therefore, fear of economic deprivation due to time taken away from work during the healing period is another obstacle associated with uptake of male circumcision.

- ***Subcategory 4.1.3: Fears associated with the loss of the foreskin***

Most of the men articulated that the presence of the foreskin is valued, as they claimed that it has various benefits. Loss of the foreskin was thus raised as a concern. In Gemmell and Boyle's (2001) survey on circumcision, as cited in Boyle, Goldman and Svoboda (2002:13), reported circumcision harm, several consequences, and feelings of anger, rage, a sense of loss, shame, and a sense of having been victimised and mutilated were noted.

These findings are in line with the views of some of the participants in this study, who said,

> "As for me, I have to remain complete, because since I was born, I have had my foreskin. What is the main reason for me to cut it off?"

> "I have few words. In my opinion, some men have not done it because they are afraid of the loss of the foreskin."

The negative consequences pertaining to loss of the foreskin are discussed according to the following perspectives.

- ***Loss of sexual pleasure associated with the absence of the foreskin***

During the focus group discussions a belief that was frequently articulated was that sexual pleasure is reduced when the foreskin is removed. Men feel that the role that the foreskin fulfils during sexual intercourse is analogous to the function of the diaphragm in an air pump, and that it hence contributes to the full experience of sexual pleasure. Therefore, removal of the foreskin eliminates the pressure that the foreskin exerts during sexual intercourse. This exertion of pressure is believed to contribute to full sexual pleasure. Views that some of the men articulated were:

> "The complaint is that if the foreskin is removed, sexual pleasure will be reduced."

> "We men know that the foreskin acts like a diaphragm in an air pump during sexual intercourse and increases pressure during sexual intercourse […] Now what will happen?"

> "Most men lament on the loss of sexual competition."

Findings by Bailey, Stephene, Quarke, Ago, Maclean, Krieger, William, Campbell and Ndinyana-Ackola (2007:4) from a study conducted in Kisumu, Kenya, indicate that in non-circumcising communities, men prefer to undergo clinical circumcision that is safe and affordable, and concerns were expressed over whether circumcision affects sexual pleasure, how it works, and what is done with the foreskins after surgery (Centre for HIV Identification, Prevention and Treatment Services (CHIPTS) 2007:11).

Under this category, fears related to the loss of the foreskin were viewed from the following perspectives.

- ***Fears associated with the disposal of the excised foreskin tissues***

The participants expressed fears associated with the method of disposal of the excised foreskin tissues. These fears were caused by the lack of transparency on the part of the authorities with regard to the disposal of the foreskins, which led to suspicions they were being used in witchcraft ritual activities. During the focus group discussions and the individual interviews, most of the men expressed insecurities related to the disposal of the tissues.

This is evident from the following responses by some of the men:

> "Where are the foreskins taken to after the operation? […] The government must be hiding something from us."

> "We suspect the government is hiding something because we do not know where these foreskins are going to be used. Is it to patch our cheques, witchcraft, or what?"

These findings correspond to the findings of a study conducted in Zimbabwe on the acceptability of male circumcision of early infants as an HIV prevention intervention, which revealed that participants' concerns were centred around safety and disposal of the foreskins, as they feared that they may be used by witches (Mavhu, Hatzoid, Laver, Sherman, Tengende, Mangenah, Langaug, Hart & Cowan 2009:3).

- ***Fear of future infection, which presence of the foreskin would prevent***

In this study, other important concerns were expressed which indicated fears surrounding male circumcision. These concerns were centred on the possible future need for the foreskin. The following sentiments in this regard were expressed by the participants:

> "Some people think that at one point a disease may come that will require the presence of the foreskin to prevent."

> "I am against male circumcision, as things change in life […] What may be the aftermath of the removal of the foreskin?"
>
> "Men are in a dilemma in case at one point the foreskin will be needed […] I have not done it, but I am of the view that I ask those questions."
>
> "What if there will be another disease that will need the foreskin? […] What will happen? […] What God has given has given."

Fears related to loss of the foreskin were found to be factors preventing some men from utilising male circumcision. These fears were based on concern over a potential decrease in sexual pleasure due to the absence of the foreskin, the possibility of future infections, which would require presence of the foreskin to alleviate them, and the perceived lack of transparency on the part of the health authorities with regard to the disposal of the excised foreskin tissues.

3.4.4.2 Category 4.2: Sexual deprivation

In this study, some men, particularly the young men, expressed concern over the possibility of sexual deprivation due to male circumcision. Fears related to infection of the wound, loss of sexual partners during the convalescence period, shrinkage of the penis, and inability of men to abstain from sexual intercourse during the convalescence period were themes that were prominent in the discussions. In this study, sexual deprivation among men is discussed according to the subcategories below.

- ***Subcategory 4.2:1: Sexual deprivation associated with loss of a sexual partner***

Fear of loss of sexual partners emerged as one of the obstacles to the utilisation of male circumcision in Kweneng District. According to the findings of a study conducted on the acceptability of medical male circumcision among uncircumcised men in Kenya, participants believed that men, particularly young men, would be concerned that their female sex partners might seek other lovers while they are recovering from circumcision surgery (Herman-Roloff et al 2011:11).

In this study, this view was corroborated by one participant, who stated that

> "Us youths are in the tendency of competing for sexual partners. The number of weeks that you take for healing may result in some other guys taking your girlfriend."

- ***Subcategory 4.2.2: Sexual deprivation associated with penile deformity***

Fear of penile deformity associated with male circumcision was another factor that was raised under this category. The fears were linked to the possibility that the penis could rot, shrink in size, or be marred as a result of inappropriate surgery. Some of the views expressed by the men were:

> "People scare us, because they say that after the operation, the penis may rot."

> "I am afraid of doing it, because I once heard one elderly person saying that he saw one boy who did male circumcision, and the penis did not grow."

> "In case I am not operated properly, who will take responsibility?"

> "And if you do male circumcision, you may not enjoy sexual intercourse. So there are so many issues around it, and is the reason why men feel lazy to do it."

Findings of a study by Herman-Roloff et al (2011:12) reveal that common barriers to the uptake of male circumcision are negative implications for reproduction associated with male circumcision resulting from the anaesthetic injection, problems with the appearance of the penis, torsion, infection, a decrease in penile size, and surgical "accidents" that would mar the appearance or impair the function of the penis. In addition, Sigmund Freud (1920), as cited in Boyle et al (2002:9), asserts that circumcision is analogous to castration, and he suggests a possible connection between castration fears and neuroses and circumcision, where life-threatening anxiety can occur in some cases.

- ***Subcategory 4.2.3: Sexual deprivation associated with a period of abstinence***

Post-surgery, the expectation is that the individual has to abstain from sexual intercourse for a minimum period of six weeks to allow for the healing of the wound and to minimise the possibility of contracting HIV infection due to trauma during the convalescence period (Male Circumcision Consortium News 2012:1). Abstinence from sexual intercourse was cited as another barrier to the uptake of male circumcision.

This was alluded to by one participant, who said,

> "Some of us men cannot stay without sexual intercourse."

This view is supported by the findings of a study conducted among uncircumcised men in Kenya on the acceptability of medical circumcision. The men indicated that the convalescence period of six weeks was too long a period for one to abstain from sexual intercourse, and particularly if the man sleeps in the same bed as his wife (Herman-Roloff et al 2011:13).

The implication from the above views is that fear of sexual deprivation associated with diminished sexual pleasure due to absence of the foreskin, penile deformities, and the sexual abstinence required during the healing period are some of the factors that hinder men from utilising male circumcision.

3.4.4.3 Category 4.3: Physical discomfort

Discomfort in the form of physical pain emerged as a theme in all the discussions that were conducted. The discomfort was attributed to the effects of trauma associated with the circumcision operation and the service delivery systems.

- ***Subcategory 4.3.1: Discomforts associated with pain due to surgery***

The literature indicates that fear of infection, bleeding, and excessive pain are some of the main barriers towards male circumcision utilisation (UNAIDS 2007:22). Boyle et al

(2002:1) state that the presence or degree of pain during male circumcision is one of the fundamental issues that divides opinion regarding utilisation.

In this study, fear of pain was frequently cited by the participants. Some of the sentiments voiced by the men were:

> "Some men say that it is good to do it. But most of other men regard it to be too painful, saying 'But it is too painful'."

> "As for me, I have fear, because it is too painful […] It is the fear of pain that comes after circumcision […] we see what those men who have done it go through."

> "People are simply afraid because of pain. […] Look! Us as men, when one is circumcised, one may want to look at a woman, and erection comes, but the erection may be painful […] it would have been better if we were wearing towels all day."

- ***Subcategory 4.3.2: Pain associated with service delivery***

Other participants cited pain and discomfort associated with experiences related to service delivery encountered after the operation. The responses by the participants highlighted a lack of swiftness on the part of service providers and the procedures used at the health centres to provide remedies (analgesics) needed to alleviate discomforts such as physical pain. These issues are evident from the following sentiments which were expressed by some of the participants:

> "We are worried about the manner in which they attend to us, especially the manner in which we are given medication after the operation […] one is made to join a long line [queue] to collect medication [analgesics], even when you are in pain."

> "To sit on those hard benches at the hospital for that long time, waiting to be given medication, makes you feel uncomfortable […] such encounters do discourage us men to undergo male circumcision."

"They don't attend to us with the urgency needed for someone in pain."

Regarding the theme of the perceived risks of male circumcision, a number of factors were found to hinder the men from utilising male circumcision. These include HIV testing prior to circumcision due to the stigma associated with knowledge of one's HIV status, and fear of economic deprivation experienced during the convalescence period after surgery due to long absence from work. Other factors include fear related to loss of the foreskin based on concerns of a possible decrease in sexual pleasure, the possibility of future infections that would require the presence of the foreskin to alleviate, and the perceived lack of transparency on the part of the health authorities with regard to the method of disposal of the excised foreskin tissues. Issues that emerged under the theme of sexual deprivation were anxiety related to possible penile deformity, loss of sexual partners, and the period of sexual abstinence during the wound-healing phase, which were perceived to have negative implications for the uptake of male circumcision. In addition, physical discomforts in the form of pain associated with the wound, and a lack of urgency by service providers in administering medications for pain relief were cited as other obstacles that have a negative impact on the uptake of male circumcision among men.

3.5 APPLICATION OF THE HEALTH BELIEF MODEL TO THE FINDINGS OF THIS STUDY

The underlying concept of the Health Belief Model is that health behaviour is determined by an individual's perception about disease or the strategies used to decrease occurrence of disease (Glanz, Rimer & Lewis 2002:53). This model argues that an individual will determine the feasibility, benefits, and costs of an intervention or behaviour change and will then attempt to explain the thought process behind the decisions made (Remocker & Shea 2011:1). The exploration of perceptions conducted among the Bakwena men of Botswana on the use of male circumcision for the prevention of HIV infection was contextualised within the assumptions of Health Belief Model (HBM).

3.5.1 Perceived susceptibility

Perceived susceptibility is one's subjective opinion or feeling of being at risk of getting a condition (Glanz et al 2002:53). In this study the age range of the participants was 18-49 years, in accordance with the Botswana HIV/AIDS Impact Survey III (2009:4) by central statistics , which states that HIV prevalence increases sharply with age, peaking between ages 30 and 45, and gradually declining with age. This is the age range with the highest rate of new HIV infections. Of the total sample (n=38), almost all the men (n=37) were single, with only one (n=1) indicating that he was married. Despite the majority of the men not being married, most participants (n=28) indicated that they had sexual partners, which ranged from one to three per person. This is an indication of how susceptible the men in Kweneng East District are to sexually transmitted infections, including HIV. Despite the presence of such risks, the majority of the men (n=26) were not circumcised, while only a few (n=12) were circumcised.

3.5.2 Factors identified as modifiers in the use of male circumcision

According to Glanz et al (2002:52), modifying factors include structural socio psychological factors (personality and structural variables) that influence behaviour. The context of motivating factors in the use of male circumcision for the prevention of HIV infection among men in Kweneng East District can be understood in terms of the following factors.

3.5.2.1 The Bakwena culture

Culture is seen as a shared meaning of systems through which social values are transmitted from one group to another, and where social values are recognised (Leininger 1997:38). Culture reflects the meaning that its people attach to it and guides their actions. Botswana has a history of male circumcision dating back to 1874, which used to be conducted as a cultural practice before it was abolished in 1917, with only a few tribes currently observing the practice (Ministry of Health [Sa]:5). Among the non-practising tribes are the Bakwena people of Kweneng East District. The implication from the history is that a number of generations have not exercised circumcision as a norm regarded as a rite to passage to manhood. The issue that is central to the promotion of male circumcision is to appreciate the history of the Bakwena people and the current cultural dynamics which may have an influence on the use of male circumcision. The

guiding principle in the ethical practice of male circumcision promotion should be moral reasoning that is in line with the values of the community. The prevailing climate of familiarity with the concept of male circumcision in the Bakwena culture creates an enabling environment for acceptance of the practice.

3.5.2.2 Acceptance of male circumcision

Generally, male circumcision in Botswana has been found to be acceptable. This is according to a number of studies that have indicated that it is acceptable, although these studies have mostly been conducted on children. Botswana, in its National Strategy Document on Male Circumcision (Ministry of Health [Sa]:6) reports that male circumcision is regarded as highly acceptable by men and women for a male child, provided the procedure is performed at no cost and is performed in a hospital setting. In the context of this study, the Bakwena people clearly have an environment of acceptance linked to their history, and also based on their relative knowledge of the role that male circumcision plays in the prevention of HIV infection. However, although acceptance is an indicator of positive health behaviour, it does not necessarily predict actualisation of the use of male circumcision. This is also supported by the argument that knowledge and acceptance alone are not predictive of positive health behaviour (Sebone 2001:5). The implication is that a number of enabling factors, in addition to knowledge and acceptance, which act as catalysts, are required to increase positive health behaviour linked to the use of male circumcision. A lack of understanding of such catalytic factors in the culture of a particular ethnic group, and the effects of such factors on service delivery, could lead to lack of compliance to the use of male circumcision. Hence the need for health care providers to be sensitive to those cultural tenets embedded in the value chains of service delivery that may act as barriers to the utilisation of male circumcision.

3.5.3 Perceived benefits of male circumcision

The construct of perceived benefits is the value or usefulness attributed by a person to a new behaviour in terms of its capacity to reduce the risks of developing a disease. According to Boskey (2010:2), it is difficult to convince people to change a behaviour if there isn't something in it for them. In this study, differences were observed in awareness of the benefits of male circumcision. Among the male population of

Kweneng East District, not all men seem to have understood the benefits of male circumcision sufficiently to realise the desired health behaviour. Differences in understanding of the benefits of the use of male circumcision ranged from knowledge of the fact that it controls infections such as HIV and other sexually transmitted infections (STIs) to hygiene considerations, while some men indicated that they had no knowledge of the benefits of male circumcision.

