



# **Understanding university students' experiences of voluntary medical male circumcision: a qualitative inquiry**

**By**

**Siyabonga Mbambo**

**210519548**

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**Supervisor:**

**Dr Kemist Shumba (PhD)**

## Declaration

I declare that this thesis titled “understanding university student’s experiences of voluntary medical male circumcision: a qualitative inquiry” has not been submitted either to this university or elsewhere, for any degree qualification or other purposes. The current submission is the first at the University of KwaZulu-Natal in partial fulfilment of the requirements for the qualification of a Master of Social Science degree in Health Promotion.

I further declare that this thesis is a culmination of my own unaided effort and acknowledged supervision received from duly appointed supervisor indicated on the cover page of this thesis. Any assistance received towards the success of this study has been appropriately acknowledged.

Lastly, I certify that effort was made to ensure that all information sources and relevant literature used in this thesis are cited according to the requirements of the American Psychological Association (APA), Seven Edition (2020) reference style.

Siyabonga Mbambo (Student ID Number: 210519548)

09<sup>th</sup> of November 2021

## Dedication

To both my late parents who have served the equal roles of a mother (my biological mother Tholi Greatah Mbambo and my maternal aunt Alice Lo Ngcongo), thank you so much for raising me up, and for teaching me respect and hardworking. It pains me that I lost both of you during the course of this qualification. However, I dedicate this qualification to both of your spirits to which I believe will remain with me in my life.

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## Abstract

Voluntary medical male circumcision remains the most crucial feature in the fight against new heterosexual HIV infections. Generally, men engage in sexual intercourse soon after undergoing VMMC. Therefore, research which focus on the factors influencing the men's decision to undergo VMMC, their prevalent sexual experiences post VMMC, and meanings attached to VMMC after undergoing VMMC is important.

The study used a qualitative research design and it is located within an interpretivist paradigm. In-depth individual interviews were conducted with UKZN Howard College students. A total of 10 students were purposively selected and participated in the in-depth interviews. Although ten interviews were pre-planned, data saturation was achieved from the eighth interview. Four participants were master's students, three were honours students, and the rest were final year undergraduate students. All participants were Christians. The Health Belief Model was used as the conceptual framework and thematic analysis, as described by Braun and Clarke (2006), was used to analyse data.

The in-depth individual interviews showed main motivations which resulted from the perceptions that influenced the men's decision to undergo VMMC. VMMC main motivational factors included reducing chances of HIV infection, preventing STI infection, hygiene, peer pressure, enhancing sex, and abstaining from sex. Participants reported post-VMMC sexual experiences of big and clean penis, improved self-esteem, enhanced sexual functioning due to pleasurable sex, and removed sex pain. The new VMMC meanings post-VMMC procedure also elicited the need for dual protection and understanding of VMMC as painless procedure that means a personal responsibility. The findings from this study elicited that the participants experienced enhanced sexual functioning post-VMMC procedure. More research is needed to focus on the sexual experiences before and post-VMMC procedure in order to appropriately inform VMMC recruitment strategies.

## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CHASU	Campus HIV/AIDS Support Unit
HBM	Health Belief Model
HIV	Human Immune Virus
MC	Male Circumcision
VMMC	Voluntary Medical Male Circumcision
NDoH	National Department of Health
PEPFAR	President's Emergency Plan for AIDS Relief
STIs	Sexually Transmitted Infections
TB	Tuberculosis
UKZN	University of KwaZulu-Natal
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
USAID	United States Agency for International Development
WHO	World Health Organization

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# CHAPTER ONE: INTRODUCTION

## 1.1. Introduction and background

The epidemic of Human Immune Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has always been threatening the life of humanity since its emergence in the early 1980s (United Nations AIDS [UNAIDS], 2019). The World Health Organization (WHO, 2020) estimated that since the start of the epidemic to 2018, a total number of 74.9 million people were infected with HIV while 32 million HIV/AIDS related deaths were recorded. The UNAIDS global report indicated that there were about 37.9 million people living with HIV in 2018, and about 25.7 million (70%) of the world's HIV infections were found in Africa (UNAIDS, 2019). From the global 37.9 million people living with HIV, there are 23.3 million people who receive antiretroviral treatment (ART) (UNAIDS, 2019). This makes a total of 62%, which is a significant positive difference in relation to the goals of the UN 90-90-90 strategy (UNAIDS, 2019). However, there is still more work to be done as Avert (2018) states that about 21% of these global numbers still do not know their HIV statuses. There were approximately 770000 million HIV/AIDS related deaths and 1.7 million new infections by the end of 2018 (UNAIDS, 2019).

Furthermore, Africa is regarded as the leading continent with the highest number of people living with HIV (UNAIDS, 2019). About 25,7 million (70%) of the world's HIV statistics are in Africa of which 20.6 million of those are in Eastern and Southern Africa while five million is in the West and Central Africa (Avert, 2019; UNAIDS, 2019). This statistical evidence suggests that the Eastern and Southern African regions are highly infected in Africa and are also the hot spots for infections globally. It has been argued that countries in the low and middle-income levels have the highest number of people living with HIV (Avert, 2018). This thus indicate why the Eastern and Southern African regions are experiencing the largest HIV and AIDS epidemic rates in the world (Statistic South Africa [Stats SA], 2016).

South Africa is particularly the most affected country in the world and in the Sub-Saharan region (UNAIDS, 2020). The country has 7.7 million people living with HIV (Avert, 2020; UNAIDS, 2020). There were 240 000 new HIV infections and 71 000 AIDS- related deaths by the end of 2018 (UNAIDS, 2020). This evidence indicates the need for more efforts and

interventions that are aimed at targeting to reduce new HIV infections and reducing AIDS-related deaths. In South Africa, several interventions are currently being implemented, including the universal test and treat programme launched in September 2016 and VMMC, (National Department of Health [NDoH], 2016). Another positive finding for VMMC in South Africa according to the youth sex survey of 2011, was that VMMC appeared to have received favour from many parts of the country with most women (more than 70%) reporting preference for their partners to be medically circumcised (Kaufman et al., 2016).

South Africa had set a target to achieve 4.3 million VMMC of men aged 15-49 years by 2016 (Avert, 2018). Almost half of this target (1.9 million) was achieved by March 2014 (NDoH, 2018). In 2018, South Africa had a performance of 2.3 million VMMC's, and this was mathematically estimated to prevent 650 000 new HIV infections. This was a step in the right direction as the country also had seven million HIV infected people (NDoH, 2018). Nevertheless, the above evidence suggests that this set target of 4.3 million was not reached by 2016 (HSRC, 2018). It would be interesting to establish the factors for the failure to reach the target. In spite of the under achievement or missed targets, South Africa is appreciated and acknowledged for its continuous increase in the roll-out of VMMC (UNAIDS, 2019).

However, the above information indicate why male circumcision is reported as a common practice in the two provinces with lower HIV prevalence rates of Western Cape (9.02%) and Northern Cape (9.0%), respectively. This is a huge difference which suggests a strong relationship between male circumcision and the reduced HIV prevalence rate. Attempts were made in previous studies (for instance, Dorrington, 2017; Leigh, 2017) to explain the interprovincial differences of HIV epidemics in South Africa which suggested the small proportion of Black South Africans as the possible reason for low HIV prevalence in Western Cape province. This was limited due to excluding the role of male circumcision and rate of sexual intercourse/sexual behaviour patterns across provinces (Dorrington, 2017). It was for this reason that Leigh (2017) concluded that low prevalence of male circumcision and high prevalence of multiple or concurrent sexual partnerships are important drivers of HIV epidemic in South Africa. Therefore, these drivers need to be considered in new HIV prevention strategies. This is significant in consideration that the heterosexual transmission of HIV is estimated to account for 85% of all HIV infections (Avert, 2018). Hence, this makes VMMC a viable form of HIV prevention as people are not coerced.

There is existence of many different barriers and drivers that determine the uptake or males' decision to undertake VMMC (Hankins et al., 2016; Nanteza et al., 2018; Rodriguez et al., 2019). Researchers categorise these determining factors into different categories that include individual's perceptual factors such as fear of pain, complications of procedure, and fearing testing for HIV. The second category involves social factors inclusive of norms, values, cultural and religious beliefs. The last category involves social influences such as the role played by females, media, and other public figures as well as role models (Jones et al., 2018; Rodriguez et al., 2019; Wambura et al., 2017).

According to the International Initiative for Impact Evaluation (IIIE, 2013), the factors that influence the decision-making process around VMMC include fear of pain during and after the surgery; both explicit and implicit costs pertaining to VMMC; worrying or fearing the adverse effects involving the surgery; threats to masculinity such as losing penile sensitivity or penis size, as well as worries relating to sexual performance or sexual inactivity and religious concerns. In addition to this, fearing the HIV test as a requirement before the surgery is also known to create distress (Hatzold, 2014).

However, the IIIE (2013) further reports that the facilitating factors to deciding on undergoing VMMC include hygiene; being protected from Sexually Transmitted Infections (STIs); improved sexual performance and satisfaction; ease and comfort in using a condom as well as being favorably and socially accepted by other ethnic groups for instance AmaXhosa or AmaZulu. In addition to this, peer pressure and female intimate sexual partners' preferences are also understood to be social motivators (Kaufman et al., 2018). It is interesting to see that VMMC decision making is influenced by different factors.

Further, it is important to understand the context specific drivers and barriers that promote and hinder VMMC intake. This is understood as the main influencers of successfully increasing the enrolment of VMMC and hopefully meeting the set targets. Efforts have been made to ensure understanding of these factors by the introduction of studies in Sub-Saharan Africa aimed at exploring and describing the acceptability of VMMC, their motivating factors, obstacles as well as a person's perceptions, knowledge and attitudes towards the VMMC procedure (Jones et al., 2018; Wambura et al., 2017; Khumalo-Sakutukwa et al., 2013). It is noted that these studies have offered a clear influence in guiding the types of interventions needed to increase

the enrolment of VMMC. However, these interventions have not yet been fruitful in terms of yielding the intended results of providing suboptimal level of VMMC targets.

Moreover, there has been a pattern of research (for instance, Adams & Moyer, 2015; Hoffman et al., 2015; Rapfutse et al., 2014) conducted in Sub-Saharan Africa and South Africa in particular, which was contextual in design but failed to clearly allude to the factors that are specific to different contexts and their influence on hindering or facilitating the enrolment of VMMC. These factors have been casually mentioned but these researchers did not describe in-depth the manifestations and unfolding of these factors particularly in tracking down the men's main motivations for undergoing VMMC, sexual experiences post-VMMC and finding new meanings or conceptions acquired after the VMMC procedure. It is within this context that this study was undertaken to explore the motivational factors of Black university students to undergo VMMC and observe their sexual experiences post-VMMC procedure. This was done by exploring the VMMC journey of Black UKZN students by exploring their main motivations for undergoing VMMC, their sexual experiences post-VMMC procedure, and their new VMMC meanings post-VMMC procedure. The sample of this study comprised of Black UKZN students who had done VMMC on and off campus and this is why it related to their lived experiences.

## **1.2. Problem statement**

The regional enrolment of VMMC programme to prevent new HIV infections in Southern African countries with high HIV prevalence has not been effective in meeting the set VMMC targets (Sgaier et al., 2014; UNAIDS, 2020). The HIV infection continue soaring with South Africa having of total 7.7 million people living with HIV with HIV prevalence of 20.4 percent (Avert, 2020). South Africa failed to achieve its 4.3 million VMMC target by 2016 and only managed 2.3 million VMMC by 2018 (HSRC, 2018; NDoH, 2018). This evidence indicates a significant failure to meet VMMC targets while HIV infections continue and threatening human lives.

There has been some significant research reporting on VMMC facilitating and hindering factors with recent studies reporting fear of physical pain and loss of sexual pleasure as major barriers to the uptake of this biomedical method of mitigating HIV acquisition (Adams & Moyer, 2015). This in turn affects the mass roll-out of VMMC (Hoffman et al., 2015; Rapfutse

et al., 2014; Weis et al., 2015). It is important to identify local barriers within a broad socio-political context. There are bioethical concerns involving the functioning of the penis foreskin in sexual health such as reduction in the sensitivity of the penis and sexual pleasure. There are also reported concerns regarding adverse effects in the form of possible complications during and post-VMMC procedure with the potential of negatively effecting the sexual lives as highlighted by Frisch et al. (2019). Accordingly, Frisch et al. (2019) reported that the rate of sexual dysfunction is greater in circumcised men. On the other hand, there is scientific evidence which suggests that circumcised men have a better endurance or stamina during sexual intercourse leading to partner satisfaction (Hatzold, 2014; Hoffman, 2015).

In addition, a study conducted by Adams and Moyer (2015) reported the fear of losing sexual pleasure post-circumcision as the biggest barrier to increasing the uptake of male circumcision. This concern was expressed by both circumcised and uncircumcised men. Although there is paucity of conclusive scientific research about this critical issue, it is noted that rejecting such reports will result into giving problems. Hence, Adam and Moyer (2015) further recommended a need for more in-depth research to be conducted towards addressing this matter where sexually active men would be asked about their sexual experiences before and post-circumcision.

It is against this backdrop that this study was conducted to elicit the experiences of medically circumcised males. It is hoped that findings from this study may inform strategies to convey appropriate and relevant media messages or campaigns in support of the mass rollout of VMMC for HIV prevention by health departments. This study explored the motivational factors of Black university students to undergo VMMC and their sexual experiences post-VMMC procedure. Using a small sample and a detailed case by case analysis of individual transcripts after the interview, this study explored the perceptions and motivations before the VMMC procedure, the sexual life experiences and VMMC meanings after undergoing it.

### 1.3. Study aim

The aim of this study is to explore the motivational factors of Black university students to undergo VMMC and their sexual experiences post-VMMC procedure.

#### 1.4. Study objectives

The following objectives guided this study:

1. To explore the factors that influence and motivate Black university students to undergo voluntary medical male circumcision.
2. To explore the prevalent sexual experiences by Black university students post voluntary medical circumcision.
3. To explore the meanings attached by Black university students to voluntary medical male circumcision after undergoing it.

#### 1.5. Research questions

1. What are the factors influencing and motivating Black university students to undergo voluntary medical male circumcision.
2. What are the prevalent sexual experiences by Black university students post-voluntary medical male circumcision.
3. What are the meanings attached to VMMC post-medical circumcision (new VMMC conceptions and misconceptions).

#### 1.6. Study significance

Blaickie (2009) and Brynard and Hanekom (2006) state that the research must make a reasonable direct or useful contribution to some field of high priority in the public or private sector. To satisfy the viewpoints of Denscombe (2010) and De Vos et al. (2011), it is hoped that this study will add new knowledge in the following areas:

- **Academic Community:** The new knowledge will be available to UKZN libraries and the greater academic community will have access to the information. The information can be used in curriculum and learning programs and as a referral source for students and researchers for further study.
- **National Department of Health:** The South African Health Department with program planners for the interventions on the prevention of new HIV infections would benefit from this research because program planners will acquire more knowledge, improved skills, methods and techniques in terms of upscaling the enrolment of VMMC. This research will contribute to informing new interventions aimed at upscaling the enrolment of VMMC for HIV prevention.

- **South African Society:** Society will benefit because researchers will be better skilled and competent resulting in increased demand for VMMC for HIV prevention. The South African Community will, by providing information regarding the subject under investigation, empower themselves with knowledge and stimulate their way of reasoning and thinking about the effects of undergoing VMMC.

## 1.7. Definition of terms and concepts

The following defined relevant concepts are consistently used in this study:

### 1.7.1. Medical Male Circumcision

Although people do male circumcision for different reasons, this study uses MMC to refer to a medical circumcision procedure conducted by trained medical surgeons in clinical settings (NDoH, 2016).

### 1.7.2. Voluntary Medical Male Circumcision

Medical male circumcision (MMC) is recommended for HIV prevention but not forced. This then makes it to be voluntary to those people who want to do it; hence, we have VMMC (NDoH, 2016). Emphasizing the voluntary aspect is important especially to human rights discourses.

### 1.7.3. Health Belief Model

This refers to health promotion model that was introduced in the 1950 by the psychologists who were employees of the Public Health Service in the United State (Glanz et al., 2002). Among these psychologists were Godfrey Hochbaum (1958), Irwin Rosenstock (1966), Howard Leventhal (1968) and Stephen Kegeles (1966). Their main intention involved increasing people's acceptance and taking preventative measures like immunisations for flue and doing Tuberculosis (TB) screening through chest X rays.

