

**KNOWLEDGE, PERCEPTIONS AND ATTITUDES OF MALES IN BINDURA  
URBAN (ZIMBABWE) TOWARDS MEDICAL MALE CIRCUMCISION (MMC)**

by

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degree of Master of Philosophy (HIV/AIDS Management) in the Faculty  
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## **Declaration**

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## Abstract

**Background:** Medical male circumcision (MMC) has emerged as one of the Human Immunodeficiency Virus (HIV) prevention methods for HIV negative men engaged in heterosexual contact. Many studies have documented its efficiency in reducing the risk of contracting HIV infection in men. Because of that, Zimbabwe like other countries in the Southern Africa region, with generalised HIV infections is finding ways to scale-up MMC in non-circumcised communities. This study searched for knowledge, perceptions and attitudes of males in Bindura urban towards MMC. Bindura is the capital city of the Mashonaland Central Province of Zimbabwe. This town has diverse people with different social backgrounds who economically depend on the surrounding mines and commercial farms. Given the enormous differences in culture, religion, social and value systems among these people it was of particular importance to understand how they perceive medical male circumcision.

**Methodology:** The study was conducted using quantitative data collection method. Random selection was done to choose respondents and age was used to determine eligibility to the study. The qualifying age was 18-49 and a sample size of 60 was considered to be appropriate taking into consideration financial and time associated with large samples. Structured questionnaire with open-ended and closed questions were used to gather data. Likert scale was used on some questions to determine perceptions and attitudes of respondents. The questionnaires used to solicit information did not require respondent to provide his name for purposes of maintain confidentiality but contained identification number. In some cases, Chi-square test for independence was conducted to test for associations between demographic characteristics and observed responses. Comparison of responses between the age groups 18-29 and 30-49 years were also done to determine if there were some differences in representations of respondents in observed responses.

**Results:** The study aimed to assess knowledge, perceptions and attitudes of males in Bindura urban towards MMC and barriers they were confronting in accessing MMC. Respondents showed high level of awareness about HIV/AIDS intensity in Zimbabwe. Male circumcision (MC) was perceived by the majority of respondents as important in curbing HIV infections. A significant proposition of respondents regarded medical reasons as the most common reason why people undergo MC. However respondents demonstrated poor knowledge or

understanding of other strategies that must be used in conjunction with MC. Risks associated with operation, its cost and protection of confidentiality and consideration of family concerns were considered by respondents as barriers to MMC. Availability of accurate information about MMC and easing of access to MMC services were considered to be very important facilitating factors. Religious and cultural reasons and stigma from peers and friends were considered non barriers.

Statistically significant associations were only detected between MMC being motivated by medical reasons and demographic characteristics of age and marital status and also an association between education level and stigma as a barrier for MMC. The study failed to show a significant association between other observed responses and demographic characteristics.

## Opsomming

Agtergrond: Mediese manlike besnyding (MMB) het na vore gekom as een van die metodes vir die voorkoming van die oordrag van die menslike immuniteitsgebreksvirus (MIV) deur MIV-negatiewe mans betrokke by heteroseksuele kontak. Baie studies het reeds die doeltreffendheid daarvan ten opsigte van die vermindering van die risiko van MIV-infeksie by mans gedokumenteer. As gevolg daarvan is Zimbabwe, soos ander lande in die Suider-Afrika-streek met algemene MIV-infeksies, op soek na maniere om MMB by onbesnyde gemeenskappe uit te brei. Hierdie studie wou kennis, persepsies en gesindhede van manlike persone in die Bindura-stadsgebied ten opsigte MMB bepaal. Bindura is die hoofstad van die sentrale provinsie Masjonaal in Zimbabwe. Hierdie stad word bewoon deur diverse mense met verskillende maatskaplike agtergronde wat ekonomies van die omliggende myne en kommersiële plase afhanklik is. Gegewe die groot verskille in kultuur, godsdien, maatskaplike en waardestelsels onder hierdie mense, was dit van besondere belang om te begryp hoe hulle mediese manlike besnyding verstaan.

Metodologie: Die studie het van die kwantitatiewe data-insamelingsmetode gebruik gemaak. Ewekansige seleksie is gebruik om respondente te kies en ouderdom is gebruik om geskiktheid vir deelname aan die studie te bepaal. Die kwalifiserende ouderdom was 18-49 jaar en 'n monstergrootte van 60 is geskik beskou in ag geneem finansiële beperkinge en tyd verbonde aan groot monsters. 'n Gestruktureerde vraelys met oop en geslote vrae is gebruik om data in te samel. 'n Likert-tipe skaal is by sommige vrae gebruik om persepsies en gesindhede van respondente te bepaal. Die vraelyste wat gebruik is om inligting te ontlok, het dit nie vir respondente nodig gemaak om hulle name te verskaf nie ten einde vertroulikheid te verseker, maar het 'n identifikasienommer bevat. In sommige gevalle is die chi-kwadraattoets vir onafhanklikheid gedoen om te toets vir verbande tussen demografiese eienskappe en response wat waargeneem is. Vergelyking van response tussen die ouderdomsgroepe 18-29 en 30-49 jaar is ook gedoen om te bepaal of daar enige verskille in verteenwoordigings van respondente in die waargenome response was.