3.5.4 Perceived barriers to the utilisation of male circumcision

Among the major reasons individuals do not change their health behaviours is the thought that doing so will be difficult. Sometimes it is not just a matter of physical difficulty, but social difficulty as well. Changing one's health behaviours can cost effort, money, and time (Boskey 2010:3). Polit and Beck (2008:150) state that the action that an individual takes is determined by the balance or imbalance between the perceived positive and negative forces affecting the health behaviour of the individual. In this study, the barriers identified which affected initiation of the desired health-related behaviour with regard to the use of male circumcision among the men of Kweneng East District are discussed below.

3.5.4.1 Value system-related barriers

Values are acceptable standards of behaviour (Concise Oxford English Dictionary 2009:1597). They are the building blocks for measurement of behaviour among cultural groups. Therefore, any lack of conformity to the standards defined results in resistance. In this study, some resistance related to the value systems that govern the Bakwena people were observed to be barriers to the use of male circumcision.

- ***Barriers related to absence of engagement in the form of consultation with the men as stakeholders***

It is important to work in close collaboration with all decision makers at every level of implementation. This involves identification of decision makers for the purpose of community engagement. Local community engagement through work groups refers to any form of consultation, collaboration, and partnership that has been put in place to enable dialogue between all parties that have a stake in a particular project. The goal is

to reach a point where the project is understood, acceptable, and meaningful to all (Engender Health 2005-2012:3). In this study, the absence of consultation with all critical decision makers, such as men who are the prime focus in the district villages during inception of male circumcision programmes, and the lack of involvement of village elders and women as secondary audiences during service delivery processes, were perceived as being some of the barriers to the use of male circumcision.

- ***Barriers related to cultural beliefs***

Among the barriers observed related to cultural beliefs was the lack of openness with regard to discussions on matters related to sexuality between the elderly and the young. In the Bakwena culture discussions on matters of sexuality are taboo, which creates an environment where it is difficult to offer traditional leadership support to men on matters such as male circumcision. In other words, the environment does not allow for free sharing of information on male circumcision between parents and children.

- ***Barriers related to religious beliefs***

Values associated with religious beliefs have also affected the use of male circumcision among some of the Bakwena men in Kweneng East District of Botswana. Most of the participants regarded the use of male circumcision to be a sinful act before God, and they felt that engaging in male circumcision would violate their religious values, since the use of male circumcision is seen as ungodly and immoral by some religious groups in the district.

3.5.4.2 Perceived source and provision of information-related barriers

Andrews and Boyle (2003:86) state that among the greatest challenges one faces in the provision of health services is to provide such services in a manner that is congruent with clients' values and core meanings. Cultural values and core meanings are known to influence service provider-client relationships in terms of interaction and the provision of useful information about clients' expectations, and they are known to influence the client's sense of what is an appropriate role for the service provider. In this study, barriers were identified associated with the source and the provision of information.

- ***Barriers associated with the use of the mass media***

Most of the men receive information on male circumcision mostly from the media. However, it is believed that reliance on the media leads to gaps in information delivery, due to lack of an interactive atmosphere between the source and the recipient. The men feel that the information provided on the radio is mostly a one-way kind of interaction, where the information that is provided is skeletal in nature and does not provide opportunities to ask questions or to seek clarification on sensitive issues regarding male circumcision. Another barrier that was identified was lack of adequate information provision to convince men in the district before taking the decision of whether to use male circumcision or not. This lack of information is attributed mostly to heavy reliance on the mass media.

- ***Peer information sharing as a barrier***

In as much as peer information sharing can have positive effects, it can equally be a source of disillusionment among communicants if the source of information is not credible. Recognition of the possibility of misconceptions associated with peer sharing can assist service providers to be cognisant of the need to provide adequate information to empower people, which will improve the positive effects regarding male circumcision utilisation. In the context of the community and the churches of Kweneng District, which is governed by value systems that are not open to discussion of sensitive subjects such as those related to sexuality, the use of peer sharing may act as a hindrance, due to misinformation. Vigilance is thus called for among service providers, to ensure that credible sources of information exist and are used, in order to provide adequate information, before peer sharing can yield positive results in the district.

- ***Barriers associated with the adoption of culture-incongruent service provision strategies***

Giger and Davidhizar (2002:185) postulate that each individual is culturally unique and should be assessed and provided with services in a culture-congruent and culturally sensitive manner according to their space, phenomena, communication, time, social organisation, and environmental controls. In Kweneng District concerns were expressed over the use of certain strategies for dissemination of information on male circumcision.

They were described as not being compatible with the defined values of the community. These included the use of young educators to discuss sex-related issues with elders, lack of gender sensitivity regarding service providers, and the use of strategies that are regarded as culturally inappropriate, such as the use of loud music during mobilisation campaigns without segregating the population according to cultural expectations. Factors such as these have been identified as having affected men negatively in their uptake of male circumcision.

- ***Barriers associated with the quality of male circumcision services provided***

Quality refers to excellence in a given service, and excellence is described as standards and criteria in accordance with the expectations of various different role players (Jooste 2008:263). Among the perceived barriers related to service provision, the men expressed concerns over the lack of depth in the information provided by the mass media, the user-unfriendliness of the print media in terms of its language usage, and the inability to read of some of the inhabitants in the villages. Another challenge cited was the lack of quality in the counselling services provided. The counselling services were described by participants as being fragmented and lacking in essential information about male circumcision required to prevent high-risk behaviours among the circumcised.

3.5.4.3 Barriers associated with the perceived risks of male circumcision

The theme of barriers associated with the perceived risks of male circumcision sought to understand what perceptions stem from the functioning of the individual's body regarding the use of male circumcision. The psychological component of this theme looked for potential psychological effects of such as fear, emotional turmoil, and negative thinking. The social aspect looked at the effects of sexual abstinence, while the physical part of the theme investigated how the circumcision surgery would influence health-related behaviour with regard to uptake of male circumcision. Under this theme a number of factors hindering the use of male circumcision, in addition to the barriers stated above, were mentioned by the men.

- ***Barriers associated with the fear of undergoing an HIV test***

The scaling up of male circumcision programmes is premised on the guideline which ensures that all male circumcision services provide HIV testing and counselling as part of the recommended minimum package (UNAIDS [Sa]:3). This requires that an individual who decides to undergo male circumcision be administered an HIV test as a prerequisite before surgery. In Botswana, according to Safe Male circumcision National Strategy (Ministry of Health [Sa]:16), although not mandatory, the provision of HIV testing is recommended for all men seeking male circumcision. The psychological discomforts related to stigma associated with knowledge of being HIV-positive creates fear among men in the district, which leads to indecision and avoidance of male circumcision.

- ***Barriers associated with the fear of economic deprivation***

Socially, culturally, and economically, men have a stronger position than women do in most cultures. Based on this fact, men are seen as providers in society. Men believe that they must fulfil this role, such that many men react negatively if they cannot find work or if they are unable to provide for their families (UNAIDS 2001:5). In this study, it was mentioned that the time taken to heal while away from work presents fears of lack of provision, particularly for those in casual employment. This expectation is inherent in the socially, culturally and economically defined roles of men in Botswana society. In Botswana, as in other African countries, men are expected to provide for their families. For this reason, fear of economic deprivation due to absence from work was cited as an obstacle for men in the uptake of male circumcision.

- ***Barriers associated with fears of loss of the foreskin***

The foreskin is biologically valued by most of the men for various reasons, such that its loss causes psychological fears among men (Boyle et al 2002:13). The belief associated with the foreskin as being analogous to the role played by the diaphragm in a pressure pump leads to psychological fears of loss of pleasure during sexual intercourse if the foreskin is removed. Among the many barriers mentioned were concerns related to the method of disposal of the foreskins. This is based on the feeling among the men that there is a lack of transparency on the part of government and

health service providers, whom the men suspect may be making the excised foreskin tissues available for the practice of witchcraft-related rituals. Other reasons mentioned were fear of loss of sexual pleasure and the possibility of diseases which would require presence of the foreskin to prevent in future.

- ***Barriers related to sexual deprivation***

Concerns were expressed that the penis could rot, become deformed, or diminish in size subsequent to the circumcision procedure. In addition, it was mentioned that the period that a man is expected to abstain from sexual intercourse after the procedure (six weeks) creates fears of losing a partner during the healing period. To some men a challenge posed by the period of healing was that they felt that it would be difficult to abstain from sexual intercourse for the healing period of six weeks for fear of other men taking their sexual partner. Fears of this nature among men inhibit them from freely utilising male circumcision. Instead, they express the preference that circumcision be performed on young children who have not yet reached reproductive age, where it is felt that the required healing time does not pose any major obstacles for the child.

- ***Barriers associated with physical discomforts due to male circumcision***

The physical discomforts of male circumcision are in the form of pain experienced after the surgery. Pain is described as unpleasant sensations caused by various stimuli that activate one's pain receptors (Plotnik 2002:652). Although pain is known to be essential for survival, as it acts as a warning sign to escape danger, the management of pain in male circumcision is critical to prevent the pain from becoming a barrier. In this study fears of pain associated with surgery were expressed. These physical discomforts are attributed to the lack of ready access to pain relievers such as analgesics at clinics and hospitals. It was mentioned that the discomforts are aggravated when men are expected to sit on hard benches and to queue for a long time before analgesics or other medications are provided. It was stated that fear of pain discourages some men from utilising male circumcision.

- ***Conclusion***

In this study, insights pertaining to the perceptions held by men regarding the utilisation of male circumcision in the prevention of infection with HIV and other sexually transmitted diseases have clearly indicated the need for vigilance when implementing male circumcision services. Generally, the men in Kweneng East District of Botswana accept male circumcision. However, an understanding that people are different and unique is essential in the formulation of frameworks for effective implementation of such services. This will lay the ground for policy makers and implementers at all levels to exercise caution when adopting mass male circumcision campaigns by developing implementation models or frameworks that take serious consideration of the cultural tenets, such as values and norms, of various ethnic groups. This means that to achieve the goal of male circumcision, vigilance in its implementation is required. This implies that there cannot be a generic approach that caters for all ethnic groups, but that cultural awareness and knowledge obtained through situational analyses are required to identify the various different culture-congruent methods of implementing male circumcision. Donor agencies and nations stand the risk of wasting resources and failing to produce results if priority is not given to cultural sensitivities and appropriate well-monitored implementation frameworks. Ignoring the cultural gatekeepers of service provision, such as consultation, appropriate channels of communication, and provision of other male circumcision-friendly services, will lead to resistance and lack of compliance by men.

3.6 SUMMARY

This chapter has presented and described the findings of this study. The outline included the themes, categories, subcategories, and units of meaning used to substantiate the views of the participants. Each theme and category has a conclusion statement at the end. All the themes discussed have been supported and discussed with reference to other literature. The presentation of the themes has also been contextualised within the framework assumptions of the Health Belief Model. The themes developed in this chapter will be discussed in the form of theory in Chapter 4.

CHAPTER 4

DEVELOPMENT OF A CULTURE-CONGRUENT MALE CIRCUMCISION MODEL FOR HIV PREVENTION

4.1 INTRODUCTION

Chapter 3 presented the findings of the study in the form of themes, categories, and subcategories, with a literature control. In this chapter, the researcher describes the concept of culture congruence of male circumcision by defining the attributes of the concept that were used to develop a culture-congruent model for HIV prevention. The researcher also looks at how the concept was identified and analysed and explains the process of a culture-congruent male circumcision.

To be able to develop the model, the researcher had to start by identifying the concept of culture congruence of male circumcision.

4.2 CONCEPT IDENTIFICATION

Chinn and Kramer (1995:81) argue that selecting a concept is the most important step of concept analysis, and it involves identifying the concept that the researcher intends to communicate in the model. Four themes were identified during data analysis, namely perceived effects of the value systems on the use of male circumcision, perceptions of the source and the provision of information, perceived knowledge of the benefits associated with male circumcision, and perceived risks associated with male circumcision. From an in-depth understanding of the data, it became clear that the promotion of male circumcision for HIV infection prevention in Kweneng East District does not take into consideration culture-congruent strategies in relation to the values and beliefs of the Bakwena culture.

4.2.1 Significance of the concept “culture congruence”

Rodgers and Knafi (2000:31) assert that the ability to solve problems, to characterise phenomena adequately, and to enhance knowledge about the phenomena is the

essence of a concept. It is useful to refine ambiguous concepts in a theory, as this will result in precise operational definitions, which will enable validation of the construct under investigation (Walker & Avant 2011:158). In this study the main research problem was that despite there being high prevalence of HIV and other sexually transmitted infections (STIs) in Kweneng East District, as well as promotion of male circumcision for HIV infection prevention, there is low uptake of male circumcision. From an analysis, the use of unacceptable male circumcision promotion strategies emerged significantly as the main factor underlying the low uptake of male circumcision services. It became evident from the findings that men will use male circumcision services if they are seen to be relevant and are provided in a manner that is culturally acceptable. Therefore, **culture congruence** became the focal concept in male circumcision promotion. To provide a clear meaning of the concept, the following section analyses the concept "culture congruence".

4.3 CONCEPT ANALYSIS

Webster (1991), as cited in George (1995:1), defines a concept as a word or words that represent reality and enhance our ability to communicate. Concept analysis implies breaking down into well-defined components; it reflects building and rebuilding and assumes that the essential components have been identified and defined (Meleis 2005:208). Other authors have given other reasons for conducting concept analysis. For example, Walker and Avant (1995:37) explain that concept analysis is a strategy to examine the attributes of a concept. According to Burns and Grove (2005:122), concept analysis is a strategy through which a set of characteristics essential to the connotative meaning of a concept is identified. Meleis (2005:205) states that a concept could have been accepted in daily experience, but that due to its embeddedness in nursing experience, the existence and properties of the concept have become normalised, thereby camouflaging and limiting the growth and meaning of the concept. She further states that such concepts could have been taken for granted to the extent that members of the discipline are not aware of their significance.

In order for the researcher to bring the concept closer to use, to answer some important questions, and to develop a culture-congruent HIV-prevention male circumcision model for the Kweneng East District of Botswana, the concept of **culture congruence** had to be properly defined.

4.3.1 Definitions of culture congruence as a concept

In this study, the participants articulated what they deemed to be acceptable behaviour by service providers. It was emphasised that there is a need to respect the way of life of participants as prescribed by their culture when dealing with them. In other words, culture-related concerns emerged in all the discussions that were conducted during the study. To enable understanding of the concept of **culture congruence**, conceptual definitions are provided from dictionaries and various authors who have defined the meaning of cultural congruence in the context of the subject.