This model is used in this study based on the assumption that taking health actions depend on the motivation of/degree of fear (perceived threat) and the expectations of potential actions of reducing fear. The existence of the readiness to act is determined by the fear reducing potential of actions outweighing practical and psychological obstacles to taking action (net benefits).



#### **1.7.4. Enabling factors for Voluntary Medical Male Circumcision**

This refers to facilitating factors that enable or allow willing males to undergo VMMC (Cockbum, 2016).

#### **1.7.5. Barrier factors for Voluntary Medical Male Circumcision**

This refers to impeding factors that disenable or make it difficult for those willing to do VMMC (Cockbum, 2016).

#### **1.7.6. UKZN students**

This refers to male students registered at the University of KwaZulu-Natal.

#### **1.7.7. Black university students**

This is used to refer to university enrolled students from a racial group of Black Africans or a group of Africans that are classified as Black.

### **1.8. Structure of the dissertation**

This study consisted of six coherent chapters arranged as follows:

- **Chapter One: Introduction**

This chapter introduces the reader to what to expect in this study. It gives important information on the background of this study as well as outlining the research problem. It also mentions both the purpose and objectives of this research and summarise the importance of this study. This chapter also noted the need for the clarification of some important study terms and concepts to enhance a better understanding of the reader.

- **Chapter Two: Review of literature and the conceptual framework**

This chapter provides the literature review relevant to this study. It uses sub headings which include Background for VMMC; VMMC Enabling and Barrier factors; Negative and Positive Sexual experiences post-VMMC. The Health Belief Model (HBM) is then introduced as the conceptual framework of the study. It locates the study throughout the journey of exploring VMMC experience.

- **Chapter Three: Methodology**

This chapter outlines the research methodology and design applied in this study. It starts with outlining the design of the study, followed by a research paradigm and the context of the study

setting. It also gives a short description on the researcher's role in the study. It also covers the selection of the study participants, instruments and procedure used to collect and analyse data. It also provides a short self-reflexivity of the researcher. It then concludes with ethical considerations.

#### **Chapter Four: Presentation of findings**

This chapter presents the findings of the study from the semi-structured in-depth interviews. This covers responses from UKZN students and is properly tailored to present a clear picture of the context in which data was collected. It presents different selected participants verbatim expressions that are appropriately supported by short narratives which gives a logical conversation between the researcher and the participants.

#### **Chapter Five: Discussion**

This chapter discusses what is outstanding or prominent based on the findings in light of the existing literature and conceptual framework. It also strives to indicate what is new from the findings. This is done through discussing different factors (e.g., main VMMC motivational factors and perceptions; Sexual experiences post-VMMC procedure and New VMMC meanings post-VMMC procedure. The HBM is used as the conceptual framework for the exploration of VMMC journey.

#### **Chapter Six: Summary, conclusion and recommendations**

This chapter present the summary, conclusions and recommendations of this study on the experiences of UKZN students who undergone VMMC for HIV prevention. The study explored the main motivations factors for VMMC, the sexual experience post-VMMC procedure and New VMMC meanings post the VMMC procedure.

##### **1.9. Chapter summary**

This chapter has introduced this study. This was done through the covering of particular sections. Among the covered sections is the introduction and background; the problem statement; the study aim; the study objectives; the study significance; the definition of relevant concepts; and the description of the structure of this mini-dissertation. The next chapter presents the review of literature and conceptual framework.

## CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

### 2.1. Introduction

This chapter presents the literature on experiences of VMMC and the conceptual framework which underpins this study. This literature review presents the background of VMMC targets for HIV prevention. Following the background is the discussion of VMMC facilitating/enabling factors and hindrance/barrier factors, and the sexual experiences/effects post-VMMC procedure. The relevance of the HBM as the conceptual framework for this study and its critics is explored in the last section of this chapter.

### 2.2. Voluntary medical male circumcision targets for HIV prevention

The development and implementation of VMMC programmes by countries was followed by modelling which was utilised in support of revisions and clarifications of initial targets of VMMC coverage and exploring answers to questions about what impact could be expected from prioritising specific age groups or geographic areas (Njeuhmeli, 2018). When doing the mathematical modelling, there was emphasis on the need for significant reforms in implementing VMMC programmes to reach the set targets. One study that was conducted in nine priority countries analysed four feasible scenarios to scale-up the enrolment of VMMC between 2017 and 2021. The countries involved were Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, and Zimbabwe (WHO, 2019). The findings revealed that only Tanzania had the potential to achieve 90% of the set targets. The other three countries; Lesotho, Mozambique and South Africa were estimated to have the potential to be close in terms of achieving the set targets, whereas other remaining countries were estimated to be not likely to achieve the set targets (Njeuhmeli, 2018).

Adams and Moyer (2015) recommended the need for more in depth research on the experiences of people who underwent VMMC. It was recommended that sexually active men be interviewed in future studies about their sexual preference before and after being medically circumcised. Uncircumcised men were recommended to be asked questions that would yield their perceptions of VMMC. For example, questions such as follows: *“Do you think MMC has any influence on sexual sensitivity or pleasure?”*. Campaigns of medical circumcisions were also advised to give comprehensive information about both the advantages and disadvantages

of VMMC, including the rate of adverse effects (as they are relatively minor and rare), commonly known as complications. This is due to the linkage of VMMC to men's sexuality. Therefore, the concerns of sexual pleasure require more discussion and research results on the subject. Campaigns should also emphasise other VMMC benefits in addition to reduced HIV infection risk, like reduced risks for STIs and cervical cancer.

It can be seen from the above findings that many countries are struggling to meet their VMMC targets. Also, it is noted that much of the focus in research on male circumcision is in relation to HIV protection than the individual male experiences. In order to inform and drive awareness campaigns, it is important to examine factors enabling and impeding VMMC enrolment.

### **2.3. Barriers for voluntary medical male circumcision**

Although awareness campaigns are used to promote VMMC, there are factors that discourage men from making the decision. These factors include fear of pain, perception of low risk to HIV infection, lack of a partner, parent or social support, and preference for traditional circumcision, which is considered as a rite of passage carrying cultural significance in some communities (Masese et al., 2017). George et al. (2014) reported a number of contributing factors that hinder the facilitation of VMMC. These factors are categorised as individual and social factors. Among the individual factors involved are individual beliefs, attitudes and experiences. On the other hand, social factors referred to decisions around partner and parental influences, the experiences of their circumcised peers as well as cultural and community norms. The study further reported that VMMC mobilisation campaigns must focus on influencing attitudes, intentions, social norms, and decisions to seek VMMC services. For the aforementioned reasons, it is crucial to ensure the provision of clear information about VMMC benefits and dispelling myths when mobilising, promoting and encouraging VMMC (Bertrand et al., 2013; Mavhu et al., 2021).

### **2.4. Factors enabling voluntary medical male circumcision**

The study by Nxumalo and Mchunu (2020) found that VMMC decision making was a complex task that emanated from a combination of individual intrinsic and extrinsic factors. The concept of intrinsic VMMC factors was used to refer to an inner desire of those men who generally admired and underwent VMMC procedure (Nxumalo and Mchunu ,2020). While the extrinsic

factors referred to information received (By men who underwent VMMC) from those with influence such as close friends, peers and family members (Nxumalo and Mchunu ,2020). It was noted that different motivational factors were understood to be behind men's decision to undergo VMMC. Among these motivational factors is the desire of women for circumcised men, enhanced sexual pleasure, religion, proven safety, affordability, confidentiality, and cleanliness (Hygiene) (Ngalande et al., 2016; VMMC Demand Creation Toolkit, 2015). The desire to have many women was understood to be the main motivational factor to undergo circumcision by the boys in adolescence stage in Malawi (Kaufman et al., 2016).

Moreover, women were also found to have influence on their partner's decision to do VMMC and adhering to postoperative care, including six weeks sex abstinence after the operation to assist in the healing of the wound (PEPFAR, 2014). There is a scarcity of studies focusing on risky sexual practices associated with the 60% protective effect of VMMC in South Africa and KZN in particular (Brooks et al., 2012). Therefore, more studies are needed to determine if there is a likelihood of circumcised men to practice risky sexual practices as a result of perceived protective benefits of VMMC in KZN province, particularly in tertiary institutions as they contain most men who have undergone VMMC.

Another study by Kaufman and colleagues (2018) conducted to assess female adolescent support of VMMC in South Africa, Tanzania, and Zimbabwe found that, on the whole, females were supportive of male peers' decisions to undergo circumcision. A few were found to be doubtful, believing that it could lead to promiscuity. In addition to female support for VMMC, A review of nine non-traditionally circumcising countries in the Sub-Saharan countries like Zimbabwe in relation to VMMC acceptability, reported 65% as the median proportion of uncircumcised men willing to be circumcised while 69% of the women were reported to favour medical circumcision for their partners (Kaufman et al., 2018). In this same study, about 70% of men and 81% of women were reported to be willing to circumcise their sons on conditions of a safe and affordable procedure that would also protect the child against HIV (Westercamp et al., 2012).

South African based studies reported different contributing factors to barriers of VMMC, which among them included, fear of pain and complications from the circumcising procedure; culture (traditional non circumcising communities rejecting VMMC and vice versa); religion (religious leaders positive influence in mobilising VMMC clients); age (younger men more willing to do

VMMC than older men with intention to give sexual pleasure to their female partners); and circumcision cost (Downs et al., 2017; Francis et al., 2012; Westercamp et al., 2012). A study titled “sex is never the same: men’s perspective on refusing circumcision from an in-depth qualitative study in Kwaluseni, Swaziland” conducted by Adams and Moyer (2015) reported the fear of losing sexual pleasure after circumcision as the biggest barrier in deciding to undergo VMMC in both circumcised and uncircumcised men.

## 2.5. Experiences during the process of undergoing voluntary medical male circumcision: comprehensive prevention of human immune virus

The process of undergoing VMMC is understood to include holistic HIV prevention strategies. Clients who are going through the VMMC process start by undergoing counselling and HIV testing before the actual VMMC procedure (May, 2014; WHO/UNAID, 2016). During this counselling process, they are educated or given information about the benefits of doing VMMC and the essential need to use other strategies to prevent HIV infection such as faithfulness to one sexual partner, a six weeks’ abstinence from sex post-VMMC procedure, as well as the correct and consistent condom usage (May, 2014; WHO/UNAID, 2016). VMMC is also explained during counselling to reduce the risk of HIV infection with 60% (WHO/UNAID, 2016). This explanation is understood to create and enable misconceptions which threaten the main efforts of preventing HIV (May, 2014). It is noted that the media promotes VMMC using messages of 60% protection or reduction of HIV infection chances. This evidence was also observed in a trial by Auvert and colleagues (Auvert et al., 2019).

## 2.6. Negative sexual experiences post voluntary medical male circumcision

Some studies have been conducted and reported negative sexual experiences post the VMMC procedure which influenced the unwillingness of men to undergo male circumcision (Zulu et al., 2015). Among the identified factors are concerns about the VMMC potential effects on one’s sexual performance (such as poor erection and lack of orgasm) and sexual pleasure, the risk of surgical pain, reluctance to comply with six weeks’ sexual abstinence period post-VMMC procedure to heal the wound, and the response of the sexual partners to the loss of the foreskin (Prochaska et al., 2014; Toefy et al., 2015; Westercamp et al., 2014). Below are the extracts of social media (Twitter) reports of negative sexual experiences as a result of post-VMMC procedure which claimed/alleged that uncircumcised men enjoy sex more than circumcised men.

Instagram



3 hours ago



refmmusi



1/7



ChrisExcel

@ChrisExcel102



Apparently uncircumcised men enjoy sex  
more than men who are circumcised 🤔



21:57 • 03 Apr 21 • Twitter for Android

193 Retweets 58 Quote Tweets 1 525 Likes



ID 🙏 GRATITUDE VS CHILD 🤔 @brianna • 3h

Replying to @ChrisExcel102

Yey ngiyabonga mina 🙏🙏🙏 i regret doing it. There  
is is no joy whatsoever now, Now its the same feeling  
like fingering 🙏🙏



refmmusi



Mbomvu 🇳🇬 Somahashi @Mlu\_Mbomvu • 10h

Replying to @ChrisExcel102

I miss mu doloneck sometimes

7/7



Fig 2.1. The negative sexual effect of VMMC. (Source: Twitter, 2021)

However, despite all the negative sexual experiences associated with post-VMMC Procedure, the findings from the studies conducted in Kenya, Uganda, South Africa, and Zambia reported the satisfaction with VMMC procedure from the majority of men who underwent VMMC (Krieger et al., 2015; Toefy et al., 2015; Weiss et al., 2015).



## 2.7. Positive sexual experiences post voluntary medical male circumcision

Previous studies have drawn a relationship between VMMC and improved sexual functioning for different reasons (Kaufman et al., 2018; Pintye., 2020). A study by Kaufman and colleagues (2018) titled 'Females Peer Influence and Support for Adolescent Males Receiving VMMC Services' reported the emotional benefits of confidence or perceived attractiveness for those who underwent VMMC. This is related to the agreement from both genders that males appeared more confident overall post-VMMC because they felt more comfortable with their physical appearance (Kaufman et al., 2018).

Moreover, the findings from the evaluation study by Pintye et al. (2020) reported the high frequency of improved sexual functioning and overall satisfaction with VMMC process within a pragmatic setting, to assist in framing the holistic benefits of VMMC in the messaging of VMMC in the future. Nevertheless, this evaluation study was not without limitations. The information on sexual function was only discovered or established at three months after the VMMC procedure and men were retrospectively asked to compare aspects of their sexual functioning with their experiences before the VMMC procedure (Pintye et al., 2020). The rationale behind this approach was to get how VMMC influences or impacts sexual functioning. However, it is understood that the rigour of this finding would have been improved had it used a baseline assessment of sexual function.

The limitations were attributed to extend to the two concepts of recall bias and choice supportive bias (Pintye et al., 2020). Recall bias was attributed to the possibility of overreporting of worsening sexual function among those men who were dissatisfied with VMMC. While a potential of choice supportive bias was attributed to improved functioning to rationalise the decision of undergoing VMMC procedure. It was also reported that other men neither returned for follow up nor had data on sexual effects of VMMC.

As we continue with VMMC enrolment in South Africa, KZN, and UKZN, it will be imperative to incorporate useful evidence of other VMMC benefits that are not related to HIV prevention with the aim to maximise the uptake of VMMC. In light of the challenges in meeting the VMMC targets and concerns raised on VMMC about the potential negative effect/impact on the sexual functioning as mentioned in qualitative studies (George et al., 2014; Wamai et al., 2015), it is envisaged that the new findings from this study produced significant evidence to influence VMMC demand messaging in KZN and UKZN in particular.

## 2.8. Unintended consequences post voluntary medical male circumcision

Chatsika and colleagues (2020) conducted a cross sectional study in Malawi titled '*VMMC and sexual practices among sexually active circumcised men in Mzuzu, Malawi: a cross sectional study*'. The findings from this study indicate that men who have done circumcision are more likely to practice risky sexual behaviours due to the perceived protective effects offered by VMMC. A significant proportion of men that underwent VMMC understood the protection offered by VMMC in prevention of HIV infection and the need for continued usage of condom to avoid HIV infection. However, the bottom line to note here is that risky sexual behaviours are observed in men who did VMMC. This therefore necessitates the need to intensify the components of information, education, and communication which is commonly referred to as IEC. This process needs to take place before, during, and after circumcision with special emphasis and focus on those not married and residing in low and high densities due to their likelihood of risky sexual behaviours post-VMMC.

Nonetheless, it is understood that VMMC could produce trade on effects or unintended consequences of leading clients to practice risky sexual behaviours and reducing the ability to adopt available options for safe sex. These could potentially result from the misunderstandings and inaccurate or inadequate perception relating to the benefits of VMMC in preventing HIV infection. It was concluded by Chatsika et al. (2020) that more studies are needed to establish if VMMC has an impact or influence on condom usage and other studies need to incorporate pre and post-VMMC sexual practices among participants.

## 2.9. Conceptual framework

### 2.9.1. Introduction of the Health Belief Model

The HBM was first introduced in the 19<sup>th</sup> century (1950) by psychologists in the United State of America who worked in the Public Health Service (Glanz et al., 2002). One of their main purpose was to increase people's acceptance and uptake of preventative measures, which involved chest X rays for TB screening as well as flue immunisations. This model is based on the principle that people are scared or frightened of diseases. It is assumed that the level or degree of fear (referred to as perceived threat) informs, determines or motivates taking the expected potential actions of reducing fear. The assumption of existence of readiness to act is determined by the ability of fear reducing potential of actions to outweigh practical and

psychological obstacles to act (which is referred to as the net benefits), leading to the assumed existence of readiness to act.