Resultate: Die studie wou kennis, persepsies en gesindhede ten opsigte van MMB by manlike persone in die Bindura-stadsgebied en hindernisse waarvoor hulle te staan kom ten einde toegang tot MMB te verkry, bepaal. Respondente het 'n hoë vlak van bewustheid omtrent die intensiteit van MIV/VIGS in Zimbabwe getoon. Manlike besnyding (MB) is deur die

meerderheid respondente as belangrik by die beperking van MIV-infeksies beskou. 'n Beduidende aantal respondente het mediese redes gesien as die algemeenste rede waarom mense MB ondergaan. Respondente het egter swak kennis of begrip van ander strategieë wat tesame met MB gebruik moet word, getoon. Risiko's geassosieer met die operasie, die koste daarvan en beskerming van vertroulikheid en agting vir die familie se bekommernisse is deur respondente as hindernisse met betrekking tot MMB beskou. Beskikbaarheid van akkurate inligting omtrent MMB en vergemakliking van toegang tot MMB-dienste is gesien as baie belangrike fasiliterende faktore. Godsdienstige en kulturele redes en stigmatisasie deur portuurs en vriende is nie as hindernisse beskou nie.

Statisties beduidende verbande is slegs tussen MMB gemotiveer deur mediese redes en demografiese eienskappe van ouderdom en huwelikstatus bespeur en ook 'n verband tussen opvoedingspeil en stigma as 'n hindernis vir MMB. Die studie het nie daarin geslaag om 'n beduidende verband tussen ander waargenome response en demografiese eienskappe aan te toon nie.

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Unforgettable are my children Martha, Tinashe, Nomsa and Ropafadzo who gave their emotional support during the challenging moments.

## **Dedication**

This piece of work is dedicated to my beloved parents, the late Mapiye Mupfunya and Ethel Mupfunya who laid the foundation of my education and to my husband Tapera for the unwavering support in various forms, financial, moral and creation of a conducive environment for me to study.



## Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CAPRISA	Centre for the AIDS Programme of Research in Southern Africa
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma virus
MC	Male Circumcision
MMC	Medical Male Circumcision
MP	Member of Parliament
PLWH	People Living with HIV
STIs	Sexually Transmitted Infections
UNAIDS	United Nations HIV/AIDS Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organisations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organisation.
ZNAC	Zimbabwe National Aids Council

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## **Chapter 1: Background of study**

### **1.1: Background**

Sub-Saharan Africa, particularly Southern Africa, continues to have the majority of people who are newly infected with HIV although there has been a steady decline in the number newly infected cases at global level since the peak in 1997 when an estimated 3.4 million people were infected (WHO/UNAIDS/UNICEF, 2011). In 2010, an estimated 1.9 million people became infected in Sub-Saharan Africa representing 70% of all people infected globally (WHO/UNAIDS/UNICEF, 2011). The magnitude of the problem in Southern Africa is shown by the fact that of the estimated 1.5 million people who got infected in Sub-Sahara Africa in 2009, 31% resided in Southern Africa (WHO/UNAIDS/UNICEF, 2011). And since 1997, over 2 million new infections occurred each year globally (WHO/UNAIDS/UNICEF, 2011).

Zimbabwe is not an exception of the pandemic ravage in the region. With an estimated 1.2 million people living with HIV (PLWH) in 2010 (Government of Zimbabwe, 2011a), Zimbabwe carries the third largest burden of HIV cases in Southern Africa after South Africa, with the largest burden globally of 5.6 million people living with HIV in 2010 followed by Mozambique with 1.4 million people in 2010 (USAID, 2011). From an estimated 1.2 million PLWH in Zimbabwe, about 400,000 were men while over 600,700 were women. About 47,000 new adult infections occurred in Zimbabwe in 2010 and the annual estimate from epidemiological modelling is expected to increase to 54,053 in 2015. The majority of the new infections are reported to occur in the age group of between 20-29 years (Government of Zimbabwe, 2011a).