4.3.1.1 Culture

The Collins Cobuild Advanced Learners' Dictionary (2004:342) defines culture as a particular society or civilisation, especially considered in relation to beliefs, way of life, or art. Macmillan English Dictionary (2002:338) defines culture as a set of ideas, beliefs, and ways of behaving of a particular organisation or group of people. According to the Chambers Concise Dictionary (2003:305), culture refers to the customs, ideas, values, or art of a particular civilisation, society, or social group. According to the Oxford Advanced Learners' Dictionary (1999:2002), culture is concerned with art and other manifestations of human intellectual achievements regarded collectively, or the customs, civilisation, and achievements of a particular time or people. The Oxford Advanced Learner's Dictionary (2010:356) defines culture as the customs and beliefs, way of life, and social organisation of a particular country or group. The Concise Oxford Thesaurus (2002:190) defines culture as way of life, lifestyle, traditions, customs, heritage, habits, ways, mores, and values.

These definitions indicate to the researcher that culture is a constellation of many factors, such as values, customs, behaviour, beliefs, way of life, and generally what individuals of a particular group, organisation, or society regard as their civilisation.

4.3.1.2 Congruence

According to the Concise Oxford English Dictionary (2009:309), the word "congruence" means to be in agreement or harmony, or simply to be identical. Congruence is said to

exist when two things are similar or fit well together (Collins Cobuild Advanced Learners' Dictionary 2004:293). When something is suitable or appropriate, it is also referred to as being congruent (Chambers Concise Dictionary 2003:266). According to the Oxford Advanced Learner's Dictionary (2010:306), congruence refers to something that is suitable or appropriate in a particular situation. The Concise Oxford Thesaurus (2002:164) defines congruence as compatibility, consistency, conformity, match, balance, consonance, congruity, agreement, accord, consensus, harmony, or unity.

The conceptual definitions of the above concepts are intended to impart meaning to the conceptualisation of the concept "culture congruence".

4.3.1.3 Subject definition of culture congruence

According to Crapo (1990:1), culture consists of learned systems of beliefs, feelings, and rules for living from which a group of people organise their lives, including the way of life of a particular society. Anderson, Scrimshaw, Fullilove, Fielding and Normand (2003) and Horne et al (2004), as cited in Capell, Veenstra and Dean ([Sa]:31), state that culture encompasses learned patterns of thought and behaviour, including language, values, actions, religion, and rules of conduct, which distinguish a particular social group from others. Culture has also been described as incorporating concepts of race, ethnicity, religion, language, nation of origin, and other factors (Bullock 2010:85). According to Kagawa-Singer and Wellisch (2003), as cited in Saca-Hazboun and Glennon (2010:282), culture affects way of life and well-being and provides beliefs and values that give meaning and purpose to life. The above authors further state that culture gives individuals a sense of identity, self-worth and belonging, as well as rules of behaviour that enable members of a cultural group to survive physically and to provide welfare and support. Culture is thus also seen from the perspective of support. According to Schim and Doorenbos (2010:256), culture provides the context for all health and social services throughout the human lifespan, across conditions, settings, and situations. It underlies health care delivery at client, provider and system levels, because it is the foundation of expectations, actions, interactions, and the meaning of care. With it, people learn how to be in the world, how to behave, what to value, and what gives meaning to existence.

After initially defining the two words separately, the researcher then combined the two words and examined them as the single concept "**culture congruence**", in order to develop a clear culture-congruent male circumcision model that would assist in the provision of culture-congruent male circumcision services in Kweneng East District of Botswana.

Schim and Doorenbos (2010:259) define culture congruence as a process of effective interaction between the provider and the client, based on the idea that cultural competence is ever-evolving and requires continual improvement in order to achieve quality care. Culture-congruent care involves actions and decisions that fit with people's way of life, to support satisfying health care and promote well-being or dignified dying (McFarland, Mixer, Wehbe-Alamah & Burk 2012:259).

As a **process of interaction**, culture congruence starts with conscious preparation to define and solve a problem in an interactive manner, which is regarded as ongoing, between the provider and the client (Jooste 2008:212). According to Jooste (2008:212), such a process of association is characterised by the development of more ideas, which will lead to creative problem solving. To achieve this, providers as agents of change need to demonstrate creative leadership. Hackman and Johnson (1991), as cited in Jooste (2008:212), view creativity as an integral part of leadership among providers as change agents, as it requires looking at problems from different perspectives, thinking in broad categories, and finding various solutions in a manner that is befitting to the client. Engender Health (2005-2012:4) describes such a process as one which involves those who have a role in or are interested in and/or affected by the activities and goals of a programme. This engagement spans activities that include dialogue and consultation, collaboration in identifying problems and solutions, partnering in implementation and evaluation, and capacity building and empowerment.

According to Schim and Doorenbos (2010:256), culture congruence is premised on the idea of *cultural competence* Campinha-Bacote (2002:181) defines cultural competence as an ongoing process in the delivery of health care services, and it requires that health service providers see themselves as *becoming* culturally competent, rather than already being culturally competent. Cultural competence implies that providers should *develop* certain psychomotor or behavioural skills (Andrews & Boyle 2003:18). These psychomotor skills are crystallised around the concepts of *cultural awareness, cultural*

knowledge, cultural skills, cultural encounters, and cultural desires (Campinha-Bacote 2002:181). Pesquera, Yoder and Lynk (2008:116) view cultural competence as *acquiring and integrating* knowledge with awareness, attitudes, and skills about culture and cultural differences that **enable** health care professionals to *provide optimal and expert care* to clients from different racial, ethnic, socio-economic and cultural backgrounds. As a *process*, providers strive to work successfully *within the cultural context* of individuals, families, and communities (McFarland, Mixer, Wehbe-Alamah & Burk 2012:259). Leininger and McFarland (2002), cited in Oermann and Heinrich (2005:262), view cultural competence as involving the *use of culturally based care* and health knowledge in sensitive, creative and meaningful ways to fit the general way of life and needs of individuals or groups for beneficial and meaningful health and well-being.

The American Academy of Nursing (1992), as cited in Capell, Veenstra, and Dean (2003:31), states that cultural competence is the **process** in which the health care provider *continuously strives to achieve the ability to work effectively* within the cultural context. Suh (2004) as cited in Capell et al ([Sa]:31), define cultural competence as *an ongoing process with the goal of achieving the ability to work* effectively with culturally diverse groups and communities with detailed awareness, specific knowledge, refined skills, and personal and professional respect for cultural attributes, both similar and different ones. With cultural competence, practices have been widely accepted in social work as standards that decrease disparities in the quality of service delivery. *Standards for cultural competence* include guidelines that address several key areas of social practice, including ethics, values, self-awareness, cross-cultural knowledge, skills, service delivery, empowerment, and advocacy (Bullock 2010:85). Cultural competence asks whether providers provide care in a manner that is *compatible with the client's health beliefs and practices*, whether health care provider organisations have a plan to *recruit diverse staff and leadership* that represent the community they serve, and whether the provider is being *given education and training in culturally and linguistically appropriate service delivery* (Pesquera, Yoda & Lynk 2008:116).

These reflections are based on the understanding that, first, *cultural diversity is a reality* in today's health care and social environment, that, second, *individual backgrounds*, experiences and exposures to diverse human cultural patterns vary widely from place to place, and that, third, *culture changes* over time, based on the number and type of

people encountered, as well as the nature and intensity of cross- cultural interaction (Schim & Doorenbos 2010:261).

According to Schim and Doorenbos (2010:261), the process of culture-congruent interaction involves the *client as the consumer* of the health service. As a behavioural construct, cultural competence *consists of actions that are tailored towards the demands* of cultural diversity and awareness of and sensitivity to clients. Cultural competence bridges the differences and barriers that frequently occur when people of diverse cultures interact and communicate. The term “client” in this context refers to *individuals, families of communities, or ethnic groups*. Within the global diversity of cultures is also the idea that individuals within groups tend to differ on these dimensions of culture. Such awareness *enables providers to act locally* in tailoring assessments and interventions to specific client needs, thereby *guarding against inappropriate stereotyping.*

The achievement of *quality care* in the process of cultural congruence is *the intended outcome*. According to Jooste (2008:262), quality refers to excellence in a given service, and excellence is described by means of *standards and criteria* in accordance with the expectations of different role players. Andrews and Boyle (2003:70) define quality of care as reported satisfaction with the care provided by health providers. Achievement of quality care involves actions and decisions that fit with people’s way of life, to support satisfying health care (McFarland et al 2012:263). Quality care refers to those *appropriate actions* or decisions related to cultural care preservation, cultural care accommodation, and cultural repatterning, which fit with or are specifically tailored to meet client needs, in order to improve health (Leininger 1997:38). As a quality assurance measure, total continual quality improvement initiatives aimed at gathering information from clients about their overall satisfaction with care using instruments that are culturally appropriate are required (Andrews & Boyle 2003:71).

4.3.2 Attributes of the concept “culture congruence”

According to the Concise Oxford English Dictionary (2009:85), attributes refer to qualities or features that are characteristically inherent. They are regarded as critical characteristics that define the boundaries of understanding and also answer the question “What is this?” that the researcher is seeking to answer (Chinn & Kramer

2011:185). Rodger and Knafi (2000:91) assert that identification of the attributes of a concept represent the primary accomplishments of concept analysis.

The researcher identified various attributes in the process of defining the concept "culture congruence", based on the concepts of "process", "provider", "client", and "outcome". These attributes are presented in the tables 4.1, 4.2, 4.3 and 4.4 as shown below.

Table 4.1 Attributes of the process in the concept "culture congruence"

Culture congruence as a process
• Involves effective interaction
• Conscious decisions are made
• Involves problem identification
• Involves problem solving
• There is dialogue
• There is consultation
• There is partnership
• There is capacity building
• The process is ongoing
• Involves integration of knowledge with awareness, attitudes, and skills
• There are assessments and interventions
• Guidelines are required
• Communication is involved
• People interact, and there is client involvement
• Cultural preservation, cultural repatterning, and cultural accommodation
• Continuous quality improvements

Table 4.2 Attributes of the provider in the concept "culture congruence"

Provider
• Evolving cultural competence
• Requires improvements
• Requires creative leadership
• Looks at problems from different perspectives
• Thinks in broad categories
• Finds solutions
• Sees self as becoming culturally competent
• Requires cultural awareness
• Requires cultural knowledge
• Needs to have cultural desire
• Provides expert and optimal care
• Strives to work successfully
• Requires specific cultural knowledge
• Requires cultural skill
• Creativity
• Continually strives to achieve the ability to work effectively
• Provides compatible care
• Organises a plan
• Requires education
• Requires training
• Requires cultural knowledge
• Makes decisions befitting people's way of life
• Gathers information from clients
• Must have respect for culture

Table 4.3 Attributes of the client in the concept "culture congruence"

Client
• Individuals
• Families
• Communities
• Groups
• Culturally diverse groups and communities
• Consumers of health care
• Culturally diverse
• Ethnic groups
• Clients differ in their culture

Table 4.4: Attributes of the outcome in the concept "culture congruence"

Outcome
• Quality care
• Well-being
• Meaningful care
• Fitting to client
• Specific client needs
• Excellence of service
• Reported satisfaction of care
• Satisfactory health care
• Compatible care
• Specific cultural practice
• Satisfactory care
• Empowerment

The researcher applied a reduction strategy to identify the attributes that constitute the appropriate meaning of culture-congruent male circumcision. This was determined by the frequency of the attribute, similarity in meaning, and the significance of the attribute to the model as shown in tables 4.5 and 4.6 below.

Table 4.5 Most frequent and significant attributes

Attribute	Frequency	Sources
Interaction	2	Schim & Doorenbos (2010:259); Jooste (2008:212)
Actions	3	Schim & Doorenbos (2010:261); McFarland et al (2012:263); Leininger (1997:38)
Solutions	3	Jooste (2008:212); Engender Health (2005-2012:4); Hackman & Johnson (1991), as cited in Jooste (2003:212)
Cultural competence	6	Schim & Doorenbos (2010:256); Campinha-Bacote (2002:181); Andrews & Boyle (2003:18); Pesquera et al (2008:116): Capell et al (2003:31); Bullock (2010:85)
Cultural knowledge	3	Campinha-Bacote (2002:181); Pesquera et al (2008:116); McFarland (2002), as cited in Oermann & Heinrich (2005:262); Suh (2004) as cited in Capell et al ([Sa]:31)
Cultural skill	3	Campinha-Bacote (2002:181); Pesquera et al (2008:116); McFarland (2002), as cited in Oermann & Heinrich (2005:262); Suh (2004) as cited in Capell et al ([Sa]:31)
Cultural desire	3	Campinha-Bacote (2002:181); Pesquera et al (2008:116); McFarland (2002), as cited in Oermann & Heinrich (2005:262); Suh (2004) as cited in Capell et al ([Sa]:31)
Specific care	3	Schim & Doorenbos (2010:256); McFarland et al (2012:263); Leininger (1997:38)
Satisfactory care	2	Andrews & Boyle (2003:71); Jooste (2008:262)
Assessment	2	Schim & Doorenbos (2010:256); Andrews & Boyle (2003:71)
Partnership	2	Schim & Doorenbos (2010:256); Engender Health (2005-2012:4)
Dialogue	1	Engender Health (2005-2012:4)
Consultation	1	Engender Health (2005-2012:4); Schim & Doorenbos (2010:259)
Evolving	3	Schim & Doorenbos (2010:259); Jooste (2008:212); Suh (2004) as cited in Capell et al ([Sa]:31)

Table 4.6 Defining attributes of the concept "culture congruence"

The process	The provider	The client	The outcome
Interaction	Cultural competence	Individuals	Specific care
Evolving	Cultural awareness	Families	Satisfaction
Solutions	Cultural knowledge	Communities	
Dialogue	Cultural skill	Ethnic groups	
Consultation	Cultural desire		
Partnerships			
Actions			
Assessments			

4.3.3 Definition of culture-congruent male circumcision

Based on the literature reviewed and the attributes, the researcher concluded that the meaning of a culture-congruent male circumcision can be understood through the lenses of the domains involved, namely the process, the provider, the client, and the outcome.

In the context of this study, culture-congruent male circumcision is a process that involves interaction between the provider and the client, with the intention of identifying problems through assessment, sharing ideas, and finding solutions, for the purpose of providing male circumcision services in a way that is specific, compatible with, and meaningful for clients. During interaction, an atmosphere of dialogue, partnership, and consultation is enhanced, thereby creating a sense of ownership and empowerment. Culture-congruent male circumcision is competence-based, as it requires providers to display creativity and leadership, and to integrate cultural awareness, knowledge, skills and desires, to enable them to function effectively in multicultural societies. For this reason, providers should continually strive to improve, so that they can render quality male circumcision services, considering that individual backgrounds, experiences and exposures to diverse human cultural patterns differ widely from place to place, and considering that culture changes over time, based on the number and type of people encountered, including the nature and intensity of the cross-cultural interaction.

4.3.4 Construction of a culture-congruent male circumcision model, and borderline cases

Under this section the researcher constructed a model and borderline cases, with the intention of enhancing understanding of the concept "culture-congruent male circumcision". According to McKenna (1997:64) and Walker and Avant (2011:164), borderline cases are often valuable ways of gaining deeper insights into concepts.