The main foundation of the HBM is the belief that “health behaviour is determined by personal beliefs or perceptions about a disease and available strategies to reduce the occurrence” (Hochbaum, 1958, p.31). Central to the value acceptance theory, the HBM assumes that behaviour results from the expectations of individuals and is in response to beliefs and values held (Armitage & Conner, 2000; Champion & Skinner, 2008). In the beginning, the HBM only had four components, which are often referred to as constructs. These are perceived susceptibility, perceived severity, perceived benefits, as well as perceived barriers. These constructs will be discussed in detail at a later stage. The essence of these constructs buttresses the struggle between the perceived threats against net benefits. People are therefore assumed and understood to be thinking along these lines/patterns of four essential constructs every time when they are presented with behaviour change initiatives. This then informs the risks and benefits associated with taking a decision to adopt a recommended behaviour (Janz and Becker, 1984).

The HBM model was then modified twice by Rosenstock Irwin in 1974 (Becker & Rosenstock, 1974) and in 1998 (Rosenstock et al., 1998). These modifications resulted in the introduction of the fifth constructs referred to as the cues to action. This was used to refer to an individual’s readiness to act and stimulation of overt behaviour. The HBM also received the latest sixth construct that was now referred to as the self-efficacy. The concept of self-efficacy is used to refer to a person’s self-belief in his/her own ability to successfully and satisfactorily take the action (Janz & Becker, 1984). This Model is essential and effective in explaining what motivates people’s behaviours to take particular actions. This therefore enables the need to look for explanations to people’s actions, which will help to design desirable change strategies.

The development of this Model led to it becoming a popular theory for health communication and is also applied in preventing HIV where “its value as a predictor of long and short-term health behaviours, including sexual risk behaviours and the transmission of HIV and AIDS” has been demonstrated (Hayden, 2009, p.39). For the purpose of this study, the HBM is used to explain that UKZN students will take a health decision of going for VMMC if they feel that HIV infection, as a negative health condition, cannot be avoided (referred to as perceived susceptibility); have a positive expectation than deciding to do a recommended action (VMMC), they will be able to avoid the negative health condition (referred to as perceived

severity); and believe that they can successfully take the recommended health action (referred to as perceived benefits). This, therefore, summarises the understanding that a person's beliefs and values towards a health condition or campaigns like VMMC influence or motivate their behaviour and decision making. Each of the components or constructs is briefly highlighted below: The six constructs of this model based on Janz and Becker (1984) findings are discussed as follows:

#### **2.9.1.1. Perceived susceptibility**

The concept of perceived susceptibility is used to refer to a person's "perception of the risk of getting a condition" (Janz & Becker, 1984, p.2). This type of a risk may normally be perceived "discordantly" from a collective group of people (Janz & Becker, 1984). The clear suggestion here is that the concept of perceived susceptibility can also be influenced by peer pressure which can affect it either by increasing or decreasing it. Glanz et al. (2002) have considered the concept of perceived susceptibility to have the greatest influencing perceptual factor to encourage people about adopting healthier behaviours. For instance, there can be the assumption that UKZN students must, at least, first believe as one of the people at risk of HIV infection in order for them to do VMMC. While those that do not believe or see themselves at risk of HIV infection are less likely to do VMMC.

In understanding the experiences of UKZN male students who underwent VMMC, this study explored contributing factors that make them decide to get circumcised, and the effect of undergoing VMMC on their sexual experiences.

**Table 2.1:** Concepts definitions and applications

<b>Concept</b>	<b>Definitions</b>	<b>Applications</b>
<b>Perceived susceptibility</b>	A person's view about risk/chance of acquiring a condition like HIV	Definition of at-risk populations, levels of risks, risk attributed to personal behavioural features, heighten perceived susceptibility if too low.
<b>Perceived severity</b>	A person's view about the condition's seriousness	Specifications of the risk consequences and the condition.

<b>Perceived benefits</b>	A person's view about the efficacy of the advice action in reducing the risks and seriousness and impact	Definition of action to take like how, where, when; clarifying the positive effects that is expected.
<b>Perceived barriers</b>	A person's view about the tangible and psychological cost associated with the advised action.	Identifying and reducing barriers through reassurance, incentives, assistance.
<b>Cues to action</b>	Strategising to activate readiness	Providing how to information, promoting awareness, and reminders
<b>Self-efficacy</b>	A person's confidence to taking action	Providing training, guidance in taking or performing action

Source: Janz and Becker (1984)

#### **2.9.1.2. Perceived severity**

The concept of perceived severity is used to refer to answering a question of how much level of seriousness does a person associate with a given threat (Champion & Skinner, 2008; Hochbaum, 1958). This, according to Janz and Becker (1984), comprises of different factors which some can be medically related (like illness or death), socially related (like employment loss or stigma) which will be viewed by a person as coming with the package of the condition. The HBM through Hayden (2009), believes that the basic or essential cognitive process for the adoption of a healthy behaviour assisting in getting a condition, is the acknowledgement of the possible risk of a disease.

The discussion of the two concepts above corresponds with the threats faced by the person. Therefore, the next two concepts of the HBM then correspond with the action or intervention that is recommended to assist the person in removing the threat. It is therefore the purpose of this study to assess the perceived severity of HIV/STI infection risk (threat) in medically circumcised university male students to discover their motivations for doing VMMC and their experiences after MMC.

### **2.9.1.3. Perceived benefits**

The concept of perceived benefits, according to Becker and Rosenstock (1974), refers to the steps taken by the person in preventing the consequences of a particular condition. The adoption of a healthy behaviour essentially relies on this concept. The mentioned 'benefits' refer to a person's ability to value new behaviour and consider it to be effective or useful in reducing the risk of getting a disease (Hayden, 2009; Mathew, 2012). The ability to access information about a certain health condition influences a person's perceived benefit. For the purpose of this study, it is noted that the VMMC promotion campaigns have been widespread using all channels of social media. It is therefore interesting hearing how UKZN, Howard College students heard about VMMC and what motivated their decisions to do it, as well as how are their experiences after doing it. It is noted that students get circumcised for different reasons, and it would be interesting to know those reasons and whether their experiences after VMMC still maintains those reasons or not.

### **2.9.1.4. Perceived barriers**

The concept of perceived barriers involves a person's own assessment of evaluating the challenges/problems preventing a person from adopting a new behaviour. Among these problems/challenges can be physically related (like inconvenience or expense) and personally related (like anxiety for negative outcomes or pain). Studies by Rosenstock (1966) and Champion and Skinner (2008) found that perceived barriers can result from different communications and they refer to negative associations that discourage or prevent a person from adopting a recommended action/behaviour. Students shared their experiences on how they conquered the stereotypes and myths associated with VMMC (that discouraged others) when they went for VMMC.

### **2.9.1.5. Cues to action**

The concept of cues to action refers to stimuli that influences certain people to take actions or adopt new behaviours. For example, the illness of a member from the family can influence someone/a person to change a behaviour (Graham, 2002; Hall, 2011; Janz & Becker, 1984). The cues to action can also be seen as the internal or external prompting factors involved in creating awareness and encourage action (Mattison, 1999). The internal cues actioning the stimuli involve anxiety or pain. While the external cues mean communicating strategies

motivating/promoting a particular behaviour, there is a causal relationship between the cues to action and the perceived susceptibility. This is supported as the low susceptibility which requires intensified cues to action for interest stimulation in adopting a new behaviour (Janz & Becker, 1984; McLeroy et al., 1988). The cues to action in this study will refer to motivational factors for university students to do VMMC based on their experiences.

#### **2.9.1.6. Self-efficacy**

Self-efficacy is the last and the sixth concept of the HBM. The origin of this term is traceable from the Social Cognitive Theory of Albert Bandura (1977). In this theory, the concept of self-efficacy is used to refer to a person's confidence in the ability to do a particular task or behaviour successfully (Hayden, 1989; Rosenstock et al., 1988). People are believed to experience difficulties and challenges when trying or adopting new behaviours until they believe in their ability to successfully do it (Glanz et al., 2002). For example, there is a high chance that a person may not try a new behaviour when he believes in the importance of a new behaviour (perceived benefit) but comprehending or seeing himself as incapable to do it (Glanz, 2002). This study also looked at self-efficacy as the major contributing factor that influence the students' decisions to be medically circumcised.

The HBM in the current study is well understood to give clear accounts of student's experiences when undergoing the VMMC. This has highlighted the main influential factors in making a final decision to undergo VMMC and the experience thereof. This is important for a developing country like South Africa with high HIV and STI infection rate with the mass rollout of the VMMC as part of the solution. It is therefore important to get the experiences of those who have already circumcised so that such accounts will shape and improve the VMMC promotion channels and contents. Despite the limitations levelled above against the Model, the present study considers the Model as the best and appropriate model. This is supported by the work of earlier studies presented above by different researchers such as Marrah (2012), Prettit (2012), Mathew (2012), and Bailey and colleagues (2015) which involve previous research on public health communication and sexual health behaviour.

#### **2.9.2. Application of the health belief model**

This study aimed to explore the experiences of UKZN Howard College students undergoing VMMC for HIV prevention. The massive rollout of VMMC was deemed as an intervention

for HIV prevention while the literature mentioned many other benefits associated with VMMC. This study, therefore, gained insight in understanding the motivations or influential factors for them to undergo VMMC, their accounts of experiences during the VMMC process as well as their experiences after the VMMC procedure. The HBM presented above suggests that the adoption of a recommended health behaviour/intervention is informed by the motivating factors contained as six concepts or variables mentioned above. This model of Health Behaviour is important for this study as it provides the framework to guide this study as the exploratory model. It provided experiential perceptions of the VMMC including the motivating reasons for doing it, the procedural experience, as well the experience after the procedure. This model, therefore, gave guidance to the researcher with constructs when phrasing the research questions.

A study was conducted on undergraduate student's attitudes to wearing bicycle helmet (Ross et al., 2010). This study was informed by the intent to understand predicting factors to using helmet with the aim of using such information in the development of effective strategies promoting helmet to reducing cycling associated injuries. It appeared in the study that some bicyclists did not wear their helmet even though they knew its protection benefits. The study then presented both potential barriers and facilitating factors to helmet use. The potential barriers involved physical discomfort, inconvenience, knowledge deficiency in helmet benefit, ridiculing concerns, negative peer pressure, and environmental barriers like accessibility and cost involved. On the other hand, potential facilitating factors to helmet use involved history of cycling accident like past personal injury or hospitalisation, long distances, owning a helmet, history of cycling accident involving a close friend, perceived vulnerability to injury, perceived ability or effectiveness of helmet in preventing injury, as well as having same age peers involved in routinely wearing bicycle helmet (Ross et al., 2010). The findings from this study indicate that those wearing helmet had more perceived vulnerability, more perceived benefits, cues to action, had higher regards for severity of consequences, and fewer barriers than those who were not wearing helmet.

This study explored the nature of student experiences when undergoing VMMC. It highlights their motivational or influential factors in deciding to do VMMC in terms of their perceived benefits, which refer to their belief in effectiveness or usefulness of being medically circumcised to reduce their HIV infection risk (Hayden, 2014). The researcher was able to establish the main motivating factors behind deciding for VMMC, and discovering whether



their behavioural experiences (risky or safe) or lifestyles after VMMC procedure correspond to the one they had before the procedure. The study also explored the nature of influence/impact brought by perceived barriers to university student's interest of doing VMMC as recommended for HIV prevention. The study explored student experience when outweighing perceived barriers like associated expense and inconvenience, and personal barriers like pain, anxiety, or death, comparing it to their level of risk (perceived susceptibility) to HIV infection, which therefore prompt the need for VMMC as HIV prevention method. This therefore highlights the extent or nature of low or high self-efficacy in university students when preventing potential HIV infection.

## 2.10. Summary

This chapter has presented the literature and the conceptual framework. This was done through covering particular sections involving background studies on VMMC; VMMC enabling and impeding factors; negative and positive sexual experiences post-VMMC. The conceptual framework of HBM was described and applied to this study. The next chapter presents the research methods applied to elicit data for this study.

## CHAPTER THREE: METHODOLOGY

### 3.1. Introduction

This chapter discusses the research design and methodology adopted to obtain data for this study. Methodology refers to the details to be undertaken by the researcher in practically studying whatever he/she believes need to be known (Terre Blanche & Durrheim, 1999). The chapter contains a description of the research paradigm, research design, research approach, selection of study participants, data collection and analysis, as well as strategies used to ensure data quality. This chapter aims to give descriptions of the nature of this study, the procedure followed in collecting data to explore the experiences of UKZN students (who have undergone VMMC) that participated in the study. The chapter also outlines the method used in presentation and analysis of data, as well as the ethical considerations of the study.

### 3.2. Research paradigm

A paradigm is understood as the worldview that involves defining the social world linked to the related sources of information referred to as data as well as the most appropriate methods used to open these sources (Ulin et al., 2004). This study subscribed to the foundations and values of the interpretive paradigm because it sought to understand the human experiences through subjective experience of participants (Thanh & Thanh, 2015). Furthermore, this study considered the experiences of each UKZN student who had undergone VMMC. The interpretivist paradigm requires researchers to have interaction and dialogue with the participants under study in order to understand the social world from their experiences and subjective meanings that people attach to it (Wahyuni, 2012). Interpretivist researchers opt to use qualitative data which yields rich descriptions of social constructs. This is what paved the way for the interpretivist researchers to uncover the insider's perspective or real meanings of phenomena from its participants under the study as a good social knowledge.

The researcher's aim was to explore the motivational factors of Black university students who underwent VMMC and their sexual experiences post-VMMC procedure. This was believed to inform their new meanings that participants have about VMMC. Consequently, in-depth interviews were conducted with Black UKZN students who underwent VMMC. The collected verbatim data was then transcribed and analysed using the thematic analysis method.

### 3.3. Research design

Durrheim et al. (2006) defined a research design as the “strategic framework that guides research activity to ensure that sound conclusions are reached” (p.563). This basically refers to a series of decisions taken by the researcher along the four dimensions namely; the research purpose, the theoretical paradigm guiding the research, the situational context of where the research is conducted, and the research technique used to gather and analyse data. This means that all the actions of the researcher must work together involving these four dimensions in order to have a unified research design that will enhance the credibility or validity of the study findings. Durrheim et al. (2006) further mentioned that there is a significant process of linking the research question to the execution of the research. This results from the process of reflecting on issues relevant to each of these four dimensions, to produce a coherent guide for action which yield valid answers to the research questions (Terre Blanch et al., 2006).

This study employed phenomenological research design. Creswell and Creswell (2018) understood phenomenology research design as one of the inquiry designs that focuses on describing participants’ lived experiences by the researcher about a phenomenon/topic described by those participating in the study. This description is derived in the essence of the common lived experiences of several participants who have undergone the similar experience (VMMC). The phenomenological research design has strong philosophical emphasis and involve interviews for data collection. This phenomenological research design is appropriate as this study aims to understand the common lived experiences of their motivations for VMMC, their post-VMMC sexual experiences and meanings attached to VMMC by Black university students who have undergone VMMC (Terre Blanche et al., 2011). Hence, the phenomenological concept is used here to refer to the commitment to the understanding phenomena in context, as they are lived, using the terms and categories of the said context. The exploratory research objective provides that the researcher focuses more on the aspect that is known little about to ensure that more is known about it (Neuman, 2011).

Importantly, the research design therefore determines the structure, guideline and direction to be taken by a well-organised study that will give the dependable and generate trustworthy findings. The above mentioned four dimensions are critical principles of research design that form the backbone of a well organised and successful research project. Creswell and Creswell (2018) extended the design of a research study to refer to an inquiry type that can be either quantitative or qualitative or mixed both quantitative and qualitative methods. It focuses on providing the specific direction for procedures in a research study.

### 3.4. Research approach

To effectively answer the research questions, the study employed a qualitative research approach. This research approach seeks to preserve the integrity of narrative data and attempts to use data to exemplify unusual or core themes emanating from contexts (Terre Blanch et al., 2011). This is possible as the researcher adopts an iterative approach to the research process, which presents the flexibility of qualitative research designs guiding it to the implementation of the research. Creswell (2009) referred to this research approach as a means for exploring and understanding the meanings that participants attach to the social or human problems with the researcher's purpose to get insights and in-depth information. The researcher, therefore, aimed to elicit in-depth insights to explore the motivational factors of Black university students to undergo VMMC and their sexual experiences post-VMMC procedure.