Due to the absence of cure for and the vaccination against the disease, the current 1,2 million people living with the HIV virus and the newly infected 47,000 individuals are likely going to eventually die of AIDS related complications, despite the increasing availability of antiretroviral treatment (Bongaarts, Pelletier & Gerland, 2009). There is need, therefore, to scale up efforts in providing prevention interventions to reduce the occurrence of new infections.

Heterosexual contact is the main mode of HIV transmission accounting for 85% of global HIV infections (UNAIDS/CAPRISA, 2007). The proportion of heterosexual contact being much higher in Southern Africa where for example, in Zimbabwe, accounts for 92% of new infections (Government of Zimbabwe, 2011a). New infections occur mainly in the sexually active group of



20-29 with women being more affected than men (Government of Zimbabwe, 2011b; Niekerk & Kopelman, 2008; WHO & UNAIDS, 2011).

Interventions for preventing new HIV infections have to therefore focus on this mode of transmission. The success of prevention depends on change effected on human behaviour and lifestyle to break the transmission cycle. This is a very big challenge given that the forces that shape and influence human behaviour are very complex and poorly understood. The complexity of the matter is evidenced by reported (WHO & UNAIDS, 2007) limited adoption rates of the prevention measures that are being promoted. They include abstaining, condom use, and early anti-retroviral therapy, voluntary testing and counselling, reducing sexual partners, delaying sexual activities and treatment of sexually transmitted infections. As the challenge continues, additional prevention strategies are required to further reduce new HIV infections.

In Zimbabwe, there has been a steep reduction in adult HIV prevalence from peak of 26.5% in 1997 to 13.1% in 2011 but albeit at very high levels (Government of Zimbabwe, 2011b) and concerns are even raised as to whether the current gains in reduction in infection rates can be sustained.

The need to have men circumcised to reduce new HIV infections gathered momentum in Southern Africa following WHO & UNAIDS recommendations to scale up male circumcision (MC) (Gruskin, 2007; Jackson, 2002; WHO & UNAIDS, 2007). In response to this, the government of Zimbabwe developed the MC policy which was launched in 2009. With the aim of reducing HIV infection among all male age groups with particular emphasis on age group 15-29. This group bears the highest incidence of new HIV infections (Government of Zimbabwe, 2009).

## **1.2. Problem statement**

Zimbabwe is experiencing a severe, generalized heterosexually driven HIV epidemic, despite multiple HIV prevention programmes that are being implemented (Government of Zimbabwe, 2009). Uptake of MMC is very low despite evidence of the protective effect of MC against men and the global and national commitment to scale up implementation of this prevention method. Since a national MC campaign was launched in 2009, the rate of voluntary adoption of MC has

been very low with a mere 13,977 having been circumcised by 2010 representing 0.7% of the estimated number (1 912 595) of MCs needed to reach 80% prevalence by 2015 (Government of Zimbabwe, 2011b; WHO & UNAIDS, 2011). At that rate, it will be a pipe dream to close the gap of circumcising about 1.9 million males by 2015, the estimated number of MCs needed to reach the 80 % prevalence. In its policy for MC, Zimbabwe National Aids Council (ZNAC) urged regular reviews on community perceptions and acceptability of MMC to be conducted in order to determine community attitudes towards MC as a way of identifying bottlenecks to the adoption of the intervention (Government of Zimbabwe, 2009; Government of Zimbabwe, 2010). This is particularly important given that value systems of societies do change over time.

### **1.3. Purpose of the study**

The purpose of this study was to provide a better understanding on how males in Bindura urban responded to the call for MMC by revealing barriers, their knowledge, perceptions and attitudes towards voluntary MC. The findings of this study would be known to the Ministry of Health and Child Welfare and the National AIDS Council (NAC) where they would certainly contribute positively to the scaling-up MC. The results of the study would provide baseline information that will assist health planners to design effective strategies directed towards dealing with barriers, perceptions and attitudes that hinder uptake of MMC.

### **1.4. Significance of the study**

Given the burden of HIV in Zimbabwe and other Southern African countries, and the goal of achieving zero HIV infections by 2015, it is critically important to increase adoption of any HIV prevention strategies supported by scientific evidence. Reducing HIV transmission is a priority for sub-Saharan Africa and in particular Southern Africa and yet uptake rates for most measures in the current prevention 'toolkit' are very low.

As males have to access MMC voluntarily, uptake will therefore depend on how the potential beneficiaries perceive MC as a viable and effective prevention tool in general. What they perceive as barriers to accessing the tool is also a determining factor for uptake of MC. There are greater chances of finding viable solutions to promote voluntary adoption if information on knowledge, perceptions and attitudes of target populations or communities are known.

### 1.5. Aim of the study

The aim of the study was to establish possible factors and barriers contributing to the low uptake of MMC and the possible ways of improving uptake.