4.3.4.1 A culture-congruent male circumcision model case

The constructed example of a culture-congruent male circumcision model case is an example with the defining attributes of the concept. According to Walker and Avant (2011:164), a model case is a real-life example of the key concept, and it includes all the critical attributes of the key concept. In this case, the key concept is "**culture congruence**".

- ***Example of a "model case"***

Village **Y** is one of the villages in district **X** of country **ZP**, where male circumcision is not practised as part of the people's culture. Statistically, the village reported a high prevalence of HIV/AIDS. Upon a review of clinical records, it was found that sexually transmitted infections were prevalent among men and women of reproductive age. As one of the intervention programmes, the HIV/AIDS coordination officers of the district decided to embark on a male circumcision promotion programme, as one of the additional strategies to curb the infection rate in village **Y**. The officers started by visiting the traditional leadership of the village, to explain the objectives of the new programme and to determine the cultural beliefs of the people of the village and to obtain feedback concerning the practices of the people of the village. They decided to conduct several meetings with the leaders and the men to create awareness and to receive feedback on what is culturally acceptable. The team of officers then identified men of the village (peer educators) to work with the team to promote the use of the programme. This approach yielded positive results, as the men responded positively. After 12 months of implementation of the programme, the officers realised that the uptake of circumcision services among the men was not as high as it was during the initial phase of implementation. The promotion team (officers) decided to evaluate the programme in

the village by conducting interviews with the men and the peer educators, so as to find ways to motivate the men who are not circumcised to use the service.

- ***Discussion of the "model case"***

On review of records of the village, the officers discovered a high prevalence of sexually transmitted infections, including HIV. They then took a conscious decision to promote male circumcision services. The team started assessment by identifying with the village leaders, so as to involve them and to develop the necessary cultural knowledge, because they were aware that the people of the village understood their culture better than anyone else, so that they could obtain ideas and solutions. The officers decided to dialogue, interact, communicate, and consult with the leaders and the men on how best to prevent or reduce the infection, through several meetings that were conducted. In order to promote ownership and to provide services in an acceptable manner, they went into partnership with the indigenous people of the village by identifying village peer educators to be part of the implementation process. When they realised that there was a decline in uptake of the services, the officers decided to improve on service delivery by conducting an assessment by means of interviews, so as to determine actions to solve the problem by continually interacting with the people through meetings and the use of peer educators. In this scenario, the officers (providers) demonstrated cultural skill and cultural desire by opening up to the indigenous people to develop competencies for effective performance. The desires to re-evaluate the reasons behind the decline in uptake of the service demonstrated creativity and leadership in ensuring that the problem was solved, and to ensure that services were offered in a specific and satisfactory way.

- ***Example of a borderline case***

In this scenario, the researcher developed a similar case to the ideal, to help readers have an understanding of what a borderline case of culture congruence is. In contrast to a "model" case of culture congruence, a borderline case of culture congruence is an example or an instance that contains some but not all of the critical attributes of the concept "culture congruence" (Walker & Avant 2011:165).

Village **W,** another village that is located in the western part of country **ZP**, is equally affected with high prevalence of HIV infection and other sexually transmitted diseases. The indigenous people also do not practise male circumcision as part of their culture. The officers equally embarked on male circumcision promotion as one of the strategies being promoted by the Ministry of Health in country **ZP**. The district HIV/AIDS coordination officers decided to sensitise the traditional leaders on the relation between male circumcision and HIV prevention. As part of implementation, posters about male circumcision were erected around the village, encouraging men to be circumcised, radio announcements were made, and music shows were held to sensitise the community. Despite all the promotional activities that were performed, men still couldn't go to be circumcised

- ***Discussion of the borderline case***

In this case, the officers from the district office identified the problem, which prompted them to take action. However, the officers then started sensitising without conducting meetings for consultation with the men as users of the service, to create partnerships and to identify solutions to the problem. They used the professional cultural approaches without involving clients in determining the most appropriate ways to approach the implementation; hence there was resistance among the men and lack of goal achievement.

4.3.4.2 Antecedents of culture-congruent male circumcision

According to Walker and Avant (2011:167), antecedents are those events or incidents that must occur or be in place prior to the occurrence of the concept. Antecedents cannot also be the defining attributes of the concept. Therefore, to provide male circumcision services that are culture-congruent, providers need to show respect for cultures, accept cultural diversity, and be willing to learn from those who are not part of their cultural orientation.

4.3.4.3 Consequences of culture-congruent male circumcision

The consequences of culture-congruent male circumcision, on the other hand, are defined as those events or incidents that occur as a result of the occurrence of the

concept (Walker & Avant 2011:167). With the provision of culture-congruent male circumcision, the consequences would be meaningful care and culture-specific services that are compatible with the clients.

4.3.4.4 Define empirical referents

Walker and Avant (2011:168) state that determining the empirical referents for the defining attributes of a concept is the final step in a concept analysis. In the context of culture congruence, the outcomes of the concept would be satisfaction with the service among the clients and a positive response in the form of utilisation of the service.

4.4 A CULTURE-CONGRUENT MALE CIRCUMCISION DEVELOPMENT PROCESS

The purpose of this section is to describe the application of the concept of culture congruence in order to develop a culture-congruent male circumcision model that will improve utilisation of male circumcision services in Kweneng East District of Botswana. The researcher applied the aspects of Dickoff et al's (1968:422) survey list, namely the agent, the recipient, the context, the procedure, the dynamics, and the terminus (outcome), to classify the concepts in the model. The aspects of this model are described below.

4.4.1 Agent

An agent is an individual that provides a particular service (Concise Oxford English Dictionary 2009:24). Agents propel the actions intended to achieve the goal of preventing HIV infections through the promotion of culture-congruent male circumcision. In this study, the agents are the medical doctors, nurses, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), including private and public sectors, that perform the activities of male circumcision promotion. The role of the provider is to demonstrate creative leadership, cultural awareness, cultural knowledge, cultural skills and cultural desire for effective performance.

4.4.2 Recipient

Dickoff et al (1968:426-428) defines the recipient as the individual who receives the services from the agent. In this study, the recipients are the men of reproductive age (15-49 years) in the families, communities, and ethnic groups of diverse cultures.

4.4.3 Context

According to Meleis (2005:256), context includes the conditions under which the activities are manifested, and consists of human, professional and organisational facilities. . It is the circumstances that form the setting of an event or an idea (Concise Oxford English Dictionary 2009:308). The context in this study is Kweneng East District of Botswana. It includes the families and the communities in which the men are found. The family is part of the community context and has its own cultural values, norms, and belief systems, as well as those of the community in which it exists. The sociocultural context includes strong cultural values, beliefs, and norms, as well as social ties, and how they influence social networks in a particular community. The health context is equally important. It is important that the services that are offered conform to culture-congruent ways of service delivery. Services should be accessible and available in terms of location.

4.4.4 Procedure

According to Dickoff et al (1968:430-431), procedure refers to the process that service providers need to follow in order to achieve the desired result. In the context of culture-congruent male circumcision, the procedure would involve the following.

First, cultural assessment is conducted at provider and client levels to acquire cultural awareness, knowledge, skills, and desire. At provider level, self-assessment and in-depth exploration of one's own cultural and professional background values and how they can influence the client is essential (Campinha-Bacote 2002:181). At client level, the focus is the individual, families, communities, and ethnic groups with regard to the values and beliefs that govern such entities. For an effective assessment to take place, providers and clients need to develop a mutual relationship that will germinate and create an atmosphere of openness among both parties. **Second**, providers and clients strategically develop activities and identify resources for culture-congruent male

circumcision service delivery. **Third**, it is necessary that there be implementation and evaluation of the strategies identified in a way that is customer-focused in terms of specificity and relevance.

4.4.5 Dynamics

Dynamics refers to the activities that are performed or the power sources that are used to promote male circumcision by the agents and the recipients for that particular culture. They are the driving forces behind the activities (Dickoff et al 1968:433). The activities include having continual engagement or consultation with clients and stakeholders, such as traditional leaders, men, women, and parents to advise on the culturally acceptable ways of the community. This approach helps to promote dialogue, including partnerships, which will lead to generation of ideas and solutions for effective performance to avoid unacceptable (culturally insensitive) ways of delivering services. To achieve this, creative leadership is a requirement in the culture congruence process.

4.4.6 Terminus (outcome)

According to Dickoff et al (1968:428-430), the terminus is what the activities that are undertaken accomplish. The expected outcome is that male circumcision services should be viewed as being meaningful in a way that is specific and compatible with clients.

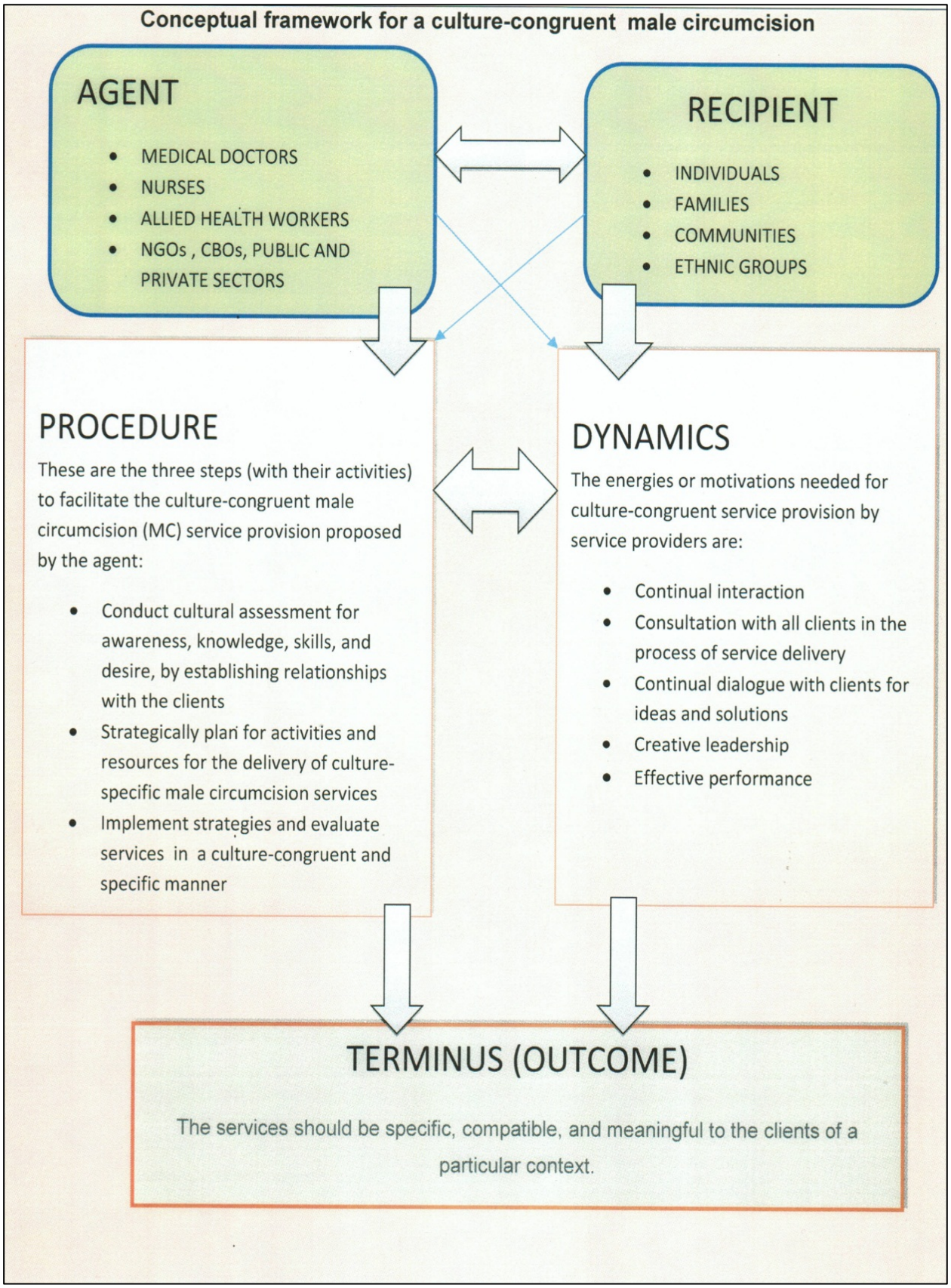

Figure 4.1: The process of a culture-congruent male circumcision

4.5 SUMMARY

This chapter has explained the meaning of the concept “culture congruence” of male circumcision. The aspects discussed in detail in relation to culture congruence include concept identification and concept analysis, by defining the attributes of the concept. Also discussed in this chapter was the process of culture-congruent male circumcision development.

Three steps of the model were identified. The first step is to conduct a cultural assessment. The second step is that providers and clients must strategically develop activities and identify resources for culture-specific male circumcision service delivery. The third step is implementation of actions in a culture-congruent way.

Chapter 5 provides a description of the model devised to facilitate the promotion of culture-congruent male circumcision services.

CHAPTER 5

DESCRIPTION OF A CULTURE-CONGRUENT MALE CIRCUMCISION MODEL FOR HIV INFECTION PREVENTION

5.1 INTRODUCTION

In Chapter 4 the researcher created the meaning of the concept “culture congruence” in the promotion of male circumcision by defining its meaning in the context of this study. Upon conducting concept analysis, the researcher proposed three phases in the process to actualise the concept of “culture-congruent male circumcision”. As an interactive process, these phases require that the provider and the client conduct a cultural assessment, strategically develop activities and resources for the delivery of culture-congruent male circumcision services, and implement and evaluate the strategies in a culture-congruent manner.

According to Chinn and Kramer (2011:185), describing a theory is the process of posing questions about the components of the theory suggested by previous definitions of the theory and then responding to the question “What is this?” In this chapter the description of the model consists of a description of the structure of the model and a description of the process of the model.

5.2 AN OVERVIEW OF THE MODEL

The researcher applied the description of the process and the structure of a model as proposed by Chinn and Kramer (2011:185-194). This is done by looking at the description of the components of the model. In this study the description of the model takes into consideration the following important aspects.