The distinctive feature of a qualitative research approach is that it aims to understand phenomena from the participants' insidious perspective (Durrheim et al., 2011). This is testified by Patton (2002) who reported that the qualitative research intends to understand a research problem being researched from the participants own lived experiences. Malterud (2001) asserted that qualitative methods investigate the meaning of social phenomena as experienced by people themselves. In this study, participants involved UKZN students who had undergone VMMC and were involved in a VMMC mobilising campaigns on campus. The study focused on exploring the motivational factors of Black university students who underwent VMMC and their sexual experiences post-VMMC procedure. The qualitative approach was deemed as appropriate as this study allowed for the in-depth approach to the focus issue motivational factors for VMMC and the nature of their sexual experiences post-VMMC procedure. The aim being of getting deeper understanding of the decision of getting medically circumcised and post-VMMC sexual experiences (Hennink et al., 2011). The study uses unstructured in-depth face-to-face interviews to explore the experiences of undergoing medical circumcision and post-VMMC sexual experiences by UKZN Howard College students who have undergone this process.

### 3.5. Selection of study participants

The interpretivist approach adopted in this study has informed the methodology of this study. Patton (2002) emphasizes the need for qualitative studies to collect qualitative data from the possible participants who have a direct experience of the phenomenon under investigation. This

study has involved UKZN Black students who had undergone VMMC which is in line with the focus of this study to explore the motivational factors of Black university students to undergo VMMC and their sexual experiences post VMMC procedure.

This study employed the purposive non-probability sampling strategy. Purposive sampling helps by getting required information from a specific population group and it allows in-depth information acquired through studying smaller number of carefully chosen cases (Teddlie & Yu, 2007). The purposive strategy was deemed appropriate for this study for the following reasons; which include the purposive sampling's ability of targeting purposefully the university's 10 male students as participants who met the key criteria/requirements to participate involving having done VMMC, being a registered university student between the age of 18 to 35 years, being part of the Men's Forum, and invited to share and explain their experiences of VMMC process. The number '10' is neither big nor small according to Creswell and Creswell (2018), and this made it to be appropriate for this study. Even though the number of ten participants was pre-planned, data saturation was finally achieved with the tenth participant. This, altogether, corresponded with the study topic, aim and objectives mentioned earlier in chapter one.

### **3.6. Data collection method**

The concept of data collection in research is about the clarification of the procedures and methods used in the generation of data for the study under discussion (Flick, 1998). In collecting qualitative data, there are three foundational ways of collecting data which according to Ulin and colleagues (2005) are observing, in-depth interviewing, and discussing in focused groups. This section presents both the data collection method as well as data collection instruments or tools that were used in collecting data.

As a data collection tool, this study employed in-depth face-to-face semi-structured interviews (Appendix A) conducted by the researcher with the participants who were Black and medically circumcised university students (Polkinghorne, 2005). The in-depth face-to-face semi-structured interviews are described as those type of interviews where the researcher develops an interview schedule which consists of a list of key topics or subtopics in advance to be asked by the researcher during the interview (Terre Blanche et al., 2006). This type of interviewing was appropriate for this study as it reminded the researcher in eliciting key information from the participants like asking questions about their motivational factors to do VMMC, their sexual experiences post-VMMC procedure, as well as their VMMC meanings post VMMC.

The usage of individual semi-structured interviews became suitable for this study considering that VMMC experiences can be sensitive and secretive in other participants. Therefore, putting them in a focus group might have been inappropriate. The researcher used one of the offices at the Campus HIV/AIDS Support Unit (CHASU) for interviews as the convenience place preferred by the participants in ensuring their privacy and confidentiality, which enabled participants to feel comfortable and to fully express themselves freely.

### **3.7. Data collection instruments**

In qualitative research, there are two or more tools used in collecting data. The first tool involves clarification of the researcher's role as the key instrument in qualitative research (Kvale, 1996; Patton, 1990). The second tool is the interview schedule that is used when conducting in-depth interviews or key informant interviews.

#### **3.7.1. The researcher as key instrument**

This section refers to the instruments that were used in the data collection procedures. Qualitative studies have their own instruments of collecting data and this is what pans out:

Terre Blanche and Kelly (1999) believe that every person possess the basic skills to conduct interpretive research but they need to convert these skills into specialised research skills. The researcher is well known to play the role of being a primary instrument to perform both skills of collecting and analysing data (Terre Blanche and Kelly, 1999). A number of efforts were executed by the researcher in equipping himself with crucial skills needed to successfully collect data. The researcher initially did a pilot interview to sharpen his skills of collecting data through listening, looking, posing questions, and interpreting issues. The researcher's ability to execute the careful and active listening motivated and encouraged interviewees to open up (Undheim, 2006). Participants benefited from these special skills through being comfortable and open during the interview when they were interviewed by the researcher who was their peer as part of men's forum membership.

#### **3.7.2. Interview schedule**

The development of an interview schedule was influenced by the study objectives involving motivational factors to VMMC decision making; the sexual experience post-VMMC procedure and the meanings attached to VMMC post-VMMC procedure (Appendix A). The questions of the interview were designed in English but they were also translated to *IsiZulu* during the interview upon request by the participants. The participants would request an *IsiZulu*

translation for clarity, and whenever they responded with an emphasis, they would use their mother tongue language. At the centre of this interview guide is the use of the open-ended questions, which allowed the researcher to obtain deep detailed information by being conversational and situational informing the fluidity and flexibility of the interview (Neuman, 2011). Open ended questioning further enhanced a two-way interactional conversation between the researcher and the participant which resulted in the intensive explorations of the study themes (Hennink et al., 2011). As evident in the informed consent form (Appendix B), the interview was recorded after the participant's permission, then later transcribed in English.

Unlike interviews in quantitative research, qualitative research interviews are associated with a dialogue instead of a monotonous question and answer session (Baker, 1999). This dialogue is called “conversational partnership” by Rubin and Rubin (1995). Burgess (1984) referred to the qualitative interview as a purposeful conversation, while Holstein and Gabbrium (1999) cited in Ulin et al. (2005) characterise it as a “social encounter”. Interviews were conducted in both English and *IsiZulu*. This was relevant considering that all the participants had formal education since they were university students which enabled them to speak English while they also had *IsiZulu* language as their mother tongue language which was similar to the researcher. This, therefore, enabled code switching sometimes in between the interviews between English and *IsiZulu*.

The concept of depth interviewing research is referred to as responsive interviewing by Rubin and Rubin (2005) while it is simultaneously referred as qualitative interviews (Hesse Biber & Leavy, 2006). Responsive interviewing subscribes to interpretive constructivist philosophy which has a goal similar to this study, which is to establish a depth of understanding not breadth (Rubin & Rubin, 2005). Further, responsive interviewing is designed to be flexible and adaptive, and this made it most suitable for this study as it aimed to extract the interpretations of UKZN student's experiences of doing VMMC (Rubin and Rubin, 2005). It was for the advantage of this flexible and adaptive design that enabled the adjustments when necessary in the interview schedule guide and group of participants (Durrheim, 1999).

The conversation between the interviewee and the interviewer in qualitative studies is informed by mutual communication instead of the interviewer's questions (Baker, 1999). Therefore, it is important that a suitable and conducive place should be chosen for the interview to take place. The study interviews were conducted at the most convenient venue and times chosen by the participants. This venue was the researcher's office in the Campus HIV/AIDS Support Unit at

the Howard College Campus which provided a safe, secured and comfortable place for the interviews. This was most the suitable considering that VMMC experience can be sensitive to some participants.

In light of the sensitivity of the research topic as mentioned above, it was for this reason that privacy and confidentiality was ensured by the researcher to prevent any possible shame on the participants. It is of the utmost importance that the interviewer and the researcher do trust each other for the success of the interview and privacy is understood to enhance this trust. The establishment of trust between the interviewer and the interviewee is recommended in order to enable increasing the depth of the interview (King, 1998). The extent of this trust is the one that will inform the extent or depth of the dialogue. The researcher was close to participants as having common membership to the men's forum and this enhanced the creation of trust in the participants with rich information and this resulted in the elicitation of more information.

Subsequent to the researcher's presentation of the research topic, aims and the objectives to the potential participants during a men's forum meeting, participants got a chance to ask questions about the study. Therefore, understanding was enhanced through clarifications and elaborations as requested by the participants (King, 1998). The atmosphere of the interview then enabled and encouraged all the participants to engage freely during the interview as they were relieved following hearing that there was no force for them to answer all the questions asked and hearing their freedom to leave anytime should they wish to. The power at the end was vested with the researcher in introducing topics as well as defining and controlling the interviewing session. Participants felt that the researcher had the common or mutual interest as the ambassadors of VMMC through the men's forum tasks.

### **3.8. Pilot study**

The researcher used two interviews to test the trustworthiness of the interview schedule. This led to the reviewing and refining of the questions in the interview schedule. This led to the improvement of the interview schedule as the instrument by asking relevant questions, removing ambiguities. This also helped the researcher by sharpening his interviewing skills. The refined interview guide was then used in interviewing the ten participants who shared their insights.

### **3.9. Data collection process**

Neuman (2014) defines a gatekeeper as the person/s or an institution which exercise either its formal or informal authority in regulating access to a site of research participants. This study



was given the gatekeeper permission letter from the office of the Registrar and Head of UKZN HIV/AIDS Programme, which allowed the researcher to approach campus students inviting them to participate in the study. Ethical clearance was obtained from UKZN's Humanities and Social Science Ethics Committee (Appendix C), which gave a green light for the study to commence. In order to get study participants, the researcher approached the Health Promoter of the University Campus HIV/AIDS Support Unit (CHASU) Howard College campus who heads the Peer Education Programme and Men's Forum, and presented the study details and requested to include willing members of the Men's Forum as study participants.

The Campus Health Promoter then invited the researcher who came and presented the study in a Men's Forum meeting with the study participants where explanations were given to study topic, target participants, contact details of the researcher and supervisor, and the assurance of confidentiality in research process. This was conducted in order to ensure the creation of a large pool of potential participants before the start of the interviews. This was to increase the probability or chance of selecting participants with rich data knowing that details and depth is more prioritised than numerical accuracy in qualitative studies (Durheim, 1999). Therefore, those participants with rich information are those whom the researcher is likely to learn more from in order to achieve the objectives of the study (Polkinghorne, 2005). This was achieved through purposeful selection of UKZN students who had done VMMC. Hence, all participants had done VMMC, either on campus or before they came to university.

The Men's Forum is a group of likeminded young university male students committed to promoting healthy behaviour and lifestyles aimed at preventing HIV infection and unplanned pregnancies, like VMMC, safe sex, and contraceptive usage. The Men's Forum is made up medically circumcised students. Interested participants were then invited and communicated directly with the researcher to arrange the convenience times for their interviews where they signed the informed consent during the interview in the office at Campus HIV/AIDS Support Unit (CHASU) (see Appendix A).

My experience as a member of UKZN Howard campus peer education and Men's Forum made me aware that members of the Men's Forum are always busy with VMMC promotion and awareness programmes, and most of the Men's Forum members had already done VMMC. Others did VMMC before varsity, in their high school days while others did it on campus. Members of the Men's Forum had started in the previous years and are still continuing investing so much efforts on mobilising new people to do VMMC on campus. However, there

is no effort that had been put in understanding the experiences of those who had already done VMMC. Members of the men's forum were then most suitable to understand the experience of those having done VMMC. The Campus Health Promoter as well as the men's forum members gave blessings in support of this study. The interviews then started after communicating with those two main stakeholders.

### 3.10. Methods of data analysis

This study used the thematic analysis six phase method to analyse data (Braun & Clarke, 2006). Although it is understood that data analysis is not a once off event in qualitative studies, it is a continuous process that takes place before the commencement of the formal stage of analysis. These six phases or stages according to Neuman (2014) are familiarisation with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing final report.

It is stipulated that qualitative data analysis commences with the immersion which refers to the examination of the interview transcript leading to one being saturated or sunked in data (Ulin et al., 2004). The process of data immersion leads into deep knowledge of the content of data (Terre Blanche et al., 2006). It was therefore important for data analysis in this study to begin with listening and transcribing the recorded interview transcripts. This was followed by systematic coding of interesting features within data. This resulted into the discovery of potential themes and gathering useful data. This paved the way for the investigation of the themes to in relation the correct extracts. Themes were further analysed and refined the specifics enabling the naming the defining and naming themes. The final phase is the analysis and relating back to the research questions and literature.

The transcriptions were done in understanding the participants as they have *IsiZulu* as their mother tongue language and were also code switching to English during the interview sessions. This is what led to the prevention of verbatim transcription of interview recordings, and this was due to its exclusion of the sociolinguistic view/position in the form of pauses, repetitions, intonation, as well as other views of conversation. Although the verbatim transcriptions of interviews enjoy the massive support for being loyal and objective (Kvale, 1996), fewer participant utterances or communication/statements undergone rephrasing and condensation to ensure the proper presentation of participant's views. This does not only prioritise correct writing (for the researcher) and reading form, but it was also presented or tailored to capture

positions of interest to the focus of the study (Lubombo, 2014). This study focus involved understanding the VMMC experiences of UKZN students. Even though the transcription involved the materiel that covered the content, interest and focus of the study as mentioned above, it can still be ensured that the produced transcriptions were still close reflections of the audio recordings of interviews. Hence, the recordings informed the generation of many pages of transcriptions.

The management of data was made possible through the thematic analysis method which arranged data into meaningful themes (Braun & Clarke, 2006). In this context, thematic analysis is used to refer to a type of analytic method used in qualitative studies which involves the identification, analysis and reporting of patterns or themes in data (Braun & Clarke, 2006). It was postulated that the discovery of concepts that spread during the interview as well as the resulted emerging themes led to the inspiring nature of the thematic analysis (Rubin & Rubin, 1995). This then informed the repeated studying of transcripts resulting in the emergence of patterns which were eventually organised into meaningful themes that could be analysed.

In line with the interpretivism philosophy, this study used the HBM model in interpreting data. Interpretivism helped in prioritising shared meanings resulting to participants sharing common experiences/background (Rubin & Rubin, 2005). The findings of this study were related to the literature review which also included other related theories. Direct quotes were extracted from interview transcripts to allow study conclusions with analysis. Pseudonyms were given to all the participants to ensure the importance of confidentiality.

The possible benefits attributed to conducting this study according to Durrheim and Wassenaar (1999) involve contributing to the body of knowledge in the field of VMMC recruitment strategies, and benefiting the immediate participants as well as the broader community interested in HIV prevention and public health promotion. It was therefore communicated to the participants that their participation and contribution to study findings is highly significant to help policy makers in designing public health interventions to enhance VMMC programs for HIV prevention. The findings could also help to inform effective strategies to improve VMMC enrolment in higher institutions and sometimes high school education by hearing the feedbacks and recommendations from the experiences from those medically circumcised.

### **3.11. Strategies used to ensure trustworthiness**

These refers to all the strategies that were used in enforcing the quality and trustworthiness of the collected data. Quality data is essential in study findings. This involve piloted interviews and the trustworthiness of this study.

It is reported by researchers that the concepts of reliability in qualitative studies refers to the ability of the collected data to be replicable and consistent (Terre Blanche et al., 2011). This is attributed to the ability of the study to yield same results when conducted/repeated by other different researchers following the same context or steps. On the other hand, validity is referred to the ability of the study to reflect the truth (Terre Blanche et al, 2011). However, there has been so much debate among qualitative researchers focusing on the applicability of these terms of validity and reliability in qualitative research. Consequently, this has led to the development of new concepts of rigour and trustworthiness to achieve the meaning of validity and reliability in qualitative research (Golafshani, 2003).

According to Shenton (2004), there are four components of the criteria to be considered in order to ensure the achievement of validity and reliability in qualitative research, namely; credibility, transferability, dependability and confirmability.

#### **3.11.1. Credibility**

Ulin and colleagues (2002) referred to credibility as seen from the ability of the study findings to display accuracy, richness, with literature roots and backing up. Correspondingly, Terre Blanche et al. (2011) also stated that credibility is seen when the study findings show accuracy in reflecting the participant's views and answers to interview questions. In this study, credibility was achieved through the researcher's ability to speak, read and write with understanding in both *IsiZulu* and English which made it easier to accommodate participants to communicate in their preferred language during interview, which enabled easier and accurate transcription of participants' responses during interview while ensuring that no details were left out. Efforts were made to present the views of the participants in the findings and in the analysis of data.