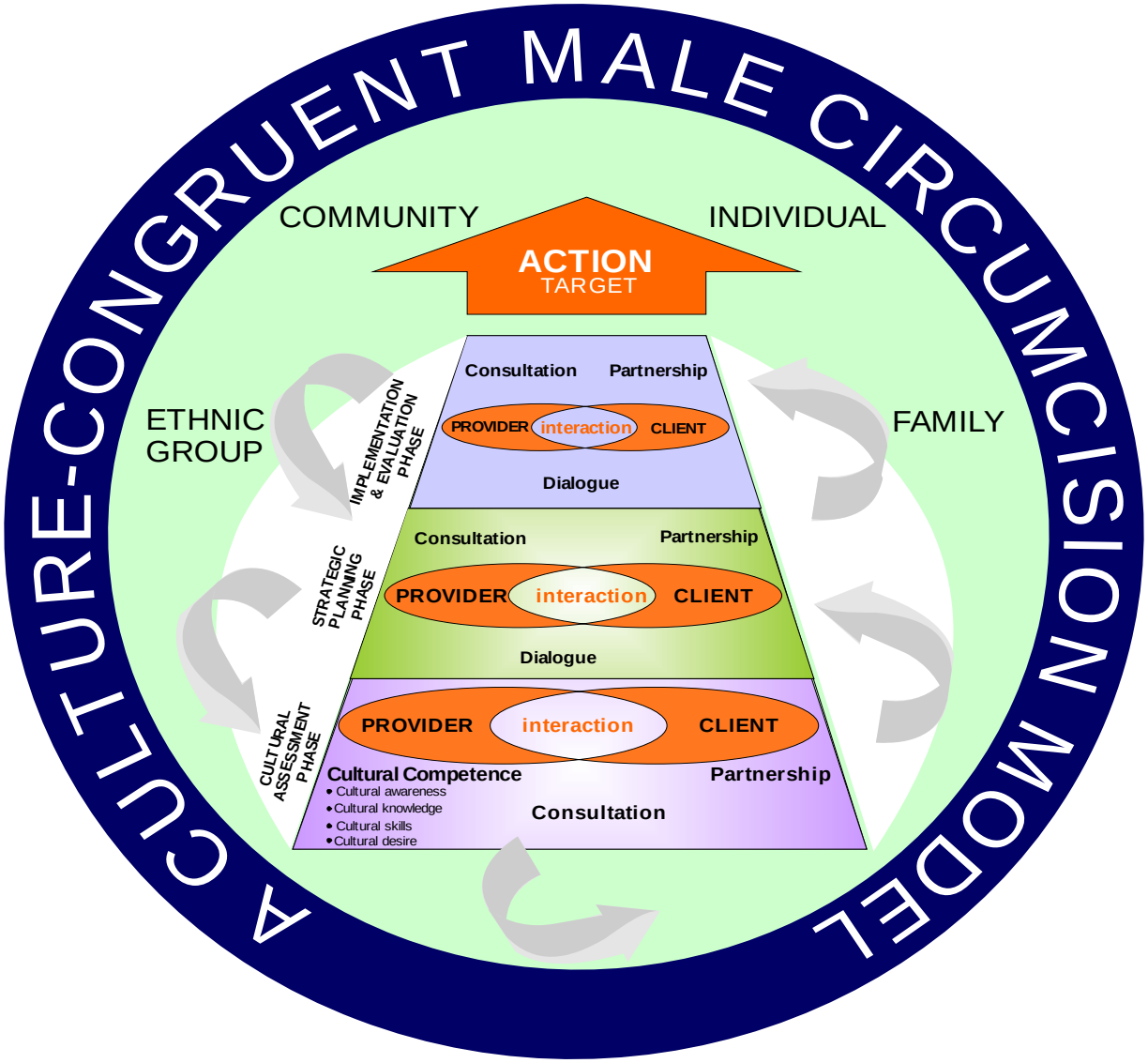

Figure 5.1: A Culture-Congruent Male Circumcision Model

The model shown in Figure 5.1 above depicts the process of rendering culture-congruent male circumcision services. The process is continuous and evolving in nature. It requires that the provider develop competencies that will enable the provision of culture-congruent male circumcision services. The model consists of three phases, namely cultural assessment in the context of service delivery, strategically develop activities and resources needed to deliver culture-congruent male circumcision services, and, lastly, implementation and evaluation of activities in a culture-congruent manner.

After immersing himself in the data during data analysis, the researcher concluded that the underutilisation of male circumcision services by clients (men) is related to the provision of male circumcision services in a culturally unacceptable way and the lack of

full client involvement by providers; hence the development of the phases proposed in the model.

- **Cultural assessment phase**

The first phase of the model requires that the provider conduct a cultural assessment. This serves as a prerequisite for the initiation of culture-congruent male circumcision service provision. This phase enables the providers to be culturally aware and to develop cultural knowledge, cultural skill, and cultural desire as competencies required in the process of providing culture-congruent male circumcision services.

- **Strategic planning for activities and resources phase**

The phase of strategic planning for activities and resources follows cultural assessment. It involves making strategic decisions on the activities deemed to be culture-congruent for male circumcision provision. The provider and the client converge to determine what actions and resources are culturally acceptable. This phase emanated from the realisation that clients are not consulted and involved in service delivery with regard to male circumcision services. The researcher identified the phase to involve cultural accommodation, cultural preservation, and cultural repatterning, as recommended by Leininger (1991), as cited in Andrews and Boyle (2003:70).

- **Implementation and evaluation phase**

During the implementation and evaluation phase, the provider and the client implement and evaluate the services of male circumcision. Implementation and evaluation of the activities is carried out while being cognisant of doing justice and not causing harm to clients (beneficence).

5.3 PURPOSE

According to Chinn and Kramer (2011:186), the purpose of a theory is important, because it specifies the context and situation in which the theory is useful. This model provides a framework for service providers (nurses, medical doctors, allied health workers, non-governmental organisations, community-based organisations, and the

public and private sectors) as agents, in order to provide culture-congruent male circumcision services in Kweneng East District of Botswana. The intention is that male circumcision services for HIV infection prevention should ultimately be viewed as being specific, compatible, and meaningful to clients.

The assumptions of the model are discussed in the following section.

5.4 THE ASSUMPTIONS OF THE MODEL

Chinn and Kramer (2011:194) assert that assumptions are those basic givens or acceptable truths that are fundamental to theoretical reasoning. According to Polit and Hungler (1999:695), assumptions are basic principles that are accepted as being true on the basis of logic or reason, without proof or verification. The assumptions of the model are based on the findings of the study and those cited in the study as explained in the humanistic theory by George (1995:304) and the Health Belief Model in the paradigmatic perspective (see section 1.6). The researcher stated his assumptions, starting with a central assumption, in the following manner:

- Culture-congruent male circumcision involves consultation and partnership with the client and is provided through assessment, planning, implementation, and evaluation of a male circumcision programme that is acceptable and compatible with the client.

➢ **Assumptions based on George's (1995) humanistic theory**

- Men as clients of culture-congruent male circumcision are perceived as existential in nature, who become through their health choices.
- Men as clients are characterised as being capable and open to options such as culture-congruent male circumcision to reduce the spread of HIV infection and other STIs.
- Men as clients are persons with values and unique manifestations linking them to their past, present, and future in terms of culture-congruent male circumcision programmes.

- Health is determined as being in relationships with others through interaction and is found in men as clients of culture-congruent male circumcision programmes and in their willingness to be open to new experiences in life.
- Care implies meeting the men with the goal of nurturing well-being through dialogue, meeting, relating, and the presence of caregivers that are open to many different ideas.

➢ **Assumptions based on the Health Belief Model (HBM) that is used in explaining the findings of the research study**

The HBM is based on the understanding that men as potential clients of culture-congruent male circumcision programmes will take a health-related action if they

- Feel that a negative health condition can be avoided
- Have positive expectations that by taking a recommended action, they will avoid a negative health condition
- Believe that they can successfully take the recommended health action

➢ **Assumptions based on culture-congruent male circumcision**

- Culture-congruent male circumcision is based on consultation and partnership of stakeholders involved in the programme.
- Culture-congruent male circumcision requires dialogue among stakeholders in order to be successful.
- Men are cultural beings with values and beliefs and can use culture-congruent male circumcision if they believe that the rate of HIV infection can be reduced thereby.
- Men may respond to culture-congruent suggestions with regard to male circumcision if they believe that their input is valued through involvement.

5.5 THE CONTEXT OF THE MODEL

According to Chinn and Kramer (2011:195), contextual placement describes the circumstances in which theoretical relationships are considered to be empirically relevant.

The context of this model is Kweneng East District of Botswana. According to 2011 population projections, Kweneng East District had a population of 217,819 people, of which 107,535 (49.4%) were males and 110,294 (50.6%) were females (Population projections for Botswana 2001-2013:78). The district has Molepolole, Mogoditshane, Thamaga, and Gabane as its largest villages. Molepolole is its administrative and largest village. The district consists predominantly of members of the Bakwena tribe of Botswana, who do not practise male circumcision as part of their culture.

According to the District Multi-Sectoral AIDS Committee (DMSAC) report of Kweneng East District Profile (2010:6), HIV prevalence by age group ranged from 3.6% in the 15-29-year age group to 43.8% in the 30-35-year age group. Female prevalence was stated to be the highest, at 49% in the 30-35-year age group, while Men's was peaked at 36.9% for the same age group. Apart from high HIV prevalence, Kweneng East District has had many cases of sexually transmitted infections in the years 2007 to 2009. This scenario lent support to the use of male circumcision as another strategy in the district to prevent HIV infection. Despite the promotion of male circumcision, the rate of use of the service has been only 11%.

The researcher discovered that providers of male circumcision services do not offer services that are culture-congruent. Therefore, the culture-congruent male circumcision model is intended to enhance the utilisation of male circumcision services through provision of culture-congruent male circumcision services.

5.6 THE STRUCTURE OF THE MODEL

Conceptual definitions were used by the researcher. According to Walker and Avant (1995:25), conceptual definitions are the means by which theorists introduce critical attributes of a concept to readers. The concept of culture-congruent male circumcision and the related concepts were contextually defined and created the foundation upon which the model was developed.

5.6.1 Definition of the central concept

In the context of this model, ***culture-congruent male circumcision*** is a process that involves interaction between the provider and the client, with the intention of identifying

problems through assessment, sharing ideas, and finding solutions for the purpose of providing male circumcision services in a manner that is specific, compatible, and meaningful to clients. During interaction, an atmosphere of dialogue, partnership, and consultation is enhanced, thereby creating a sense of ownership and empowerment.

5.6.2 Definition of related concepts

To give the model its particular character, the following related concepts were defined.

- **Individual**

In this model, an individual refers to a person in Kweneng East District who may need culture-congruent male circumcision services and is considered as a unique entity, different from others, rather than as part of a group.

- **Men**

In this model, men are individual adult human males of reproductive age (15-49 years) who are the targets of male circumcision services in Kweneng East District.

- **Family**

In the context of this model, a family is a group of people residing in Kweneng East District, who are related by marriage or blood, and which may consist of one or two parents, and their children and close relations in terms of genealogy, background, and family tree, who may wish to use male circumcision services.

- **Community**

A community is a group of people living together in an area or a country that practise common ownership in terms of religion, culture, race, profession, or other characteristics and has a sense of belonging to one another, and who may need male circumcision services. In the context of this model, the community is the inhabitants of Kweneng East District of Botswana.

- **Ethnic group**

In the context of this model, an ethnic group refers to a group of people who could be citizens, collective residents or inhabitants belonging to a common nation, cultural tradition, tribe or race, or ethnic or ancestral connection, which may require male circumcision services. In this model, the ethnic group of reference is the Bakwena tribe of Kweneng East District of Botswana.

- **Health care provider**

In the context of this model, health care providers are agents that are involved in the provision of culture-congruent male circumcision services. These agents could be medical doctors, nurses, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors.

- **Assessment**

In the context of this model, assessment refers to a systematic, comprehensive examination of individuals, families, communities, and ethnic groups regarding their health-related cultural beliefs, values and practices, with the goal of determining explicit health care needs of the client and to intervene in a culture-congruent and meaningful way (Andrews & Boyle 2003:36). Assessment in culture congruence involves making judgements about the self, as the provider, and the client, as the recipient. In this context, the role of nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers, is to make a judgement of self to identify their own influences on male circumcision, as opposed to tailoring services in a culture-incongruent manner.

- **Cultural competence**

Campinha-Bacote (2002:181) views cultural competence as an ongoing process in which health care providers continually strive to achieve the ability to effectively work within the cultural context of the client.

In the context of culture-congruent male circumcision, cultural competence is the ability of nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors working in Kweneng East District as providers to continually strive to work effectively within the context of existing cultural values, customs, behaviour, beliefs, way of life, and generally what individuals of a particular group, organisation, or society regard as their culture with regard to the use of male circumcision.

- **Cultural awareness**

Cultural awareness is the self-examination and in-depth exploration of providers' own cultural and professional backgrounds in the form of biases, prejudices, and assumptions about people who are different from them culturally (Campinha-Bacote 2002:182).

In the context of culture-congruent male circumcision services, cultural awareness requires that nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors conduct self-examination and in-depth exploration of their own cultural and professional values by recognising possible biases, prejudices, and assumptions, and how these influence their decisions when implementing male circumcision services among clients in Kweneng East District.

- **Cultural knowledge**

In the context of the provision of culture-congruent male circumcision services, cultural knowledge is the process by which nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers, seek to obtain sound knowledge of diverse cultural and ethnic groups, in order to enhance an understanding of cultural concepts that will facilitate the provision of culture-congruent male circumcision services (Campinha-Bacote 2002:182; Andrews & Boyle 2003:315).

- **Cultural skill**

In this model, cultural skill is the ability of nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers, to collect data related to the use of male circumcision, as well as to perform a culture-based assessment of the client in terms of beliefs, values, and practices in order to determine explicit needs and interventions that are compatible with the cultural context.

- **Cultural desire**

Cultural desire is the motivation by nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers of male circumcision services, to want to engage in the process of becoming culturally aware, culturally knowledgeable, and culturally skilful, as opposed to their making impositions, as providers of the service.

- **Interaction**

Interaction occurs when providers and clients communicate with one another during the process of male circumcision service delivery, in such a way that they influence one another during the assessment, planning, implementation, and evaluation of male circumcision services.

In the context of this model, the providers could be nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, while the client could be an individual, a family, a community, or an ethnic group.

- **Partnership**

During male circumcision service delivery, nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers, and individuals, families, communities, or ethnic groups, as clients or recipients, develop alliances, relationships,

and associations, and collaborate as partners in conducting assessments, planning of services, and implementation and evaluation of male circumcision services, with the aim of providing culture-congruent male circumcision services.

- **Dialogue**

In the context of the culture congruence process, dialogue involves nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and public and private sectors, as providers, and individuals, families, communities, or ethnic groups, as clients or recipients, engaging in discussions directed towards exploration of the subject of male circumcision and its delivery, and resolving identified problems. The atmosphere involves having conversations and an exchange of ideas for effective performance.

- **Consultation**

In the context of male circumcision services for prevention of HIV infection in Kweneng East District of Botswana, consultation is the act by providers, such as nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, to discuss with stakeholders, such as men, women, traditional leaders, and other social organisations, to obtain advice on what is culturally acceptable, before making decisions on male circumcision services. Consultation assists in the identification of culture-congruent methods of male circumcision service provision.

- **Evolvement**

In the context of culture congruence, evolvement is the gradual, progressive, and successive process of developing cultural competencies by providers, in order to render male circumcision services in a culture-congruent manner.

- **Solutions**

In the context of the model, providers in Kweneng East District, such as nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-

based organisations (CBOs), and the public and private sectors, and clients, who could be individuals, families, communities, or ethnic groups, identify ways of solving a problem(s) or dealing with difficult situations related to the provision of male circumcision services. In other words, they are the means of solving a problem(s) in the process of achieving culture-congruent male circumcision services.