#### **3.11.2. Transferability**

The concept of transferability refers to the ability of the study findings to be transferred or generalised to the same population under the same context as mandated by a qualitative

researcher. This study has ensured a detailed description of the population studied to ensure that those who would want to use findings in a different context, would then be able to make needed adjustments corresponding to the context and setting of this study (Terre Blanche et al., 2011). This study purposively selected participants from UKZN students who have done VMMC.

### **3.11.3. Dependability**

Ulin et al. (2002) asserted that the dependability of the study is greatly influenced by the consistency of the research process. The research questions of this study appear to be clear and fitting well with the study design and objectives. As much as the interview schedule guide was written in English language, the researcher was competent to speak *isiZulu* and English. The researcher then used the language most convenient and preferred by each individual participant during interview. This ensured the capturing of all the significant data during interview that was translated and transcribed after the interview without jeopardizing or negatively affecting this study's consistency or reliability.

### **3.11.4. Confirmability**

Terre Blanche et al. (2011) stated that confirmability is the correctness of the study findings and conclusions in correspondence with the study objective without being influenced by the researcher's bias and values. The researcher has acknowledged this in his position in the study and attempted to maintain the distinction between personal values and the values of the participants, which is referred to as self-reflexivity (Rubin & Rubin, 2005). This study executed a process of maintaining and reviewing field notes, field diary, drawing references to notes in research proposal with the aim of aligning the original focus of the study.

### **3.12. Reflexivity**

The concept of reflexivity means the researcher's ability to examine his/her own beliefs, judgements and practices during the research process and that the level of influence it exerted on the research (Terre Blanche et al., 2011). This requires the researcher to be open and accept he/she is part of the research. In addressing this, the researcher was able to acknowledge his presence as a form of the instrument used in collecting data. The researcher conducted short reflections after every interview to reflect how he had conducted each interview and suggesting the areas of improvements for the next interview.

### **3.13. Ethical considerations**

Singleton and Straights (2010) state that research ethics involves the application of ethical principles to scientific research which comes from society at large and research professions. Ethics is both a subject matter and a discipline. The subject matter consists of standards of right and wrong and ethics is about how to act in a moral and responsible way.

Based on understanding of research ethics by different researchers (Creswell, 2014; Denscombe, 2010; Flick, 2015; Mouton, 2001; Ritchie et al., 2014), the researcher has abided with the core ethical principles (protection from harm, anonymity, and confidentiality; voluntary participation and informed consent) and adhered to the Policy on UKZN Humanities and Social Sciences Research Ethics committee (Appendix C). This included the following:

#### **3.13.1. Protection from harm, anonymity, and confidentiality**

The researcher protected the physical, social and psychological well-being of the study participants and respected their rights, interests, sensitivities and privacy and operated with honesty and integrity. The researcher ensured that his paramount obligation is to his research participants and that when there is conflict, the interests and rights of those studied came first.

The research participants had the right to remain anonymous and had their rights to privacy and confidentiality respected. The researcher used pseudonyms in field records, oral and written forms of data dissemination. Participants were immediately protected by the device of anonymity and the researcher anticipated the long-term effects and repercussions on individuals or groups as a result of the research.

#### **3.13.2. Voluntary participation and informed consent**

The researcher negotiated consent by communicating information likely to be material to a person's willingness to participate, such as the purpose of the study and the anticipated consequences of the research. The researcher has not used participants legally compelled consent (i.e. by their university registration) to participate in the research. Consent from participants did not absolve researcher from his obligation to protect research participants as far as possible against the potentially harmful effects of research (see research information on Appendix A). The participants voluntarily consented to participate in terms of being

interviewed and recorded. They were also informed of their rights to withdraw from the interview should they wanted.

### **3.13.3. Limitations of this study**

The researcher and selected participants had common membership of the Men's Forum under the Campus HIV/AIDS Support Unit, and this forum focused on promoting VMMC on campus. Since the participants were perceived as the ambassadors of VMMC owing to their membership to the campus Men's Forum, it was possible for them to feel uncomfortable in raising their personal concerns emanating from their VMMC personal experiences. However, the researcher ensured confidentiality and anonymity of all participants' responses. This was evident in the researcher using pseudonyms on participants' interviews. The researcher also used his interviewing skills from the social work background like probing, refocussing, etc., to get rich data from the participants.

As evident from the research topic, this study initially targeted all the university students who had undergone VMMC regardless of their racial identities. The researcher had access to students from the Black racial group. Hence, this study refocused to the specific Black university students of the UKZN Howard College campus.

### **3.14. Chapter summary**

This chapter has discussed the methodological main point of this study, namely; research design, research approach, research paradigm, data collection and analysis, strategies used for data quality, and the ethical considerations of the study. The following chapter presents the findings from this study.

## CHAPTER FOUR: PRESENTATION OF FINDINGS

### 4.1. Introduction

This chapter presents the findings of this study stemming from the ten (n=10) selected participants. Pseudonyms are given in order to hide the true identities of the selected participants of this study. This chapter begins with the description of the demographic characteristics of the study participants. The findings are discussed using the HBM as the guiding conceptual model with five main components. The HBM facilitates the analysis of stories of participants exploring their motivating factors to undergo VMMC decision making, their sexual experiences post-VMMC and their new VMMC meaning post the procedure. The findings are presented according to three major themes (which are main motivations for VMMC; sexual experiences post-VMMC; and new VMMC meanings) emerging from the data analysis.

**Table 4.1:** Demographic characteristic of participating students

Pseudonym	Age (when circumcised)	Age (2021)	Degree	Year of Study
Jama	16	23	BSS Geog and ENVS	3 <sup>rd</sup>
Dembele	24	30	MA CFSD	1 <sup>st</sup>
Sizwe	14	21	LLB	4th
Maqhawe	17	26	BSS CCMS Honours	1
Mpendulo	18	25	MA Dev Studies	1
Ndukuzempi	24	27	LLB	4th
Nhlanhla	17	25	BSS PSYC Honours	1
Senzo	24	30	MA Housing	2
Jack	18	25	BSS PSYC Honours	1
Rick	19	27	MA Dev Studies	2



Source: Author (2020)

## 4.2. Study themes

The participants of this study comprised of ten male students from the UKZN. This study only included young African, Zulu speaking males. All participants were from Christian affiliated background. There were four masters' students, three honours students and three final year/undergraduate students. The age of all the participants at the time they were medically circumcised was between their 14<sup>th</sup> to 24<sup>th</sup> age ranges. Their age at the time of this current study was between their 21<sup>st</sup> to 30<sup>th</sup> age ranges. Therefore, this research used their ages at the time of this study (2021) to avoid some confusions.

The researcher established that all the participants are students and they had met the eligibility criteria of being male, registered students of the university, and who had done the VMMC. This study explored the motivational factors of Black university students who underwent VMMC, their sexual experiences post-VMMC procedure and their new VMMC meanings post the VMMC procedure. There were three dominating themes that emerged from the data namely:

- Motivations for VMMC
- Sexual experiences post-VMMC
- New meanings for VMMC post-VMMC.

Subthemes will be used to better present these main identified study themes above:

### 4.2.1. Motivations for voluntary medical male circumcision

There were many different factors influencing student's decision to undergo VMMC. These factors involved; Hearing sources for VMMC; Perceptions for VMMC and Main Motivations for VMMC, as discussed in the following sections.

#### 4.2.1.1. Sources for voluntary medical male circumcision information

Different sources of information were vital in increasing awareness about VMMC among young men. Family members were reported as one of the sources of information that resulted in participants' decision to undergo the procedure. Most participants learnt about VMMC through outreach programs such as local clinic school visits and 'Brothers For Life' school

visits. Media presence of VMMC adverts also played a role in encouraging young men to consider and end up going for VMMC.

*“I was a bit young during that time when I heard about VMMC through my sister who was a UNISA student then. She regularly advised me on doing VMMC”* (Sizwe, age 21).

While these sources were crucial for people in different communities, peer education was reported as important for education and awareness about VMMC at UKZN Howard College campus.

*“I first heard about it from the media sources like television dramas and soapies like soul city and interaction”* (Dembele, age 30).

These statements above involving hearing about VMMC through media sources like TV dramas and soapies suggests that there is free accessibility of VMMC information as it is marketed in different platforms. This also suggested that the participants understood VMMC which resulted in them making informed decisions to do VMMC. After participants heard about VMMC, they started having perceptions about it.

#### **4.2.1.2. Perceptions about voluntary medical male circumcision**

This study established that there were varying perceptions that encouraged or discouraged young men to undergo VMMC. Negative perceptions are referred to as perceived risks to doing VMMC while positive perceptions are referred to as perceived benefits.

##### **4.2.1.2.1. Perceived VMMC risks**

There were varying concerns that were perceived as challenging factors or anticipated barriers faced by the participants when they had to decide on whether to do VMMC or not. Pain was the most cited concern by the participants when they thought about doing VMMC.

*“So, I heard the rumours that it is painful. Sometimes those who had done it used to come back (at school) and showed difficulty in walking”* (Jama, age 23).

The concept of ‘pain’ above has been used by the participants to refer to ‘pain’ as a synonym of doing VMMC. It therefore appears clearly from the participants’ words that there is no any other way of doing VMMC without experiencing pain. The fear of pain appears to have been

communicated and spread in the society. This fear of pain is caused by what participants saw and heard from those who had done VMMC before. Participants were found in the positions of needing to think about the benefits outweighing the risk pain of doing VMMC. Pain was not the only factor feared by the participants. The participants also reported fears related to possible complications that may develop during the VMMC procedure.

*“I heard that when you have done MMC, you may suffer from permanent erectile dysfunction. ... The other story was that sometimes you may die from the theatre during the MMC procedure and never come back home alive”* (Sizwe, age 21).

The concept of complications here is used to refer to the unfavourable and unintended results of doing VMMC. The unfavourable results of possibly getting permanent erectile dysfunction, losing blood and dying are most feared by the participants when thinking about doing VMMC. These unfavourable results appear to be irreversible like death while some appear to be threatening the masculinity of the participants such as suffering from a permanent erectile dysfunction as a result of the unintended result of doing VMMC. Therefore, all these complications or anticipated unfavourable results seem to cause problems as they act as obstacles or stumbling blocks in thinking about doing VMMC.

Furthermore, some participants feared HIV test which was used as a VMMC prerequisite in other community health centres.

*“At first they used to say that not everyone must be circumcised. HIV test was a prerequisite for a person to do VMMC. At the time, we were not regular HIV testers which meant that it was difficult to know our HIV statuses. This is because a person was required to know his HIV status in order to be circumcised”* (Dembele, age 30).

Other participants raise concerns of alleging the sale of their human foreskin remains to traditional healers by the delegated authorities. This then made other participants believe that VMM is against their culture.

*“...the doctors also sell our removed foreskins to traditional healers who then use them when mixing their traditional medicines...”* (Mpendulo, age 25).

The above statement suggests that HIV test was then used as a selection criterion for doing VMMC. This posed as a threat or obstacle to those participants who had never done an HIV test before and to those who did not have knowledge of their HIV status. Therefore, this yielded feelings of nervousness and anxiety when contemplating about doing VMMC because they had

no choice but to do HIV test first. Proper or adequate education is needed to clarify the rationale behind encouraging VMMC to people who are knowledgeable of their HIV statuses.

A shocking perception is that of the selling of human remains such as the removed foreskin by doctors to traditional healers for traditional medicines. This suggests that medical doctors are making money through selling patient's removed foreskin for their own profits. This introduces feelings of scepticism or doubt in the participant to know that his foreskin will be sold for money to someone who will then make traditional medicine using it. This then influences some participants understanding of VMMC to be against their traditional Zulu culture. The participants have experienced internal fights between perceived risks/barriers above and the perceived benefits as mentioned below:

#### 4.2.1.2.2. Perceived benefits for voluntary medical male circumcision

There were varying factors that were perceived as facilitating factors or anticipated benefits faced by the participants when they had to make decision on doing VMMC. Protection from HIV infections was a key factor which encouraged participants to do VMMC.

*“So, I was interested in being circumcised because I wanted to remain safe as well as they said that it provides 60% protection from being transmitted with HIV...”*  
(Nhlanhla, age 25).

The statement of sixty percent protection from HIV and STI infections shows the level of accurate understanding of VMMC benefits. This suggests that there is a high risk of HIV and STI infection when one has not done VMMC and this risk is reduced by doing VMMC. This is the dominant benefit of doing VMMC involving the reduction of the chances of HIV and STI infection.

Furthermore, most participants cited hygiene as one of their perceived VMMC benefits.

*“A lot was said about VMMC as they mentioned that VMMC makes it easy for peeing and your penis does not store dirt any more ... But what made me decided to do it were the VMMC benefits as they told me that doing VMMC would help keep me clean and easier sex during sexual intercourse”* (Senzo, age 30).

Enhancing sexual intercourse was reported as a common benefit after doing VMMC.

*“Another perception was that VMMC makes you to feel more pleasure during the sexual intercourse which is not the case when you are not circumcised” (Ndukuzempi, age 27).*

The ease of peeing and cleanliness is used to characterise the benefits of VMMC. This evidence suggests that the participant enjoyed less then. Therefore, the participant felt motivated to do VMMC because of these benefits. The decision of doing VMMC is understood as an act of living a responsible lifestyle with the conviction to enjoy pleasurable sexual intercourse. The participants favoured VMMC after hearing and anticipating about the positive sexual benefits of it. This is driven by their quest to be enjoying improved sexual intercourse.

Participants anticipated that VMMC would boost their sexual performance or lifestyle which was a positive motivation for them to do it. The quest for sexual performance or lifestyle can also be attributed to the effect of masculinity as they aspire to satisfy themselves and their sexual partners. The above mentioned perceived VMMC benefits form part of motivating factors for the participants to do VMMC. The hearing sources for VMMC and Perceptions about VMMC resulted into participants having their main motivations to undergo VMMC.

#### **4.2.1.3. Main motivations for voluntary medical male circumcision**

Following the hearing sources and perceptions about VMMC as mentioned above, there are many various main reasons/motivations behind the decision to do VMMC. These are the main reasons that motivated and encouraged the participants to consider deciding to do VMMC. These main reasons are so diverse with different participants. Protection from HIV/STI infections by reducing the chances of infection was the main motivation for most participants to decide doing VMMC.

*“So, my main motivation was to protect myself from HIV and STI infections during sexual intercourse. So, my main motivation was to reduce chances of being infected with HIV or STI as I wanted to have this back up plan should the condom breaks” (Ndukuzempi, age 27).*

Participants who had previously experienced STI infection reported doing VMMC to avoid STI reinfection.

*“My main motivation was to avoid getting the STI again and I never wanted to transfer it to someone again. The nurse told me that I can get it again if I continued having unprotected sex*

*with the same person If I did not get circumcised. Hence, the nurse advised me to bring my sexual partner so that she can get the same treatment as well. So it was more about putting my own health and life first as HIV and STI was not a joke” (Jack, age 25).*

Moreover, hygiene was reported to be one of the main motivators influencing participants to do VMMC.

*“This was because I was disgusted by the dirt found in the foreskin every time I had to bath” (Sizwe, age 21).*

Also, peer pressure was reported to have played a role in motivating participants to do VMMC. The participants said:

*“It was seeing my peers being medically circumcised which motivated me to do it as well. I felt that I cannot fail to do something that my peers have done. Even my family brothers had done it and it motivated me as well. So, I told myself to withstand the pain” (Nhlanhla, age 25).*

Furthermore, a significant number of participants reported doing VMMC due to the main reason of removing pain during sexual intercourse. This then was to enhance sexual intercourse by alleviating sex pain to those participants who had experienced sex pain before VMMC.

*“I think I decided when I had sex with a girl and felt the pain. It became so clear to me that I was never going to enjoy sex. So, I decided to do VMMC because I knew no one who died because of it. So, I did it because I wanted to continue having sex as I grew up” (Jama, age 23).*

While all these were important, other participants who were addicted to sex before VMMC reported doing VMMC for the main motivation of abstaining from sex during the healing period.