- **Actions**

In the context of a culture-congruent male circumcision model for HIV infection prevention, the process of implementing male circumcision services is about carrying out activities aimed at achieving the goal of promoting utilisation of male circumcision services. Nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, as providers, and individuals, families, communities, or ethnic groups, as clients or recipients, implement activities that will promote the utilisation of male circumcision services in Kweneng East District.

- **Specific care**

It entails the provision of male circumcision services in a precise, definitive, distinctive, and culture-congruent way in the cultural context of individuals, families, communities, and the various ethnic groups of Kweneng East District.

- **Satisfaction**

In the context of male circumcision services, satisfaction is the feeling by recipients or clients of a particular culture, such as individuals, families, communities, or ethnic groups of Kweneng East District, that male circumcision services are provided in an acceptable, competent, and meaningful way.

5.6.3 Relational statements

According to Walker and Avant (2011:183), relational statements specify relationships between concepts. They describe, explain, or predict the nature of interaction of the concepts in a model (Chinn & Kramer 1999:77). In this model, the researcher

deductively developed the following statements to show the relationships of the concepts:

- The core relational statement in this model is that culture-congruent male circumcision provision occurs when the provider and the client interact from the phase of assessment, proceeding through to the implementation and evaluation phase of a male circumcision programme.
- When there is dialogue between the provider and the client, culture-specific care is identified, which results in the provision of culture-congruent male circumcision services.
- The provider exhibits cultural competence of male circumcision services when there is integration of cultural awareness, cultural knowledge, cultural skill, and cultural desire, which are obtained through assessment.
- Consulting with clients on the provision of male circumcision services enhances the development of partnerships and the identification of solutions.
- As an evolving process, culture congruence of male circumcision requires continued dialogue, consultation, and the creation of partnerships that result in the provision of specific and satisfactory male circumcision services.
- Interaction between the provider and the client is critical for culture-congruent male circumcision actions, which are required for delivery of meaningful services.
- When male circumcision services are offered in a culture-congruent way, clients are satisfied with the services.
- Cultural assessment is the basis for cultural knowledge, which will enable effective provision of culture-congruent male circumcision services.

The following section describes the model in detail, explaining the relationship of the concepts.

5.6.4 The structure and the process of the model

According to Chinn and Kramer (1999:92), the structure of a model refers to how the model is constructed, and the overall form of the conceptual relations within the model. The interactive process of culture-congruent male circumcision is described in phases, starting from the phase of cultural assessment and proceeding to the phase of implementation and evaluation. Within each phase, a discussion is presented of the

critical roles played by the providers to enable the enhancement of culture-congruent male circumcision services.

5.6.4.1 Model description

As represented in Figure 5.1, the model is characterised by three phases, namely assessment, planning, and implementation and evaluation. Each phase has an intersection of provider and client, which indicates the significance of interaction between providers of male circumcision services and clients during each phase. The large base of the triangle-shaped structure signifies the importance of the bottom phase as a precipitator to achieving competencies for culture-congruent male circumcision services. The shape gradually narrows towards the achievement of culture-congruent male circumcision service provision. Each phase has a description of the attributes of the provider in the enhancement of culture-congruent services. From the base of the diagram flows a spiral link of the phases, depicted by arrows. The arrows depict how evolving and interrelated the phases of the process of culture-congruent male circumcision are.

- **Phase 1: Cultural assessment**

Phase 1 describes the interactive process between providers and clients in the assessment of culture-congruent male circumcision. It is the phase of precipitation of culture-congruent services. To initiate this phase, the provider needs to have cultural desire about clients that are different in terms of values and beliefs. During this phase, interaction between providers and clients is critical before adequate assessment can be conducted, in order to establish trust and mutual respect. The literature asserts that before a provider provides services that are culture-congruent for clients of diverse cultural backgrounds, it is important to engage in cultural assessment (Andrews & Boyle 2003:18). Andrews and Boyle (2003:18) describe cultural assessment as an enabler of insight development, which assists in overcoming ethnocentric tendencies and cultural stereotypes, which act as vehicles for perpetuating prejudice, impositions, and discrimination. This process of assessment evolves during this phase in an endeavour to establish the “right fit” in terms of the specifics of the client. In this model, cultural assessment is viewed from two levels, namely the provider level, and the client level.

- ***Provider level***

According to Campinha-Bacote (2002:181), one of the constructs of competence development in the provision of culture-congruent services is cultural awareness. This author argues that self-assessment and in-depth exploration of one's own cultural and professional backgrounds is essential. This argument is premised on the understanding that service providers as professionals have both generic and professional values. Such an orientation can easily pose the risk of imposing prejudices and impositions on people of different world views. It is vital for male circumcision service providers to introspect in these domains of orientation, in order to avoid stereotyped mindsets during this phase. For this reason, when they render services, agents, such as nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, involved in providing male circumcision services for HIV infection prevention need to be aware of their own biases, as well as influences on clients with a different cultural orientation, so as to avoid cultural conflicts.

- ***Client level***

The need for cultural knowledge in the view of cultural diversity in implementing culture-congruent male circumcision is vital. According to Campinha-Bacote (2002:182), cultural knowledge is the process of seeking sound knowledge about clients from diverse cultures and ethnic groups. In this context, providers, such as nurses, medical doctors, allied health workers, non-governmental organisations (NGOs), community-based organisations (CBOs), and the public and private sectors, are expected to be cognisant of health-related beliefs and cultural values in relation to male circumcision. To provide culture-congruent male circumcision services, the researcher adopted Giger and Davidhizar's (2002:185) model of assessment, which states that each client is culturally unique and should be assessed according to six cultural phenomena, namely communication, space, social organisation, time, environmental control, and biological variations. The researcher deemed this model to be appropriate in the context of male circumcision service delivery assessment, where the focus is on the following:

- *Communication patterns*

Communication is known to cause insurmountable problems for health care providers when clients come from different cultural orientations (Giger & Davidhizar 2002:185). Therefore, enhancement of male circumcision communication will be dependent on an awareness of cultural and social factors that make up individual communication patterns among the Bakwena people of Kweneng East District, and how these factors influence the behaviour of the Bakwena people.

- *Space*

According to Andrews and Boyle (2003:28), the concept of space and distance is significant in cross-cultural communication. Space relates to the distance and intimacy strategies used when relating verbally and non-verbally with clients (Giger & Davidhizar 2002:185). Knowledge of the significance attached to space value when communicating sensitive subjects such as male circumcision to clients of different cultural backgrounds is vital. In this context, space refers to how close, in terms of privacy, or how distant (open) communication should be. Knowledge of how the Bakwena people of Kweneng East District interpret their space related to sensitive subjects, such as male circumcision, is vital. The view of space has a direct effect on the type of communication medium the provider will use to communicate with a particular client.

- *Social organisation*

Knowledge of existing social structures, in the form of a hierarchy, patterns of interaction, religious and spiritual groups, and others, that define a particular community sets the basis to understand the units of function which are acceptable in the community. In some cultures, the family is the basic unit of acceptable cultural operations, while in other cultures this unit extends beyond the limits of the family. In the case of Kweneng East District, the Bakwena people value kgotlas (wards) as traditional structures acceptable for communication purposes on matters of community interest, such as male circumcision. Such knowledge would be helpful in identifying who to consult and dialogue with during the process of culture-congruent service provision.

- *Time*

According to Giger and Davidhizar (2002:185), cultural groups can be past-, present- or future-oriented. They further state that groups that are oriented to the past tend to maintain traditions, and have little motivation for future goals. Groups that are oriented to the present tend to be appreciative of the past and do not plan for the future, while groups with a future orientation plan and organise present activities to achieve future goals. Knowledge of cultural orientations in terms of time would assist providers to determine how loyal to traditions a particular client is, or how open he is to new ideas, such as male circumcision. In this context, it would be critical to assess the time orientation among the Bakwena people of Kweneng East District, in order to determine appropriate approaches that can be used to deliver male circumcision services.

- *Environmental control*

Environmental control is the ability of the client to control nature, to plan, and to direct factors in the environment that affect the individual client (Giger & Davidhizar 2002:185). That is to say, how individuals or communities perceive HIV infection in terms of severity, with the continued high prevalence of the disease, has an effect on how clients respond to interventions designed to combat the infection. The deduction is that perceptions among clients or recipients of male circumcision as a service can have an effect on environmental control in whether they use male circumcision or not. Therefore, assessment of the environmental control of various cultural groups through dialogue is vital for understanding certain behaviours of clients.

- *Biological variations*

An understanding of bio-psychosocial variables is equally important for understanding clients from different cultures. Indices such as susceptibility to disease, response to chemotherapy, and the process of meeting the client's emotional needs, such as the feeling of being treated as an individual, and physical care may differ significantly (Giger & Davidhizar 2002:187). Knowledge based on thorough assessment of such indices, such as how clients feel emotionally about the use of male circumcision, is critical. Providers need to establish through engagement how clients feel about the use of male

circumcision as a strategy. Such awareness about the client can significantly assist service providers to devise appropriate interventions.

Below is a graphic representation of the assessment process.

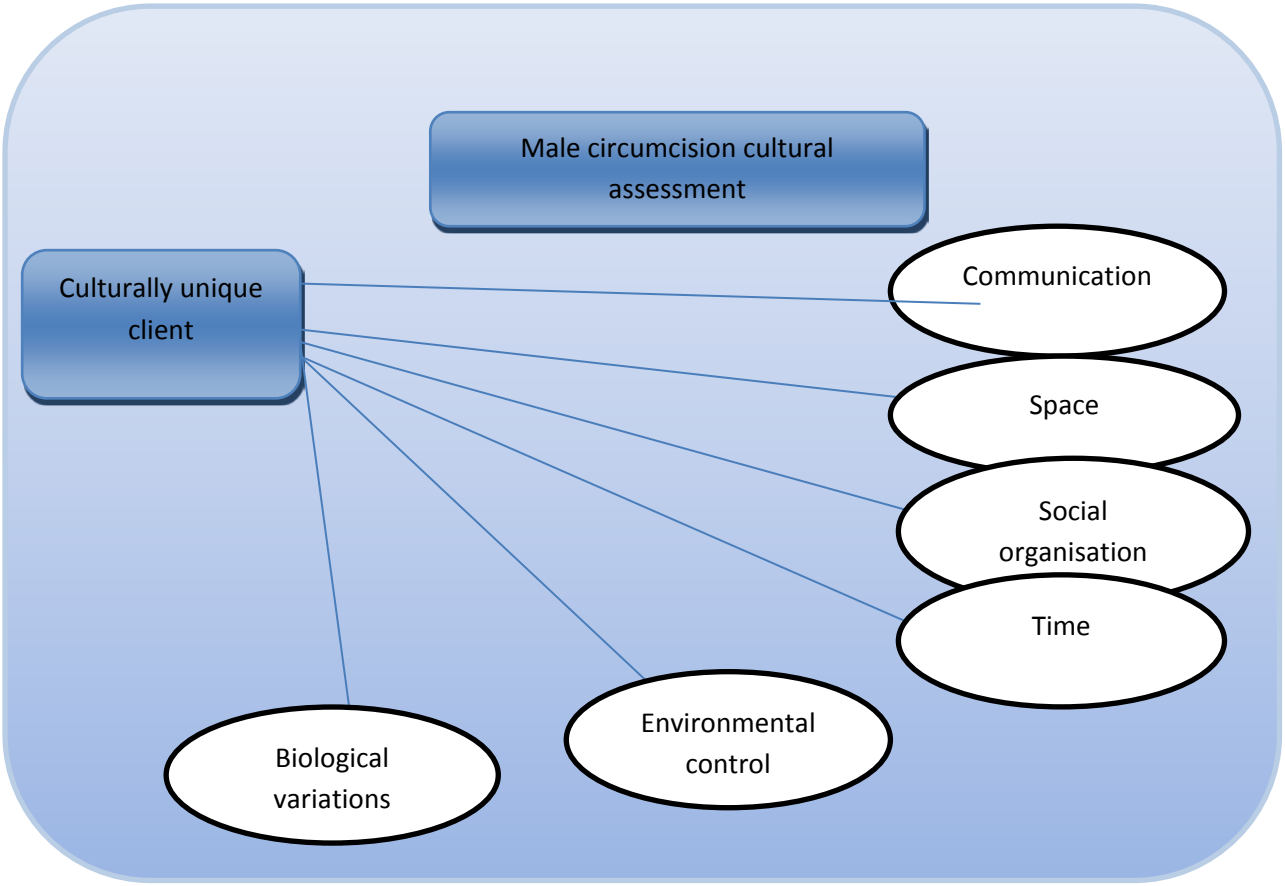

Figure 5.2 Cultural phenomena assessment

(Giger & Davidhizar 2002:186)

After a thorough assessment has been conducted, the provider and the client progress to the next phase.

- **Phase 2: Strategic planning for activities and resources of male circumcision services**

Defining the problem and situation from the viewpoint of the client(s) is the goal of the planning phase in the development of appropriate actions for the provision of culture-congruent male circumcision services. During this phase, providers and clients interact and work together as partners to determine and develop culturally acceptable activities

and resources. They engage in dialogue and consultation to determine specific care or strategies.

Dienemann (1998), as cited in Jooste (2008:294), states that a strategy is an organisational plan for allocation of resources and the achievement of sustainable results. It is an attempt to produce fundamental decisions and actions that will shape the objectives of the programme. Jooste (2008:294) argues that cultural norms, values and beliefs, behaviour, the sharing of the use of specific symbolic codes (such as specific language), and basic assumptions of health care professionals are some of the factors that have a significant influence on organisational performance, which, if not checked thoroughly, could result in the development of strategies seen as impositions.

Leininger (2002:181-192) distinguishes between generic care, which is emic (insider perspective), and professional care, which is referred to as etic (outsider perspective). This author goes on to say that cultural conflicts arise from conflicting world views and moral assumptions that lead to ethical dilemmas. To make culture-specific decisions in the process of rendering culture-congruent male circumcision services during the planning phase, the provider and the client need to engage in consultation on which interventions are deemed satisfactory. To achieve this, the researcher proposes the actions outlined in the culture-competent model of decision making (Andrews & Boyle 2003:525; Leininger 1991, as cited in Andrews & Boyle 2003:70), where both the service provider and the client should:

- Define the problems and priorities that reflect the emic (insider) perspectives of clients as per their cultural orientation.
- Determine the materials, approaches, and personnel resources needed for the delivery of culture-congruent male circumcision services.
- Determine aspects of action plans that need to be negotiated with clients.
- Assist clients to retain or preserve relevant health care values that are assistive to the promotion of male circumcision (culture preservation).
- Negotiate with clients and accommodate cultural decision and actions that are beneficial and satisfying to the promotion of male circumcision (culture accommodation).

- Reorder the ways collaboratively in a way that is beneficial while respecting the clients' cultural values and beliefs and still able to provide male circumcision services in an acceptable way (cultural repatterning).

The above phase in the model is accomplishable only where there is interaction between providers and clients before implementation and evaluation is carried out.

❖ **Phase 3: Implementation and evaluation**

During Phase 3, the process of interaction in the form of dialogue, partnerships, and consultation continues between providers and clients for effective functioning. Skilled providers act as process experts, by fostering the client's ability to play a role in male circumcision promotion, rather than only doing it on behalf of the clients. Depending on how skilled the client is (individual, family, community, or ethnic group) in identifying and successfully managing its problems, the provider may best serve as a technical expert or advisor in the promotion of male circumcision services, using the mechanisms or modes devised in a culture-congruent and specific way (Stanhope & Lancaster 2000:367). At this stage, lay advisors or opinion leaders of the community can be identified by their agreement with community norms, heavy involvement in social groups, specific areas of skills and knowledge, and ability to influence change on male circumcision through culturally acceptable ways.

The evolving process of culture-congruent male circumcision progresses into evaluation of services. According to Stanhope and Lancaster (2000:369), evaluation is the appraisal of the effects of some organised activities or programmes by looking at the design of the activities, including the methods used in terms of how effective, efficient, adequate, and appropriate they were, and assessment of progress by comparing objectives and results. The providers must decide whether the costs in terms of money and time were worth the resulting benefits, by comparing results with the baseline information obtained during assessment to review success or failure, and whether there are any unintended consequences of male circumcision promotion.

The involvement of the client playing the lay role during evaluation is vital. In this context, the entire process is open to renegotiation, in order to achieve culture-congruent male circumcision service provision that will contribute to the prevention or

reduction of HIV infection as the ultimate goal. Therefore, by using culture-congruent male circumcision service provision approaches, the outcome of the model is that uptake of male circumcision services should improve. However, failure to improve the uptake of the services will necessitate a review of the entire process by both providers and clients to determine possible solutions.

5.7 GUIDELINES FOR OPERATIONALISATION OF THE MODEL FOR PROVISION OF CULTURE-CONGRUENT MALE CIRCUMCISION SERVICES

Guidelines were developed to support the health service providers to provide male circumcision services in a culture-congruent manner. The guidelines are intended to play a central role in ensuring that services are efficiently and effectively provided in a cultural context to ensure comfort to the recipient. It is believed that suggestions made will assist providers to provide services in a manner that will mitigate cultural conflicts resulting from cultural imposition, thereby promoting compliance.

For this reason, the researcher found it necessary to develop context-based guidelines that would facilitate the provision of male circumcision services in a culture-congruent way. Three phases were identified in the model and were the basis for the development of the guidelines. These phases are (1) the assessment phase, (2) the strategic planning phase, and (3) the implementation and evaluation phase. Through the analysis of the data it became increasingly clear that men have difficulties in utilising male circumcision services because of the perceived incompatibilities between service providers and the community associated with service delivery. In developing the guidelines, the researcher was guided by the survey list proposed by Dickoff et al (1968:425-433). The guidelines are related to the activities (the procedures and dynamics) that need to be undertaken by the service providers in Kweneng District (the context) to promote the utilisation of male circumcision by men (the recipients). Therefore, the guiding question in the formulation process of the guidelines was “How can male circumcision services be offered (the procedure) to men of the reproductive age (the recipients) so that they are able to utilise them without showing resistance (terminus)?”

5.7.1 Conduct a cultural assessment

According to Andrews and Boyle (2003:36), a cultural assessment is a systematic and comprehensive assessment of individuals, groups, and communities regarding their cultural beliefs, values and practices. Jooste (2008:294) argues that cultural norms, values and beliefs, behaviour, the sharing of the use of specific symbolic codes (such as specific language), and basic assumptions of health care professionals are some of the factors that have a significant influence on organisational performance, which, if not checked thoroughly, could result in the development of strategies seen as impositions. Cultural assessment requires strategies that focus on the interaction between the provider and the client, in order to identify culture-congruent ways of male circumcision service delivery.

5.7.1.1 The aim

The main purpose of this phase of the model is to enable health care providers to establish the cultural values and beliefs of the client, in order to identify culture-congruent ways of providing male circumcision services for the prevention of HIV infection.

5.7.1.2 Strategies to enhance cultural assessment

- First establish relationships of mutual trust, respect, openness, and understanding with the clients or communities where male circumcision services are intended to be implemented, in order to enhance effective communication.
- Be open-minded during cultural assessment, in view of cultural diversity, to avoid biases, prejudices, stereotypes, and cultural imposition.
- Establish all the important social structures of the community to ascertain the hierarchy that will facilitate dialogue, consultation, and the use of appropriate channels of communication.
- Conduct discussions with all major stakeholders in the various communities before services are initiated, to obtain their emic (insider) views on what is culturally acceptable by
    - Starting with the top village leadership, such as the chiefs and other elders, to win their influence

- o Addressing men and women in their various sections, villages, and district localities, respectively, to establish their views

5.7.2 Engage stakeholders in strategic planning of culture-congruent male circumcision services

Dienemann (1998), as cited in Jooste (2008:294), states that a strategy is an organisational plan for allocation of resources and achieving sustainable results. It is an effort to produce fundamental decisions and actions that will shape the intents of the programme. Leininger (2002:181-192) distinguishes between generic care, which is emic (insider), and professional care, which is referred to as etic (outsider). The author goes on to say that cultural conflicts arise from conflicting world views and moral assumptions that lead to ethical dilemmas. To make culture-congruent decisions in the process of rendering male circumcision services during the planning phase, the researcher adopted the actions as outlined in the culturally competent model of decision making (Andrews & Boyle 2003:525), where service providers should be able to identify demographic, cultural and health system barriers to male circumcision service delivery.

5.7.2.1 The aim

The aim during this phase is to define the problem and situation from the viewpoint of the client(s), in order to determine an appropriate activity plan for the provision of culture-congruent male circumcision services.

5.7.2.2 Strategies for strategic planning of culture-congruent male circumcision

- Define the problems and priorities as per the emic (insider) perspective of the client according to the cultural orientation.
- Empower clients by involving them in the development of the activity plans, to promote a sense of ownership of the programme.
- Constantly engage in consultation with clients to determine acceptable approaches that can be used as part of activities compatible with the cultural context.

- Determine aspects of action plans that need to be negotiated with clients, by assisting them to retain health care values that promote male circumcision utilisation, in order to develop an acceptable and contextual plan of intervention.
- Determine materials, approaches, and personnel resources needed for the delivery of culture-congruent male circumcision services.

5.7.3 Involve stakeholders in the implementation process of male circumcision services

Implementation is the process that turns strategic plans into series of actions and tasks and ensures that these tasks are executed in such a way that the objective of the strategic plan is achieved (Ehlers & Lazenby 2004:212). This phase involves communication, interpretation, adoption, and enactment of the plans for culture-congruent male circumcision services.

5.7.3.1 The aim

The aim during this phase is to enact services that are considered relevant, meaningful, and satisfactory to the client.

5.7.3.2 Strategies for implementing and evaluating culture-congruent male circumcision activities

- Continually engage in dialogue and consultation during the implementation of activities, in order to constantly promote partnerships that will enhance ownership of the programme.
- Identify and involve clients on the basis of community norms, heavy involvement in social groups, specific areas of skills and knowledge, and ability to influence others during the implementation of male circumcision services, in order to promote ownership.

5.7.4 Engage stakeholders when evaluating culture-congruent male circumcision services

Evaluation of culture-congruent male circumcision services should be conducted in collaboration with stakeholders (Andrews & Boyle 2003:70). This may include clients, those who have an influence on the culture, such as traditional leaders, and any other significant stakeholder in the provision of culture-congruent male circumcision services.

5.7.4.1 The aim

The aim during the evaluation phase is to determine effectiveness of the decisions and the actual actions undertaken in the implementation of culture-congruent male circumcision services.

5.7.4.2 Strategies for evaluating culture-congruent male circumcision services

- Ensure that the processes and instruments applied in the evaluation of male circumcision services are culturally appropriate.
- Do periodic assessment of the impact of interventions in order to evaluate effectiveness of the activities, by looking at the design, and including the methods used in terms of how effective, efficient, adequate, and appropriate they were, by comparing objectives and results.

5.8 EVALUATION OF THE MODEL, AND GUIDELINES FOR CULTURE-CONGRUENT MALE CIRCUMCISION

According to Chinn and Kramer (2011:200), a model is evaluated using the criteria of clarity, simplicity, generality, accessibility, and significance. Evaluation of a model in nursing involves scrutiny of what the researcher has written to explain the various different perceptions of reality of the model in the field of nursing (Pearson et al 2005:226).

5.8.1 Clarity

According to Chinn and Kramer (2011:200), clarity is concerned with whether a model is easy to understand, and whether the ideas contained in the model are consistently conceptualised. It denotes precision of boundaries, communication of a sense of orderliness, vividness of meaning, and consistency through the theory, and is demonstrated in assumptions, concepts, and propositions (Meleis 2005:262). The key concepts of "culture congruence", including all the related concepts of the model, were defined. According to Meleis (2005:263), questions such as, "Was the theory visually and graphically presented?" and "Did the graphic presentation enhance understanding of different components of the theory?" need to be considered in the development of the model.

The graphic representation of the model in Figure 5.1 illustrates the three phases of culture-congruent male circumcision service delivery. The evolving connections of the three phases of the model have been described in detail in such a way that they can be readily comprehended.

5.8.2 Simplicity

A theory is more desirable if it focuses on fewer concepts and fewer relationships, as this will enhance the utility of the theory (Meleis 2005:263). This is what is meant by "simplicity" of a theory. The researcher simplified the model for the provision of culture-congruent male circumcision services by defining the most critical concepts so that it can easily be applied to a wide range of services in nursing practice.

5.8.3 Generality

Generality answers the question "To what extent does the model accommodate all speciality areas of nursing practice?" (Chinn & Kramer 2011:201). This model was developed and described in order to enhance the main objective of promoting utilisation of male circumcision services for the prevention of HIV infection (Pearson et al 2005:226). However, the model is broad enough to be applicable to other public health nursing programmes offered to clients.

5.8.4 Accessibility

According to Chinn and Kramer (2011:2001), empirical accessibility addresses the applicability of a theory and also determines the extent to which empirical indicators can be identified for concepts in the theory. The researcher identified and defined the attributes of culture congruence as the key concept that emerged from the findings, in order to ensure empirical accessibility of the model. In addition, a definition of the key concept “culture congruence” for the development of the model was given in section 4.3.1.

5.8.5 Significance

The usefulness of a theory encompasses areas such as the potential for usefulness of the theory in nursing practice, research, education, and administration (Meleis 2005:265).

- **Usefulness of the model in nursing practice**

According to Meleis (2005:265), the usefulness of a theory in nursing practice assesses the theory in terms of its goals, consequences, and potential for practice. Considering the challenges that nursing practice is currently facing with regard to combating the spread of HIV infection in the goal of attainment of zero new HIV infections, and because of the different perceptual views associated with various cultural orientations, this model will focus on care in the context of specific clients. The model was developed in such a way that it can be understood by service providers, as the agents, and individuals, ethnic groups, or communities, as the recipients, of culture-congruent male circumcision services. It also includes the procedures to promote culture-congruent male circumcision services, the dynamics involved and the outcome of culture-congruent male circumcision services (see sections 4.4.4 to 4.4.6). However, implementation of the model requires that service providers in health care settings engage with clients by conducting assessment, planning, implementation, and evaluation of the services provided, in order to determine the “right fit” for the client.

- **Usefulness in research**

The usefulness of the model was determined by clinical observations and the literature review that the researcher conducted. In addition, the model has explained the concepts and the propositions that will enhance further research.

- **Usefulness in education**

The significance of the model in relation to education encompasses its potential to offer guidelines for nursing curricula and programmes that can be linked to the nursing process (Meleis 2005:267). The nursing process is described as a scientific approach by which the practice of nursing, including nursing education, is applied in an orderly, systematic, and creative manner in order to identify client strengths and potential health problems, and to promote wellness (Wilkinson 2001:9). The model has explained the process of delivery of culture-congruent male circumcision services for prevention of HIV infection that can be used in the context of nursing process as a scientific tool in nursing education for the promotion of culture-congruent male circumcision services, through assessment, planning, implementation, and evaluation of the culture-congruent male circumcision services.

- **Usefulness in administration**

According to Meleis (2005:267), theories ought to provide the potential for guiding and describing nursing care in terms of structure and organisation. The model has outlined the dynamics that are critical to the planning of culture-congruent male circumcision services by service providers at all levels.

5.9 SUMMARY

This chapter described the structure and the process of the culture-congruent male circumcision model and the structural symbols that were used to describe the processes of the model. The three phases of the model that were described are cultural assessment, strategic planning of activities and resources, and implementation and evaluation. In addition, the major and related concepts of the model were identified and defined, and these concepts were later explained in relation to one another. The relational statements that depict the relationship between the concepts that constitute the model were explained. The assumptions on which the model is based were also

described. The researcher also developed guidelines to operationalise the model in the practice of culture-congruent male circumcision services. Both the model and the guidelines to operationalise it were subjected to intense evaluation by experts to determine their usefulness in practice.

Chapter 6 presents the conclusions and limitations of the study and offers recommendations.

CHAPTER 6

CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapters explained in detail the exploratory, descriptive, and contextual theory-generating qualitative research approach used to develop a culture-congruent male circumcision model for HIV infection prevention. In this chapter the researcher presents the conclusions of the study, the limitations experienced by the researcher while conducting the study, and the recommendations made by the researcher with regard to nursing education, nursing practice, and further research on male circumcision.

The overall aim of the study was to develop and describe a culture-congruent male circumcision model which is intended for use as an additional strategy for HIV infection prevention in Kweneng East District of Botswana. To achieve this purpose, the researcher employed a theory-generating design which is qualitative, exploratory, descriptive, and contextual in nature.

The conclusions of this study are based on the findings that emerged and an evaluation of the methodology used. They are presented according to the phases employed in the study.

During Phase 1, after interacting with the data, the researcher became aware of the factors influencing men in the use of male circumcision. To be able to arrange ideas logically so as to develop a culture-congruent male circumcision model, the researcher employed several reasoning strategies. These included intuition, bracketing, inductive reasoning, analysis, synthesis, and deductive reasoning, using a literature control. The researcher is of the opinion that the objective to create conceptual meaning for the development of a culture-congruent male circumcision model for HIV infection prevention was met. The objective was addressed by identifying the concepts of the model, when the researcher explored the perceptions of men regarding the use of male

circumcision through the use of focus group discussions and in-depth individual interviews (as explained in section 2.5.1.3).

The reasons for the identified low uptake of male circumcision in the district emerged during the interviews.