*“I wanted to abstain from the sexual intercourse. The only way for me to abstain was to bleed so that the penis was not going to be useable then. I was really addicted to sexual intercourse at the time as I exchanged sexual partners every week ...” (Rick, age 27).*

The implications from the above statements indicate that masculinity appeared to have played a role in motivating participants into doing VMMC. This was also evident in other participants who wanted to do VMMC in order to enhance their sexual intercourse with their sexual partners. This played a role in other participants who were motivated to do VMMC in order to alleviate complications or pains during sexual intercourse. However, the waiting period before sex after the VMMC procedure was reported to be the main motivation to do VMMC by some participants who were addicted to sexual intercourse.

The other participant above suggests that he was not in the position to control his sexual behaviour and therefore wanted something that was going to force him to abstain from sexual intercourse. The participant details that it was beyond his sexual ability to have or not have sex as his sex addiction level had reached a level beyond his control. The participant, therefore, had to come up with a different mechanism to help him abstain. However, this was ironical as some do VMMC in order to enhance their sexual performance while this participant wanted to abstain sexual intercourse.

#### **4.2.3. Sexual intercourse post voluntary medical male circumcision**

Participants were asked to share their sexual experiences outlining if there were changes before and after they got medically circumcised. There were lot of positive changes which effected positive sexual changes as a result of post-VMMC procedure. Participants reported self-observation of physical changes which led into improvement of their sexual experiences. In addition, emotional changes were also reported to be attached to positive post-VMMC sexual experience. The above mentioned two changes resulted into the overall positive sexual change of enhanced sexual intercourse.

##### **4.2.3.1. Physical changes**

There were a number of personal observations of the physical changes by the participants after VMMC procedure. Cleanliness was mentioned by most participants as one of the main observable benefits of doing VMMC procedure which made the penis look attractive.

*“...I also noticed the cleanliness on my penis as well as the foreskin had been removed which used to store some dirt particularly after peeing. But now, I am able to freely clean it” (Jama, age 23).*

Other participants reported that they noticed increased penis size as one of the benefits after undergoing VMMC procedure. This meant that VMMC was believed to have increased the penis size of the participant

*“Sometimes I saw my penis as having gained some size. Yeah, I saw it as it was bigger than before”* (Senzo, age 30).

Other participants also believe that VMMC increased their penis size. The participants’ belief in having increased penis size as a result of VMMC can be attributed to the masculinity or feelings of manhood. This is because manhood, according to society, is associated with bigger penis size which is associated with the man’s ability to satisfy his sexual partner. VMMC is then associated with being masculine as well as clean.

#### **4.2.3.2. Emotional changes**

The study discovered several personal changes that occurred in the emotional aspects of the participants after doing VMMC. These are the personal observation of the emotional changes by the participants. Positive emotional effect of VMMC on the lives of the participants was reported. These contributed to the development of self-esteem of the participants which also boosted their self-confidence.

*“Yes emotionally; I was emotionally boosted in terms of self-esteem as being circumcised felt like a great thing. I felt like I could do a thing; I could make things happen”* (Jama, age 23).

Other participants reported feelings of happiness and healthy after doing VMMC.

*“I can say yes. I emotionally felt healthier in my private part after removing the penis foreskin that stores the dirt and exposes me to STIs ... That feeling was internal. I did feel internally happy. I felt so proud of myself that I have taken a crucial decision of my life”* (Dembele, age 30).

Feelings of relief and self-pride were reported as critical for participants after doing VMMC.

*“Emotionally, I would say that I felt relieved”* (Sizwe, age 21).

The participants reported the positive emotional effect of VMMC on their lives by boosting their self-esteem which subsequently boosted their self-confidence. VMMC makes them feel happy and healthier as they shared their feelings of relief and self-pride after VMMC. These



improved their confidence levels which positively impacted their sexual performance with their sexual partners. Participants witnessed and reported positive change in their sexual performance following the VMMC.

#### **4.2.3.3. Sexual changes**

The above-mentioned emotional effects of VMMC (referred to as improved confidence levels) and physical changes (referred to as clean and increased penis size) were then understood by the participants to enhance their sexual performance with their sexual partners. Most participants reported exciting, satisfying and pleasurable sexual intercourse as a result of VMMC which encouraged them to advise more people to do it.

*“The sexual intercourse after VMMC was very amazing as I needed not to push and pull the foreskin. I had an intense feeling of excitement and satisfaction after doing VMMC. I also felt more likely to advise other people to do VMMC”* (Dembele, age 30).

In addition, more participants experienced great and amazing sexual intercourse post-VMMC procedure.

*“It was like that. It was more exciting. It was really great and amazing because there was no more blocking thing. So, it was so smooth and exciting”* (Maqhawe, age 26).

This was emphasised by other participants who highlighted the alleviation of pains that participants had experienced during the sexual intercourse before VMMC and those pains were no longer there after VMMC.

*“Also sexually, there were no longer those pains that used to be there before I got circumcised as there was no longer a foreskin that used to swell and tear. So, there was a great deal of difference. It was more pleasurable. There was so much change. There was a positive change”* (Jama, age 23).

The use of the words amazing and exciting sexual intercourse describes the positive changes of their sexual experience as a result of VMMC. These words were used by the participants to mean a great surprise or wonders brought by VMMC effect on their sexual lifestyles. This means that VMMC brought excitement and satisfaction in the participant's sexual experience.

However, the VMMC effects of enhanced sexual intercourse has resulted to the temptation of unintended consequences of practising unprotected sex. This clearly needs to be addressed during post-VMMC counselling so that it can be avoided.

Moreover, some participants reported their initial painful sexual experience due to having started the sexual intercourse before the complete healing process of six weeks. This painful sexual experience later changed when the same participant restarted engaging in sexual intercourse now after the complete healing process of six weeks. The resulted experience was that of positive, enhanced and pleasurable sexual experience.

*“It was terrible. It is because my wound had not yet healed as my stitches were just removed. I think on the day I removed my stitches was when I had sex. ... I tried again later after six-week full healing period. It was great, amazing, and beautiful. It was clean and I was not even worried for my sexual partner to do oral sex because it was clean. The only difference is the one of gaining confidence in sexual performance after doing VMMC which was not there before doing it. This was due to having some dirt and unpleasant smell stored in the penis foreskin which made me feel ashamed of myself as I could not even do oral sex. There is lot of sexual pleasure now (Rick, age 27).*

The participants' words of 'terrible (sexual intercourse)' is used to refer to the painful experience of engaging in sexual intercourse earlier than before the six weeks recommended healing period. This is a very dangerous and risky experience by the participants as it is more likely to worsen the wound leading to the complications as a result thereof.

The participant later used words such as 'great, amazing' sexual intercourse after a complete healing of the wound. This therefore emphasises the sexual benefits mentioned earlier above in relation to the sexual experience post-VMMC procedure.

Contrary to VMMC enhancing sexual intercourse, the other participant reported VMMC to bring a disadvantage to them like reduced sex rounds. This means it is not only the positive association of VMMC and sexual intercourse. The same participant reported VMMC as having a negative influence in his sexual life.

*“Now one cannot have lot of sex. I mean after three rounds of sexual intercourse, I start feeling the pain when engaging in more rounds of sexual intercourse” (Rick, age 27).*

This suggests that VMMC has limited the duration of sexual intercourse in the participant due to feelings of pain during sexual intercourse. However, this is contrary to what was reported by other participants earlier who associated VMMC experience as reducing pain during sexual intercourse.

#### **4.3.3. New meanings about voluntary medical male circumcision**

Participants were asked to share their new meanings for VMMC noting their earlier motivations to undergo VMMC and their sexual experiences post VMMC procedure. Consequently, this provided two subthemes of new perceptions about VMMC and outlining misperceptions about VMMC.

##### **4.3.3.1. New perceptions for voluntary medical male circumcision**

Participants reported their accurate understanding of VMMC as reducing chances of being infected with HIV which demands a need for dual protection to ensure better protection.

*“... MMC does not guarantee protection from HIV infection. MMC reduces the chances of sexually transmitted infections or diseases (STIs and STDs). It only reduces the chances not that it solely prevents the infection. MMC reduces chances of HIV infection by 60%, but still there is 40% risk of being infected when doing unprotected sex. That is why there is still a need to use a condom” (Mpendulo, age 25).*

This raise hopes that there is a better updated knowledge of VMMC benefits from the participants. This can be attributed to the successful counselling post-VMMC procedure. However, more efforts are still needed to address misconceptions and myths below that have a potential to jeopardize VMMC enrolment.

##### **4.3.3.2. Misconceptions and voluntary medical male circumcision**

While participants were able to develop new meanings in the form of new perceptions for VMMC, this enabled them to outline prevalent VMMC myths and misconceptions that need to be deconstructed. Exaggerated pain during and after the VMMC procedure is understood as another VMMC misinformation.

*“Another perception involved the excessive pain during and after the procedure. There is no such thing as the excessive pain as our bodies react to similar situations in different ways. There is no much pain in it... .. People’s earlier perceptions about pain was not evident in me because the pain was not that much to me as some people had*

*exaggerated it to the extent that they could not even walk. I was personally able to walk on my own after the MMC procedure” (Jama, age 23).*

Other participants reported the misconception of VMMC as a permit for disobeying/disrespecting parents/guardian figures.

*“The other one relates to masculinity like when you have been circumcised sometimes you think you are now a man. You do not want to listen to guidance or advices from your father figures because you believe you are now also a man. This is not really the case. That is what I can say” (Nhlanhla, age 25).*

Having multiple sexual partners was also reported to be a benefit after undergoing VMMC.

*“It is the one that says that when you are medically circumcised, you must have multiple sexual partners because you will not get HIV” (Nhlanhla, age 25).*

VMMC was associated with the sexual effects of causing erectile dysfunction after the procedure.

*“The other involve the perception that you get erectile dysfunction after doing VMMC” (Senzo, age 30).*

Participants further reported the need to nullify conspiracy theories spreading the myths that VMMC is a medical way of castrating people.

*“There are some rumours that doctors are using this medicinal castration to reduce the number of humans on earth. They attribute this to the wish to stop Africans from over producing. That is what people have. You only realise all these things are false after doing it” (Senzo, age 30).*

These disturbing myths have a potential to further cause more doubts or more resistance from people to do VMMC. Therefore, it becomes extremely important to correct or dispel these myths or misinformation to scale up the enrolment of VMMC.

#### 4.4. Summary

This chapter has managed to present the findings in the form of three main dominant themes that emerged from the collected data. The three dominant themes were motivations for VMMC,

sexual experiences post-VMMC, and new VMMC meanings developed after the procedure. Motivations for VMMC involved protection from HIV/STIs; preventing STI Reinfection; hygiene; peer pressure; removing pain during sexual intercourse; and to abstain from sex for those addicted to sexual intercourse. The reported sexual experiences post-VMMC cited were amazing, exciting and satisfying sexual intercourse. The new VMMC meanings after the procedure such as misconceptions claiming VMMC as permit to disobey parental/guidance figures, VMMC causing erectile dysfunction, VMMC being a medical way of castrating Black people were discovered. The next chapter provides the discussions of the presented data in chapter four, triangulated with the consulted literature studies on this subject.

## CHAPTER FIVE: DISCUSSION

### 5.1. Introduction

This chapter discusses the study findings in relation to the three research objectives and the literature. The HBM has been used here to explain and enlighten the findings. Although most results of this study concur with the results of previous studies, this discussion also shows the extent to which results of the current study build upon those of the previous studies. Below is a brief background of the study. This study focused on exploring the motivational factors of Black university students to undergo VMMC and their sexual experiences post-VMMC procedure. There were three dominating themes that emerged from the data namely: motivations for VMMC; sexual experiences post-VMMC; and new VMMC meanings post the procedure.

### 5.2. Biographical analysis of age and religion

Age and religion were found as influential in the decision making involving doing VMMC. This study found that almost all the participants got medically circumcised at the time when their age was between sixteen and twenty-four years old. These results concur with the results of the previous findings. For instance, a study conducted by Weiss) found that younger men wanted to get medically circumcised while the older men did not perceive/consider medical circumcision as beneficial to them. Similarly, different studies were conducted in four different countries including Tanzania, Malawi, Zambia, and Zimbabwe. These studies analysed age specific preferences for VMMC and found that younger boys were more willing to circumcise compared to older men (Hatzold et al., 2014; Scot et al., 2014; Ngalande et al., 2016).

Furthermore, this study found that all the interviewed participants who had done VMMC are subscribing to the Christian faith as part of their religious status. This evidence is in accordance with the view that religion and culture are determining factors for the acceptability of VMMC as evident in the existing literature (Kaufman et al., 2017; Scott et al., 2014 Masese et al., 2017). Men's decision to undergo VMMC in South Africa is highly influenced by the social norms, especially of religion and culture. Christian values nation or religion is highly dominant in the country of South Africa. The role of Christian belief on VMMC remains debatable with some Christians believing that VMMC should be done because it is commanded by God. While others believe it is a doctrine in the Old Testament that was already superseded during Jesus Christ's coming. In the context of deciding to do VMMC or not, despite the importance of both

instances, Nxumalo and Mchunu (2020) further highlighted that the person's level of faith or religious belief remains the most influential factor. In the context of this, a study by Downs and colleagues (2017) reported the potential influence of religious leaders to mobilise for VMMC clients.

### **5.3. Contributing factors to voluntary medical male circumcision decision making**

This study discovered that there were many different factors influencing students' motivation to undergo VMMC. These factors involved; sources of hearing about VMMC; perceptions about VMMC; and main motivations to do VMMC. VMMC hearing source referred to different sources of VMMC information that were vital in educating young men about VMMC which included close people like family members and/girlfriends, outreach programs by local clinics and Brothers For Life, media presence via TV and radio adverts, and peer education influence on campus.

These findings are not new because previous studies also found that extrinsic factors influencing VMMC decision making are referred to those with close influence like close friends, peers, and family members (Nxumalo, 2020). For instance, Kaufman et al. (2018) assessed female adolescent support of VMMC in South Africa, Tanzania, and Zimbabwe. This study found that, on the whole, females were supportive of male peers' decisions to undergo circumcision although few were found to be doubtful, believing that it could lead to promiscuity. Furthermore, Hallet et al. (2012) reported the significant role played by women in either promoting or discouraging VMMC decision-making process and also highlighted that the outcome may yield both potential benefits and risks to their health.

#### **5.3.1. Reminders to voluntary medical male circumcision**

The HBM explains the influence of the different sources of VMMC information that were vital in educating young men about VMMC which included close people like family members and/girlfriends, outreach programmes by local clinics and Brothers for life, media presence via TV and radio adverts, and peer education influence on campus, as the 'Cues' to do VMMC (Janz & Becker, 1984). Janz and Becker (1984) use 'Cues' to do VMMC to refer to strategies to activate readiness that provide 'how to' kind of information, awareness, and reminders for VMMC. 'Cues' are made of different factors which involve mass media campaigns, advice from others, reminder/postcard from a physician, illness of a family member/friend, newspaper

or magazines articles. This then emphasises the need for VMMC Promotion campaigns to use different platforms of information to recruit potential VMMC clients to increase VMMC enrolment and achieve the set targets.

### **5.3.2. Perceptions of risks for voluntary medical male circumcision**

This study has established varying factors of perceived VMMC risks or barrier factors to doing VMMC. VMMC surgical pain and complications (Losing blood resulting to death) were the most reported dominant barriers as well as sexual problems of permanent erectile dysfunction. In addition to this, fears of prerequisite HIV test and fears for the sale of the removed foreskin post-VMMC procedure, were the added barriers to do VMMC. This was similar to the results mentioned in the previous studies. For instance, some studies have been conducted to understand where the unwillingness of men to do VMMC stems from. One major finding suggested concerns about the potential effects of VMMC on their sexual functioning such as erection, orgasm, and sexual pleasure (Rogers et al., 2013; Toefy et al., 2015; Westercamp et al., 2012). The additional concerns to these factors involve pain from surgical risk and the reluctance to abstain from sex for six weeks after the procedure to recover/heal the wound (Rogers et al., 2013; Toefy et al., 2015; Westercamp et al., 2014).

Accordingly, South African based studies reported different contributing factors to barriers of VMMC. These factors included fear of pain and complications from the circumcising procedure, culture, religion, age, and circumcision cost (Westercamp et al., 2012). Adams and Moyer (2015) reported the fear of losing sexual pleasure after circumcision as the biggest barrier in both circumcised and uncircumcised men. This was supported by results from extensive research of studies that explored the factors influencing the unwillingness of men to undergo male circumcision (Zulu et al., 2015).