The study revealed that most men among the 38 participants (from the district) are **aware of the benefits of male circumcision**, and also widely accept the strategy. However, as efforts to curb the spread of HIV infection and other STIs are being made through the strategy of male circumcision services, a number of factors were identified that are preventing the men of reproductive age in Kweneng East District of Botswana from fully utilising these services. The factors are those related to **value systems**, categorised as lack of consultation with all affected stakeholders, cultural beliefs, and religious beliefs. Negative perceptions were linked to the **sources of information** on male circumcision, such as the mass media. This was cited as the main source of information, but challenges cited were the lack of adequacy of the information provided and the narrow range of coverage. The use of culture-incongruent strategies such as young educators, lack of gender sensitivity, and the use of gumbagumbas (loud music on trucks) without segregating the men into age groups are some of the factors cited as causes of concern by the men.

Challenges with the quality of male circumcision services provided were also identified. A lack of quality was attributed to the mass media and counselling services. Challenges identified were the user-unfriendliness in terms of the language used in print media information on male circumcision, as well as an absence of adequate information on male circumcision in the social media. **Perceived risks of male circumcision** were other obstacles that were cited. The men expressed fears related to the HIV tests which are administered before circumcision, economic deprivation during the healing period, and the loss of the foreskin. Other risks that were cited were those associated with sexual deprivation in the form of loss of a sexual partner during the convalescence period, fear of penile deformity, and the unbearable period of sexual abstinence during the healing period. In addition, pain was cited as an obstacle. It was associated with surgery and the user-unfriendliness of health facilities regarding service delivery to assist in pain alleviation, due to long queues.

The salient factors that were identified were the basis for, first, identifying the concepts on which "**a culture-congruent male circumcision model for HIV infection prevention**" was based, second, defining the concepts that form the model, in order to give them meaning, and, third, classifying the concepts in relation to one another in a way that gives the model structure and process.

During Phase 2, the objective was to describe the structure and the process of the model. This objective was achieved when the researcher organised the concepts in relation to one another, and the structure and the process of the culture-congruent model took shape. The researcher described the process and structure of the model in accordance with the recommendations made by Chinn and Kramer (2011:185-194), by posing questions about the components of the theory suggested by the previous definitions and then responding to the question "What is this?" A graphic representation of the model was produced, summarising the structure and the process of the model (see Figure 5.1). The purpose of the model is to provide a framework for service providers (nurses, medical doctors, allied health workers, non-governmental organisations, community-based organisations, and the public and private sectors), as agents, to provide culture-congruent male circumcision services in Kweneng East District of Botswana.

After the model was developed, it was subjected to intense scrutiny by experts, who examined the clarity, simplicity, generality, acceptability, and significance of the designed culture-congruent model of male circumcision for HIV prevention.

Finally, during Phase 3 of the study, the objective was to develop and describe guidelines to operationalise the culture-congruent male circumcision model for the practice of health practitioners. The guidelines of the model were developed based on the reality (ontology) that men are existential human beings that become through choices. Men as clients are characterised as being capable, open to options, and persons with values and unique manifestations of their past, present, and future. To satisfactorily provide for their care, it means that male circumcision service providers must meet the male persons, with the goal of nurturing their well-being through dialogue, meeting, relating, and the presence of male circumcision service providers who are open to new ideas (George 1995:306). After reflection by the researcher, the men's perceptions were viewed from the perspective of the Health Belief Model

(epistemology), which asserts that health-seeking behaviour is influenced by people's perceptions.

Despite meeting the objectives of the study, the researcher experienced some limitations.

6.2 LIMITATIONS OF THE STUDY

Limitations of a study are conceptual and methodological shortcomings that could not be overcome in the study (Polit & Beck 2008:73). The following are some of the limitations that the researcher experienced in the study.

6.2.1 Sample

The research sample did not exhaustively cover all males of reproductive age at whom male circumcision is targeted. The exclusion of men aged 15-17 years was due to the fact that men of this age are categorised as minors by the laws of Botswana, and are thus prohibited from participating in research studies without prior parental consent (Tubatsi 2010. Personal interview, 29 December. Gaborone). Therefore, the possibility that eligible participants who could have added value to data could have been excluded cannot be ruled out.

The study was conducted among members of the Bakwena tribe only, and the findings of the study are thus contextually applied. A theory-generating research design which was qualitative, exploratory, descriptive, and contextual was used to develop a culture-congruent model, based on the perceptions that Bakwena men of Botswana have regarding the use of male circumcision as a strategy for HIV infection prevention. Therefore, localities that have similar cultural contexts and dynamics can benefit from the findings of this study.

6.2.2 Personal limitations

The researcher has limited proficiency in Setswana. To overcome this barrier, he was assisted by a locally trained and experienced HIV/AIDS educator from the Botswana Defence Force (BDF) to conduct interviews among participants who could not speak English. In addition, the researcher kept reflective dairies to record experiences,

personal feelings, information, and all the logistics of the study. The researcher occasionally could not avoid becoming emotionally affected, when participants cited lack of cultural respect shown by providers, as well as the grief experienced from the loss of relatives and significant others due to HIV infection.

6.3 RECOMMENDATIONS

To render culture-congruent male circumcision health services in communities with diverse cultural backgrounds, several perspectives that require complex integration of knowledge, skills, and attitudes are worth considering (Andrews & Boyle 2003:15). Cultural competence is required among service providers, to enable them to provide effective services within the cultural context of individuals, families, and communities.

Despite the sample not being representative of the entire reproductive age of 15-49 years, the findings clearly illuminated salient issues significant to the development of the model, and to the body of nursing knowledge and the education of health workers in general. The following are the researcher's recommendations for education, practice, and research.

6.3.1 Education

The researcher's recommendations with regard to education are as follows:

- Nurses, doctors, and other health workers need to overcome cultural ignorance by incorporating transcultural health care in nursing and medical curricula, so as to avoid cultural impositions.
- In-service training programmes for service providers on the practice of "a culture-congruent male circumcision model for prevention of HIV infection" should be developed.

6.3.2 Practice

The researcher's recommendations in terms of practice are:

- Develop male circumcision services in accordance with the context of the culture for individuals, families, communities, or ethnic groups.
- Use service providers that are culturally competent in the provision of male circumcision services.

- Use the developed culture-congruent male circumcision model and guidelines to promote culture-congruent male circumcision services.

6.3.3 Research

The researcher's recommendations for research are:

- The study did not cater for the secondary audience that has an influence on men's perceptions of male circumcision, such as women. Therefore, the researcher recommends that another study be conducted to explore women's views regarding the use of male circumcision by men.
- The theoretical assumptions and statements developed in the model can be used as the basis for hypothesis development for further studies.

6.4 CONCLUSION

The researcher used a theory-generating design which was qualitative, exploratory, descriptive, and contextual in nature to understand men's perceptions with regard to the use of male circumcision as an HIV-infection prevention strategy, and to develop a culture-congruent male circumcision model for HIV infection prevention. The feedback indicates that provision of male circumcision services should not be done haphazardly without considering cultural factors. The study findings also indicate that to achieve the goal of HIV prevention using male circumcision (MC) as an additional strategy requires vigilance. This implies that there cannot be a generic approach that caters for all ethnic groups. Donor agencies and nations stand the risk of wasting resources if cultural sensitivities and well-monitored implementation frameworks are not given priority. Ignoring the cultural gatekeepers of service provision, such as consultation, appropriate channels of communication, and provision of other male circumcision-friendly services will lead to resistance and lack of compliance, which will result in failure to achieve the goal of zero new HIV infections. Therefore, the researcher recommends the use of a culture-congruent model for meaningful and satisfactory male circumcision services.

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ANNEXURE A

Ethical clearance certificate

UNISA university of south africa

UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE

HSHDC 61/2011

Date of meeting: 7 December 2011 Student No: 3621-053-6

Project Title: Men's perception of the utilisation of male circumcision for the prevention of HIV/AIDS in Kweneng East District, Botswana.

Researcher: Bruce Ngomi

Degree: D Litt et Phil Code: DPCHS04

Supervisor: Prof TR Mavundla
Qualification: D Litt et Phil
Joint Supervisor:

DECISION OF COMMITTEE

Approved [√] **Conditionally Approved** [ ]

Prof E Potgieter
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MC Bezuidenhout
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

ANNEXURE B

Permission letters from The Health Research and development Department in the Ministry of Health and DHMT of Kweneng District

Telephone: (267) 363200
FAX (267) 353100
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD

MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REPUBLIC OF BOTSWANA

REF NO: PPME-13/18/1 Vol VII (91) 7 September 2011

Health Research and Development Division

Notification of IRB Review: New application

Bruce K. Ngomi
c/o Mrs Mutinta Ngomi
Scottish Livingstone Hospital
Private Bag 001
Molepolole

Protocol Title:	**PERCEPTION AND UTILIZATION OF MALE CIRCUMCISION AMONG MEN IN KWENENG EAST DISTRICT - BOTSWANA**
SPONSOR:	N/A
HRU Review Date:	5 September 2011
HRU Expiration Date:	4 September 2012
HRU Review Type:	Full Board HRDC
HRU Review Determination	Approved
Risk Determination:	Minimal risk

Dear Sir/Madam

Thank you for submitting a new application for the above referenced study. This approval includes the following:

1. Application Form
2. Proposal
3. Data Collection tools

This permit does not however give you authority to collect data from the selected site without prior approval from the management. Consent from the identified individuals should be obtained at all times.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research, Ministry of Health within 3 months of completion of the study. Copies should also be submitted to all other relevant authorities.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at pkhulumani@gov.bw, Tel +267-3914467 or Lemphi Moremi at lamoremi@gov.bw or Tel: +267-3632464

Continuing Review
In order to continue work on this study (including data analysis) beyond the expiry date, submit a Continuing Review Form for Approval at least three (3) months prior to the protocol's expiration date. The Continuing Review Form can be obtained from the Health Research Division Office (HRDD), Office No. 9A 10 or Ministry of Health website: www.moh.gov.bw or can be requested via e-mail from Mr. Kgomotso Motlhanka, e-mail address: kgmmotlhanka@gov.bw As a courtesy, the HRDD will send you a reminder email about eight (8) weeks before the lapse date, but failure to receive it does not affect your responsibility to submit a timely Continuing Report form.

Amendments
During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDC approval before implementing it. Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e- mail from Mr. Kgomotso Motlhanka, e-mail address: kgmmotlhanka@gov.bw . In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

Reporting
Other events which must be reported promptly in writing to the HRDC include:
- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

Do not hesitate to contact us if you have any questions. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours faithfully

P. Khulumani
For Permanent Secretary

TELEPHONE: 5908000
FAX: 5915065
TELEGRAM: NGAKA

Republic of Botswana

Scottish Livingstone Hospital
PRIVATE BAG 001
MOLEPOLOLE

REFERENCE NO: SLH 3/24 I (42)

3rd February 2012

Bruce K. Ngomi
C/O Mrs Mututa Ngomi
Scottish Livingstone Hospital
P/Bag 001
Molepolole

RE: STUDY ON MEN'S PERCEPTION OF THE UTILISATION OF MAE CIRCUMCISION FOR THE PREVENTION OF HIV/AIDS IN KWENENG EAST DISTRICT OF BOTSWANA

This is to inform you that Ethics and Research Committee reviewed and approved your protocol referenced above.

The study should be conducted within the time limit as approved by the Health Research and development.

Please ensure that:

1. The data collection does not interfere with patient care.
2. Necessary arrangements are in place to avoid interference with nurses' coverage of their work stations.
3. Submit 2 copies of findings of the study with three months of completion of the Hospital Management.

Dr Japeth Mukaya
Chairperson – SLH Research Com

Malebogo Sabuta
Secretary – SLH Research Com

ANNEXURE C

A BACKGROUND/DEMOGRAPHIC QUESTIONNAIRE FOR FOCUS GROUP DISCUSSION (FGD)

A STUDY ON MEN'S PERCEPTION OF THE UTILISATION OF MALE CIRCUMCISION FOR THE PREVENTION OF HIV/AIDS IN KWENENG EAST OF BOTSWANA

(Men Questionnaire)

QUESTIONAIRE NO_____

INSTRUCTION TO THE RESEARCHER

1. Introduce yourself to the respondent
2. Explain the purpose of the study

BACKGROUND INFORMATION

1. What is your age? _____
2. Do you leave in Kweneng East?

   Yes ☐

   No ☐

3. What is your level of education?

   Never attended ☐

   Primary ☐

   Secondary ☐

   Tertiary ☐

4. What is your marital status

   Single ☐

   Married ☐

   Divorce ☐
   Widowed ☐

5. If single, divorced or widowed, do you have a sexual partner?

   Yes ☐

   No ☐

6. If yes, how many do you have _____

7. Do you use any form of protection during sex?

   Yes ☐

   No ☐

8. If yes, how often do you use protection during sex?

   Sometimes ☐

   Always ☐

   Never ☐

9. Have you heard of male circumcision?

   Yes ☐
   No ☐

10. How did you hear of male circumcision?

    Parents ☐
    Radio ☐
    Television ☐
    Any other specify _____

11. Are you circumcised?

    Yes ☐
    No ☐

12. If yes, when did you get circumcised? _____

End of interview

FOCUS GROUP DISCUSSION GUIDE

A STUDY ON MEN'S PERCEPTION OF THE UTILISATION OF MALE CIRCUMCISION FOR THE PREVENTION OF HIV/AIDS IN KWENENG EAST OF BOTSWANA

Date of focus group discussion: _____
Time focus group discussion started: _____
Time focus group discussion ended: _____
Village where discussion took place: _____
Age category of participants: _____
Number of participants: _____

Guidance for focus group facilitator: Discuss ground rules for the FGD and write them on the flipchart if possible. Pose each question to the group and allow participants to respond and discuss. If needed, use the follow-up questions to guide further discussion.

'***Could you explain to me in detail what your perceptions are regarding the use of male circumcision in the prevention of HIV infection?***'

Thank you for your time and participation in this discussion

ANNEXURE D

CONSENT FORM

By signing this document, I am giving consent to be interviewed by the researcher. I understand that I will be part of the research that is looking into the perception and utilisation of male circumcision among men in Kweneng East District. I will be part of the participant in the interview. I understand that I have been selected to participate in the study because am a male or female aged between 18 -49 and I reside in Kweneng East District where the researcher is undertaking the study or I am in traditional leadership. I was informed that the participation would be entirely voluntary and that am free to withdraw at any time. I have been informed that the information I will give will not show my name and I will not be identified in the final report. This study will help to better understand the perceptions and utilisation of male circumcision in Kweneng East district. This will help to identify ways to improve the provision of the service to the men. I also understand that the results can be given to me if I ask for them and Mr. Ngomi Bruce is the person to contact if I have questions about anything as participant. Mr. Ngomi can be reached through cell number 72570828 or in Magokotswane, Amazing Grace Villa, and plot number 2937 in Molepolole or Mrs. Ngomi at Scottish Livingstone Hospital in Molepolole or Mr. Khulumani at Health Research Unit in the Ministry of Health on number 3914467.

Participant name	Researcher's Name
----------	----------
Participant signature	Researcher signature
----------	----------
Date: ----------	Date: ----------