In summary, the International Initiative for Impact Evaluation (IIIE, 2013) summarises the determining factors that influence the decision making process around VMMC that include the fearing of pain during and after the surgery, both explicit and implicit costs pertaining to VMMC, worrying or fearing the adverse effects involving the surgery, threats to masculinity involving such as losing penis sensitivity or penis size, as well as worries relating to sexual performance or sexual inactivity and religious concerns. In addition to this, fearing the HIV test as a requirement before the surgery is also known to create distress (Hatzold, 2014).



As evident above, this study also confirmed previous discoveries and also found new perceived VMMC barriers/risks which involve the fear of HIV test which was used as a prerequisite for VMMC procedure and the allegation of selling the removed foreskins by clinicians to traditional healers to use in their traditional medicines. This, therefore, calls for the need of clinicians to clarify during the counselling whether VMMC is compulsory or not including the implications of either decision when one considers to do VMMC. This kind of education will enlighten potential VMMC clients into making informed decisions of whether to do HIV test or not when considering to do VMMC. On the point of selling removed foreskins, there should be increased element of transparency during the counselling sessions where the potential VMMC clients are educated about what happens to the management of the medical waste of foreskins remains after the procedure. This kind of education has a potential to deconstruct these types of myths which have a potential to push away some potential VMMC clients.

The issue of perceived VMMC barriers or risks can be best explained by the HBM. The HBM, according to Janz and Becker (1984), refers to the revealed perceived risks of doing VMMC as perceived barriers that discourage participants to do VMMC. Perceived barriers are used to refer to a person's view about the tangible and psychological costs associated with the advised action (i.e. Doing VMMC). These perceived barriers from above relates to fears of VMMC pain and complications, HIV test as a pre-requisite for VMMC, selling of human foreskins for traditional medicine, and VMMC as against the culture involving loss of one piece of your body part. The task here involves being able to identify and reduce these barriers through reassurance, incentives and assistance. This can include the provision of more accurate and updated correct information about VMMC. The pre-VMMC-counselling session is the one that helps to identify and reduce these barriers through reassuring, incentivising and assisting potential VMMC clients.

### **5.3.3. Perceptions of benefits for voluntary medical male circumcision**

The researcher learned the number of factors serving as perceived benefits for VMMC which confirmed the findings from the previous studies as well as discovered new findings. The findings of protection from HIV infection and hygiene remained dominant perceived VMMC benefits to most participants. This was followed by perceived benefit of enhancing sexual intercourse which resulted from the pain free sex, easy condom usage, and improved sexual

functioning. These results are in line with the results of previous studies, (for example, Scot et al., 2014), which suggests that there are different factors contributing to the facilitation of VMMC in men from Zulu ethnic group. Among these factors in younger men included, hygiene, protection from STIs, reduced pain during sex, and sexual satisfaction (George et al., 2014). The perceived VMMC benefit of hygiene was reported as common perceived benefit of VMMC corroborating other studies conducted in Africa (Tarimo et al., 2012). In addition, older men in other African countries mentioned that their wish to be circumcised was driven by their intent to give sexual pleasure to their female partners (Francis et al., 2012).

This study made new discoveries of findings about perceived VMMC benefits like immunity to HIV infection as well as living responsible lifestyles. The perceived VMMC benefit of immunity to HIV infection is the most dangerous misconception to VMMC as much as it has a potential to attract more potential VMMC clients. It simultaneously has a huge potential to cause unintended consequences of promiscuity, unplanned pregnancies and increased in new HIV infections. It is for this reason that this myth needs to be deconstructed during VMMC awareness campaigns and programmes to eliminate elements of such attitudes. On the perceived VMMC benefits of living responsibly lifestyle, this indeed need to be integrated in VMMC promotional interventions to educate public that deciding to do VMMC is indeed one of the signs/indicators of living responsible lifestyles.

Again, the HBM clearly explains these perceived benefits of doing VMMC namely protection from HIV infection, hygiene, enhanced sexual intercourse, and living responsible lifestyle. Janz and Becker (1984) of the HBM referred to the stated perceived VMMC benefits as the person's view in the efficacy of the advice action in reducing the risks, seriousness and impacts. Therefore, the above-mentioned perceived benefits of protection from HIV infection through reducing chances of HIV and STI infection, easy condom usage, enhanced sexual intercourse, hygiene, and living responsible lifestyle, among others are all the benefits that results from doing VMMC. Therefore, the main tasks here involve defining the action (Doing VMMC) like how, where, when, and clarifying the positive effects that is expected as a result of doing VMMC.

#### **5.3.4. Main motivations to adopt voluntary medical male circumcision as an HIV prevention measure**

The findings of this study revealed that there are many main motivational factors positively influencing the participant's decision to consider doing VMMC. This study found dominant main motivation of doing VMMC to be protection from HIV by reducing chances of heterosexual HIV infection/transmission by 60 percent. Participants who were already sexually active at the time of VMMC procedure reported their VMMC main motivation of preventing STI infection. On the other hand, participants who had already previously experienced STI infection reported VMMC main motivation of preventing STI for the second time. In addition to this, a number of other varying factors were reported to be the main motivators of VMMC. These factors included hygiene, peer pressure, being good role model, being a man, enhancing sexual intercourse, alleviation of sex pain, and abstinence from sex during the six-week healing period for those addicted in sex.

Correspondingly, previous studies have reported that different motivational factors were understood to be behind men's decision to undergo VMMC. Among these motivational factors is the desire of women for circumcised men, enhanced sexual pleasure, religion, proven safety, affordability, confidentiality and cleanliness (Hygiene) (Ngalande et al., 2016; VMMC Demand Creation Toolkit, 2015). The desire to have many women was understood to be the main motivational factor to undergo circumcision by the boys in adolescence stage in Malawi (Kaufman et al., 2016).

The IIIIE (2013) further summarised that the facilitating factors to deciding on undergoing VMMC including hygiene, being protected from the STIs, improved sexual performance and satisfaction, ease and comfort in using a condom, as well as being favourably and socially accepted by other ethnic groups, for instance, AmaXhosa or AmaZulu. In addition to this, peer pressure and female intimate sexual partners' preferences are also understood to be social motivators (Kaufman et al., 2018). It is interesting to see that VMMC decision making is influenced by different factors.

The main VMMC motivation discovered by this study of reducing the chances of VMMC infection by those participants who are already engaging in unprotected sexual intercourse can be best explained by the concept of perceived susceptibility of the HBM (Janz & Becker, 1984).

Accordingly, the main VMMC motivation of preventing STI reinfection by those participants who had previously experienced STI infection can be best explained by the concept of perceived severity of the HBM (Janz & Becker, 1984).

The participants above understood that their engagement in sexual intercourse results to their perception of being at risk of HIV infection. This view of perceived risk by the participants is referred to a perceived susceptibility, which refers to the person's view about risk or chance of acquiring a condition like HIV infection (Janz & Becker, 1984). The task here involves defining the at-risk populations, level or risks, with risk attributed to personal behavioural features believed to increase the perceived susceptibility if too low. The perceived susceptibility will influence the likelihood of the participant to do VMMC to reduce his risk of contracting HIV. Hence, the participant's perceived susceptibility to HIV through their behavioural risk of engaging in sexual intercourse was the main reason to do VMMC.

These insights suggest that the participant had understood the consequences of not taking the advised action of VMMC through his previous STI infection. This appears to have led the participant into believing that they are vulnerable to HIV infections considering their previous experience with STI. An STI infection was understood as a serious consequence of not taking the advised action of doing VMMC, and therefore, HIV infection was understood as even more serious than the STI infection. The participants then appeared to have committed to protecting both themselves and their sexual partners by taking the advised action of VMMC. This perceived seriousness of contracting an STI or HIV is explained as the perceived severity by the HBM (Janz & Becker, 1984). This refers to a person's view about the condition's seriousness. The task here involves specifying the consequences of the risk and the condition. This is evident from the participants who decided to do VMMC to avoid STI reinfection as well as HIV infection.

The main VMMC motivation of being a man, enhancing sex and alleviating sex pain can be explained by the concept of self-efficacy in terms of the HBM. The concept of being a man is associated with the ability of enduring pain. Now with the perceived pain associated to manhood qualifies the participant to believe in the bravery of enduring the perceived VMMC pain to be a man. This experience of bravery by the participants mentioned above clearly fits as self-efficacy in the HBM (1984). This is used to refer to the confidence of a person in taking the recommended action. The task here involves providing training and guidance in taking the action as evident in the participant's access to VMMC awareness programmes in school,

families, media platforms, as well as through counselling sessions before entering theatre to do the procedure. This equipped the participants with step by step guide on taking the action to do VMMC. Therefore, in the context of increasing the uptake of VMMC and attracting more potential VMMC clients, these VMMC main motivational factors need to be incorporated in VMMC promotional campaigns and programmes to help meet the set VMMC targets.

#### **5.3.6. The voluntary medical male circumcision procedure: comprehensive HIV prevention**

The researcher established from participants' remarks that VMMC involves the integration of various HIV prevention mechanisms. The findings revealed that the VMMC procedure is in between of pre and post-counselling. The pre-counselling session is preceded by health screening of HIV test together with other health tests such as blood sugar and BP. During the counselling sessions, all the participants were educated about the importance of dual protection in the form of using a condom despite being medically circumcised. The main point of VMMC education was the clarification that VMMC reduces the chances of HIV infection by 60% not by 100%. Responsibly lifestyles were emphasised through consistent correct condom usage and avoiding having multiple sexual partners.

Similarly, previous studies on VMMC experiences reported that the process of doing VMMC procedure include the comprehensive HIV prevention strategies. The process of undergoing VMMC is understood to include holistic HIV prevention strategies. Clients who are going through the VMMC process start by undergoing counselling and HIV testing before the actual VMMC procedure (May, 2014; WHO/UNAID, 2016). During this counselling process, they are educated or given information about the benefits of doing VMMC and the essential need to use other strategies to prevent HIV infection such as faithfulness to one sexual partner, a six weeks' abstinence from sex post-VMMC procedure, as well as correct and consistent condom usage (May, 2014; WHO/UNAIDS, 2016). VMMC is also explained during counselling to reduce the risk of HIV infection with 60% (WHO/UNAIDS, 2016). This explanation is understood to create and enable misconceptions which threaten the main efforts of preventing HIV (May, 2014). It is noted that the media, through messages promoting VMMC, uses 60% protection of reducing HIV infection chances and this was also observed in a trial by Auvert and colleagues (2019).

#### 5.4. Meaning attached by the participants to voluntary medical male circumcision

The last objective of the current study involved the new meanings for VMMC brought by both motivations for VMMC and sexual experiences post-VMMC. The new meanings attached by the participants to VMMC further revealed participant's new VMMC perceptions post-VMMC procedure. The participants were asked to retrospectively report their new VMMC perceptions after undergoing the VMMC procedure. This study had found that participants had developed new meanings attached to VMMC that reflected appropriate, correct and adequate information about VMMC. Participants attached these different meanings mentioned below to the experience of having done VMMC through their new perceptions and myths/misconceptions about VMMC.

This study learned that there are lots of meanings that participants attached to VMMC because of their new perceptions. This study established that participants had developed better VMMC understanding post-VMMC procedure. This was highlighted by their understanding of main VMMC benefits and shortfalls. Participants communicated that VMMC does not mean guaranteed protection from HIV infection as it only reduces the chances of infection by 60%. This was highlighted in their admission of the remaining 40% chances of infection should they engage in unprotected sex. Participants emphasised the meaning of dual protection whenever engaging in sexual intercourse. The participants better VMMC understanding enabled participants in dispelling myths and misconceptions about VMMC. This was further communicated by participants meaning that VMMC does not mean permission to have multiple sexual partners and it also does not cause erectile dysfunction.

These research findings are not unique as they reflect in previous studies. For instance, Herman-Roloff et al. (2012) referred to early sexual resumption as one of the riskiest sexual practices post-VMMC procedure which are presumed to emanate from the misunderstandings of the protective effect of VMMC. Moreover, the desire to undergo circumcision was associated with knowledge of perceived protective effect of VMMC from those uncircumcised men who had experienced high incidences of STIs and were exposed to HIV infection through their risky sexual behaviours (Chikutsa et al., 2015; Kaufman et al., 2016). In the context of this, it is understood that one's motivation to do VMMC could be associated with his desire to practice unprotected sex by freely engaging in risky sexual practices resulting from the perceived protective effect of VMMC.

This may be attributed to the deficiency in understanding protective effect of VMMC (Chatsika et al., 2020). This development is understood to expose men to more risk of HIV infection through practicing risky sexual behaviours. Therefore, this need to be addressed during both the pre and post-VMMC counselling sessions to avoid the unintended consequences. This phenomenon is referred to as risk compensation (Chatsika, 2020; Kong et al., 2012). Risk compensation in qualitative studies was attributed to misconceptions of VMMC particularly to those who believed that VMMC provided 100% protection from HIV infection (Kelly et al., 2012, Rupfutse et al., 2014). This myth was exacerbated by another perception of increased sexual pleasure when a circumcised person engages in unprotected sex (Rupfutse et al., 2014). Wang et al. (2016) recommended that the promotion of VMMC by health workers need to consider risk compensation.

#### **5.4.1. Voluntary Medical Male Circumcision impact on sexual functioning**

The findings from this study sustained that VMMC effect resulted into improved confidence levels. The attributed confidence was understood by participants to have positively enhanced their sexual performance with their sexual partners. The increased or boosted confidence levels from the emotional changes brought by VMMC led to the actual positive experiences of sexual intercourse. Most participants reported improved and pleasurable sexual intercourse as a result of VMMC. This was emphasised by other participants who highlighted the alleviation of pains that participants had experienced during sexual intercourse before VMMC and those pains were no longer there after VMMC.

In correspondence with the above findings, more researchers testify to the concept of enhanced sexual intercourse post-VMMC. Zulu et al. (2015) examined the post-VMMC experience, including sexual satisfaction and performance of the male study participants and their female partners. Zulu found results that confirmed the findings of the previous research which found that men who had undergone VMMC and their sexual partners had a high degree of satisfaction with VMMC procedure and its consequences on sexual satisfaction (Westercamp et., 2014; Wamai et al., 2015; Zulu et al., 2015). Zulu et al. (2015) also found that men tend to value women's opinions and perceptions of VMMC which suggested the need for women inclusion in VMMC promotion interventions.

This study established that not all participants complied to a full six week waiting healing period before the commencement of sexual intercourse. The findings revealed some participant who resumed sexual intercourse after two weeks of the VMMC procedure which led into him experiencing so much pain and prolonged healing. Consequently, previous studies associated early or premature sexual resumption with the increase in adverse events. This suggests the need to investigate effective intervention strategies to delay sex resumption during the wound healing period. The study also recommended the need for more studies in the future to examine VMMC impact on sexual satisfaction in the general population.

Similar to the findings from the previous studies that evaluated effect of VMMC on sexual functioning, Nordstrom and colleagues (2017) found that the majority of men indicated that VMMC had resulted to improvements in some domains of their sexual functioning. In support of this, Pintye et al. (2020) evaluated VMMC effect post-VMMC procedure and found that improved sexual functioning was the result of improved sexual desire, ease of vaginal penetration and ejaculation, and the ability to achieve and maintain the erection post-VMMC procedure.

However, contrary to VMMC enhancing sexual intercourse, one participant from this study reported VMMC to mean a disadvantage to them in the form of reduced sex rounds due to pain. Hence, this hints that it is not only the positive association of VMMC and sexual intercourse. The same participant reported VMMC as having a negative influence in his sexual life. This is contrary to what was reported by other participants earlier who associated VMMC experience as reducing pain during sexual intercourse. Therefore, more research is needed to explore the VMMC impact on sexual performance. Notwithstanding the significant improvements in sexual functioning post-VMMC, it was noted in the evaluation that there were some participants who reported one category of worsening sexual functioning due to post-VMMC procedure (Nordstrom et al., 2017). However, Morris and Krieger (2013) found no evidence of variations related to any component of sexual functioning by the status of circumcision.

As we continue with VMMC enrolment in South Africa, KZN, and UKZN, it will be imperative to incorporate useful evidence of other VMMC benefits that are not related to HIV prevention with the aim to maximise the uptake of VMMC. In light of the challenges in meeting the VMMC targets and concerns raised on VMMC about the potential negative effect/impact on the sexual functioning as mentioned in qualitative studies (Westercamp et., 2014; Wamai et



al., 2015), the new findings from this current study produced significant evidence to influence VMMC demand messaging in KZN and UKZN in particular.

## 5.5. Summary

This chapter has discussed the findings of the study. This was done through covering particular sections. Among the covered sections are biographical analysis of age and religion, contributing factors to VMMC which are main motivations for VMMC, VMMC being a comprehensive HIV prevention, meanings attached to VMMC, VMMC impact on sexual functioning. This was conducted in relation to the integration of literature into findings and the framework of the HBM where it was appropriate and fitting. The next chapter will present the conclusions as well as the recommendations that emanated from the findings of this study.

## CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 6.1. Introduction

The previous chapter has presented the discussions that emanated from the study findings and the literature. The current chapter aims to provide the overall study conclusion and recommendations that are shaped and informed by the study findings. In doing this, the researcher will provide a summary of major findings in correspondence with the intended aim and objectives of this study. This will be followed by the conclusions, recommendations and study limitations.

### 6.2. Summary

This study has examined the experiences of UKZN Howard College students who underwent VMMC for HIV prevention. The study explored the motivational factors of Black university students to undergo VMMC and their sexual experiences post-VMMC procedure and outlined their new VMMC meanings developed after the VMMC procedure.

The HBM was used as the conceptual framework which helped in contextualising the experiences of UKZN Black students when undergoing VMMC. The HBM by Janz and Becker (1984) was the appropriate model used in this study which was aimed at understanding the experiences of UKZN Howard College students when undergoing VMMC for HIV prevention, which involved unearthing their motivational factors to their VMMC decision making, and their sexual experiences, including the meanings they attached to the experience of doing VMMC in their lives. These key findings are summarised below in relation to the three main objectives of this study:

1. To explore the factors that influence and motivate Black university students to undergo voluntary medical male circumcision.
2. To explore the prevalent sexual experiences by Black university students post-voluntary medical circumcision.
3. To explore the meanings attached by Black university students to voluntary medical male circumcision after undergoing it.

Based on the aim of this study, the following aspects were revealed;

This study made a lot of conclusions. Conclusions were made in relation to the first and second objectives namely; exploring the factors that influence and motivate Black university students to undergo voluntary medical male circumcision and exploring the prevalent sexual experiences by Black university students post-voluntary medical circumcision, respectively. This study established that there are many factors that influence the decision making of UKZN Howard College students to undergo VMMC. It appeared that VMMC decision making involved VMMC motivational factors (VMMC hearing sources of family members, outreach programmes by local clinics, media presence and peer education), and perceptions (perceived VMMC risks of pain, complications, permanent erectile dysfunction, fears of death, fears of HIV test being a VMMC pre-requisite, and sale of foreskin remains). These perceived VMMC risks were outweighed by perceived VMMC benefits of protection from HIV infection, hygiene, enhancing sexual intercourse, easy condom usage, and living responsibly lifestyles. These sources of hearing about VMMC and perceptions resulted to main motivations of VMMC which included reducing chances of HIV infection, preventing STI infection, hygiene, peer pressure, good role models, being a man, enhancing sex, alleviation of sex pain, and abstaining from sex during healing period. The reported sexual experiences post-VMMC cited enhanced sexual intercourse as a result of pleasurable, exciting and satisfying sexual intercourse. This was enabled by removed sex pains, and big and clean penis which led to enhancement of sexual functioning. Although one participant reported a rare VMMC negative effect of reduced sexual functioning, the same participant reported enhanced sexual intercourse post-VMMC procedure. The understanding of these factors is important in promoting VMMC promotional programmes. These findings corresponded with findings of the previous studies (for example, IIE, 2013; PEPFAR, 2014; Nxumalo, 2020).

In line with objective number three on exploring the meanings attached by Black university students to voluntary medical male circumcision after undergoing it. This study also uncovered new VMMC meanings after the procedure. These new VMMC meanings were in the form of misconceptions and new perceptions. VMMC misconceptions/myths highlighted claims of VMMC as a permit to disobey parental/guardian figures, VMMC causing erectile dysfunction, and VMMC being a medical way of castrating Black people. The new VMMC perceptions emphasised the meaning/importance of dual protection post-VMMC procedure since it (VMMC) only reduces the chances of infection by 60%.

The lessons from this study can be applied in other similar contexts. It appeared that there are many different types of factors that motivate men to consider undergoing VMMC which must then be incorporated in the VMMC promotional programmes to increase VMMC uptake. Although VMMC was reported to have affected positively on the sexual experiences of people who underwent it, awareness about the rare post-VMMC negative effects of reduced sexual functioning reported in a previous study need to be stated during recruitment while emphasising that it seldom happens (Monica et al., 2017).

This necessitate the need for the continuation of pre-procedure counselling and post-procedure counselling. This is where all the VMMC related myths and misconception need to be dispelled so that the clients have the adequate and proper meaning to VMMC. The results from this study supported that the success of VMMC requires the integration of VMMC with other comprehensive HIV prevention strategies, for example; the promotion of dual protection. The findings from this study has informed the recommendations aimed at increasing the VMMC uptake and meeting the targets.

### **6.3. Conclusion**

This study has explored the experiences of UKZN Howard College students who underwent VMMC. Among the findings, it appeared that there are many different factors influencing and motivating the VMMC decision making such as family members, friends, awareness programs. Some of the sexual intercourse experiences post-VMMC involved enhanced sexual intercourse. The post-circumcision meanings highlighted the emphasis of dual protection. The associated VMMC misconceptions involve VMMC as a permit to disobey parental/guardian figures; VMMC causing erectile dysfunction; VMMC being a medical way of castrating Black people. More research is needed on the sexual experiences post-VMMC procedure.

### **6.4. Recommendations**

The findings from this study led to the formation of the following recommendations. Firstly, further research is recommended to focus on the sexual effects post VMMC. This corresponds with Adam and Moyer (2015) recommendation for more in-depth research to be conducted where sexually active men would be asked about their sexual experiences before and post-circumcision. This then means that it must be people who are sexually active before they get medically circumcised and still become sexually active after they have been medically circumcised.

Secondly, there is a very strong recommendation emphasising the need to dispel myths associated with VMMC. The role of female involvement and participation in VMMC promotional and recruitments programmes as highlighted by Kaufman et al. (2018), which was also evident in this study findings, should be considered and included in VMMC promotional strategies. A considerable amount of effort should be made in warning and educating VMMC clients about the dangers of VMMC myths and misconceptions (Pintye et al., 2019; Wirth et al., 2017). Lastly, there is a need for the expansion of VMMC benefits to include enhanced sexual intercourse during the VMMC recruitment and promotion. These recommendations are properly detailed below to ensure the successful implementation of VMMC in order to achieve the set VMMC targets towards the prevention of new HIV infections.

#### **6.4.1. Dispelling Voluntary Medical Male Circumcision myths**

##### **6.4.1.1. VMMC as a permission for having multiple sexual partners**

This study made new discoveries of myths to VMMC. Among these is the permission to disobey parents/guardians, permission for multiple sexual partners, VMMC causing erectile dysfunction, and medical way of castrating. The myth of VMMC as a permission for having multiple sexual partners is one of the most dangerous misconception to VMMC as much as it has a potential to attract more potential VMMC clients. Correspondingly, it relates to the concept of risk compensation. In the context of this, it is understood that one's motivation to do VMMC could be associated with his desire to have multiple sexual partners and practice unprotected sex by freely engaging in risky sexual practices resulting from the perceived protective effect of VMMC (Kelly et al., 2012; Westercamp et al., 2014). This may be attributed to the deficiency in understanding protective effect of VMMC.

Therefore, this simultaneously has a huge potential to cause unintended consequences of promiscuity, unplanned pregnancies and the increase in new HIV infections. This development is understood to expose men to more risk of HIV infection through having multiple sexual partners and sometimes practicing risky sexual behaviours (Westercamp et al., 2014). Therefore, this together with other myths mentioned above, need to be addressed during both the pre and post-VMMC counselling sessions to avoid the unintended consequences. It is for this reason that these myth needs to be deconstructed during VMMC awareness campaigns and programmes to eliminate elements of such attitudes.

In addition, the findings from this study have brought the allegation or myth involving VMMC as a medical way of castrating Black men and VMMC as a permission to disobey parents/guardians. For this reason, VMMC promotional and recruitment interventions together with pre and post-counselling sessions need to address and deconstruct these myths.

#### **6.4.1.2. Negative VMMC sexual effect**

In contrast to VMMC enhancing sexual intercourse, one participant reported post-VMMC sexual effect of reduced sex rounds due to pain. This is in great contrast with the results of the previous studies where the majority of participants reported enhancement or improvement in sexual functioning post-VMMC procedure while other few participants reported no sexual changes post-VMMC procedure (Morris & Krieger, 2013). Hence, the findings appear to be contradicting each other as it suggests that it is not only the positive association of VMMC and sexual intercourse or enhancement. The same participant reported VMMC as having a negative influence in his sexual life. This is contrary to what was reported by the majority participants earlier who associated VMMC experience with reduced pain during sexual intercourse and enhanced sexual intercourse. Therefore, more research is needed in the future to explore the VMMC impact on sexual performance post-VMMC procedure.

#### **6.4.1.3. Expansion of VMMC benefits**

In addition to the well published benefits of VMMC involving reduced chances to HIV infection; reducing chances for Human Papilloma Virus; reducing chances of penile cancer; reducing risk of urinary tract infections, genital ulcer disease; and hygiene (Monica et al., 2017; Weiss et al., 2015), this study established the added benefits of doing VMMC, which is enhanced sexual intercourse. Therefore, in quest to increase the uptake of VMMC and attracting more potential VMMC clients, these new benefits of sexual enhancement together with VMMC main motivational factors mentioned above, these benefits of VMMC need to be incorporated in VMMC promotional campaigns and programmes to help meet the set VMMC targets.

## 6.5. Study limitations

Each study conducted has its own inherent limitations that the researcher needs to be aware of. Hence, this study is without exception as it involves noted limitations involving the study sample, recall bias plus choice support bias, and limited focus to one racial group.

The information on sexual changes brought by VMMC was discovered when the participants were retrospectively asked to compare aspects of their sexual performance with the experiences before the VMMC procedure. The rationale behind this approach was to get how VMMC influences or impacts sexual functioning. However, it is understood that the rigour of this finding would have been improved had it used a baseline assessment of sexual functioning. Similar to study by Pintye and colleagues (2020), the limitations of this study are attributed to extend to the two concepts of recall bias and choice supportive bias.

Recall bias is attributed to the possibility of overreporting of worsening sexual function among those participants who were dissatisfied with VMMC. While a potential of choice supportive bias is attributed to improved function to rationalise the decision of undergoing VMMC procedure (Pintye et al., 2020). It can be understood from this that since the participants were ambassadors promoting VMMC on campus, they might have been somehow influenced to rationalise the VMMC decision. In addressing this limitation, the researcher with his experience as a social work graduate, used his skills of ensuring confidentiality and privacy during every individual interview, as well as ensuring the anonymity of participants' responses by using pseudonyms. This then encouraged participants to speak the objective truth of their personal experiences resulting to rich and credible data.

It was noted from the topic of the current study that it targeted UKZN Black students who underwent VMMC for HIV prevention. Since the study only targeted Black students, this then has implications to the applicability or generalisability of the study findings. Given the lived personal experiences highlighted by the participants, this qualitative study therefore cannot be generalised to the general population for its unique nature of the participants' experiences.

In light of the factors mentioned above, the findings of this study cannot be generalised to the general public like illiterate participants or other different racial groups. However, findings are limited to those contexts with the same conditions as of this study.

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## Appendix A: Information and informed consent letter

Discipline of Psychology

School of Applied Human Sciences

University of KwaZulu Natal

Howard College Campus

Dear Participant

### **INFORMED CONSENT LETTER**

My name is Siyabonga Mbambo and I am a Psychology master's student at the University of KwaZulu Natal, Howard College Campus, South Africa.

I am interested in doing a study to understand the experiences of university students who have been medically circumcised. I need to gather information in the form of an interview. This letter is an invitation for you to be part of this interview.

Please note the following:

- ✓ This research aims to understand the experiences of male university students who have been medically circumcised.
- ✓ The interview may last for about 45-60 minutes.
- ✓ Your participation in this study is voluntary. You have the right to withdraw from the study at any stage you want. The study is for academic purposes, and there will be no financial rewards for participation, nor would there be any negative consequences should you decide to withdraw. Any information linking you with a study will be erased when compiling a final write up.
- ✓ The data will be stored in a secure storage and destroyed after 5 years.
- ✓ The study will use pseudonyms when writing the research report.
- ✓ The participants will be invited to individual feedback sessions so that the findings can be discussed with them.
- ✓ If you are willing to be interviewed, please know that it will be recorded for the purposes of capturing data. Therefore, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	Willing	Not willing
Audio equipment		
Photographic equipment		
Video equipment		

If you willing to participate in this interview I can be contacted at:

Email: [210519548@stu.ukzn.ac.za](mailto:210519548@stu.ukzn.ac.za) or [mbambosa@gmail.com](mailto:mbambosa@gmail.com)

Cell: 071 474 8112.

You can also contact my supervisor, Ms Cynthia Patel located in the Discipline of Psychology, School of Applied Human Sciences, Howard College Campus of the University of KwaZulu-Natal

Ms Cynthia Patel contact details

Email: [PatelC@ukzn.ac.za](mailto:PatelC@ukzn.ac.za)

Or alternatively, you can contact;

HSSREC RESEARCH OFFICE

Full Name: Prem Mohun

HSS Research Office

Govan Bheki Building

Westville Campus

Contact: 0312604557

Email: [mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

Thanking you in advance for your contribution to the research.

**If you wish to obtain information on your rights as a participant, please contact Ms Phumelele Ximba, Research Office, UKZN, on 031 260 3587.**

## **DECLARATION**

**I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.**

**I understand that I am at liberty to withdraw from the project at any time, should I so desire.**

**SIGNATURE OF PARTICIPANT**

**DATE**

.....

.....

## Appendix B: Interview guide

### Demographic information

Age	
College	
School	
Course	
Year of study	
Religion	
Race group	
Ethnicity	
City/town you were born	
When were you circumcised?	

### Before circumcision process

1. How did you first hear about Voluntary Medical Male Circumcision (VMMC)?

2. At the time, what did you think about Voluntary Medical Male Circumcision?

Follow up on perceptions, stories that you had heard, etc.

3. Can you describe for me how you made a decision to be circumcised?

Follow up: what would you say was your main motivation? When did you decide to go for medical male circumcision?

4. What was the support you received when you decided to get medically circumcised?

Follow up: Was transport to and from clinic/hospital provided?

### **During the circumcision process**

**5.** I would like to know more about what happened during the process when you were medically circumcised, can you please tell me more about what happened? What was it like when you were medically circumcised? Follow up; screening tests, theatre/cutting/foreskin removal process, etc.

**6.** What was it like after the circumcision process??

**7.** What helped you during the healing process after the circumcision process?

### **After the circumcision process**

**8.** I am interested in hearing your experiences after you were medically circumcised. Did you observe any changes? Probe physical and emotional changes

What was it like to have a sexual intercourse for the first time after you were medically circumcised?

**9.** Earlier you said .... about VMMC when you first heard about it, what do you think about it now? Follow up: how do you feel about it?

*If the respondent does not refer specifically to sex life before and after then probe the issue here - after question 9*

**10.** In retrospect, do you think there are misconceptions, misinformation about medical male circumcision? If yes, what are those? What is your view on using a condom even if person is circumcised?

**11.** If someone came to you for advice regarding VMMC, what would you say?

## Appendix C: Ethical clearance letter



18 September 2018

Mr Siyabonga A Mbambo 210519548  
School of Applied Human Sciences  
Howard College Campus

Dear Mr Mbambo

Reference number: HSS/1036/018D

Project title: "Undertanding university students' experiences of voluntary medical male circumcision for HIV prevention: a qualitative inquiry?"

### Full Approval - Full Committee Reviewed Application

With regards to your response received on 14 September 2018 to our letter of 31 August 2018, the Humanities and Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

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

Yours faithfully

Prof S Singh

/px

cc Supervisor: Cynthia Patel  
cc Academic Leader Research: Dr Maud Mthembu  
cc School Administrator: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee  
Professor Shenuka Singh (Chair)/Dr Shamila Naidoo (Deputy Chair)  
Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: [cynthia@ukzn.ac.za](mailto:cynthia@ukzn.ac.za) / [shamila@ukzn.ac.za](mailto:shamila@ukzn.ac.za) / [mthembu@ukzn.ac.za](mailto:mthembu@ukzn.ac.za)

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