### 1.6. Objectives

- 1 To establish the knowledge that males have about MMC;
- 2 To establish perceptions and attitudes of males in Bindura urban toward MMC;
- 3 To identify barriers that are confronting males to access MMC and;
- 4 To document suggestions and proposals for improving uptake of MMC.

### 1.7. Definition of key terms

**A generalized HIV epidemic:** It is a pandemic that is self-sustaining through heterosexual transmission. In a generalized epidemic, HIV prevalence usually exceeds 1% among pregnant women attending antenatal clinic.

**Acceptability of MMC:** It is the willingness of respondents to accept MC as an additional HIV prevention strategy.

**Barriers to MMC:** These are factors and conditions that limit an individual to accept or access MMC.

**Heterosexual HIV transmission:** It is the transmission of HIV between individuals of the opposite sex through sexual intercourse.

**HIV incidence:** It is the number of new cases of infection arising in a given period in a specified population.

**HIV prevalence:** It is the proportion of individuals in a population who are living with HIV at a specific point in time.

**Human immune deficiency virus (HIV):** It is the virus that weakens the immune system, ultimately leading to AIDS.

**Medical male circumcision:** It is a surgical removal of the foreskin that covers the head of the penis.

**Trans gender person:** It is a person who has a gender identity that is different from his or her sex at birth

**1.8: Structure of this thesis**

This study is divided into six chapters. Chapter 1 introduces the study, provides the statement of the problem, purpose, significance, aim, objectives and definition of key terms. Chapter 2 focuses on literature review, which explores the background of MC, its protective effect, health benefits, acceptability and barriers to MMC. Chapter 3 outlines methods that were used in data gathering, collection, presentation and analysis. Chapter 4 is composed of the interpretation of the results. Chapter 5 provides the discussion of results and comparisons with earlier findings from similar research and chapter 6 presents the conclusions and recommendations

## **Chapter 2: Literature review**

### **2.1. Introduction and background of male circumcision**

Male circumcision is not a new phenomenon as it has been practiced for religious, social and cultural reasons for many decades. According to Hankins (2007), an estimated 665 million men over 15 years of age in the world are circumcised with the majority being Muslims. Hankins (2007) also noted that in countries such as Turkey where circumcision is socially acceptable, boys do not consider themselves as men unless they are circumcised. In Zimbabwe, around 10% of men were circumcised for religious and traditional reasons before the launch of voluntary medical male circumcision (VMMC) (Government of Zimbabwe, 2009). Circumcision for religious reasons was predominantly practised by the Chewa and Muslim people while traditional circumcision was practised by small groups of the population such as the Xhosa, Tonga, Venda and the Tshangani tribes as rites-of-passage to manhood (Government of Zimbabwe, 2009). Circumcision is reported to be rare among the Shona and the Ndebele tribes who form the majority of the population groups (Government of Zimbabwe, 2009; Halpern, 2005).

#### **2.1.2. Surgical MC and its protective effect**

MC is a surgical removal of the foreskin that covers the head of the penis (Jackson, 2002) and this skin acts as the main entry point for HIV during penetrative sex between an uninfected man and an HIV-positive person. The inner surface of the foreskin contains a higher proportion of T-cells that the HIV virus targets. Circumcision removes these cells and in addition, a circumcised penis develops thicker skin that is resistant to HIV infection (Geoffrey, 2011; Jackson, 2002; Weiss, Halperin, Bailey, Hayes, Schmid & Hankins, 2008; Westercamp & Bailey, 2007). The inner foreskin that is vulnerable to HIV is reported to have less Keratin, a protein found in the skin, which has a protective effect (Jackson, 2002). The protective effect is reported to be much greater when circumcision takes place early in a man's life as there is more time to allow the thickening of the skin on the head of the penis before a man reaches adulthood (Rennie, Muula, & Westreich, 2007). A cross sectional study that was conducted in Orange Farm, South Africa in 2007-2008 showed that circumcised men had a 65% lower HIV incidence and 55% lower HIV prevalence than uncircumcised men (WHO & UNAIDS, 2011; WHO/UNAIDS/UNICEF, 2011).

### **2.1.3. Male circumcision as an HIV prevention strategy**

WHO & UNAIDS (2007) recommended MC to be scaled up in 13 countries that were identified to have high HIV prevalence rates and low MC. These countries included Botswana, Kenya, Lesotho, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. The recommendation was made following considerable evidence from three randomised control trials conducted in Kenya, Uganda and South Africa that showed that MC could reduce the risk of HIV acquisition by men through vaginal sex by 60% (Gruskin, 2007; WHO & UNAIDS, 2007). The global HIV report of 2010 also revealed that the adult national HIV prevalence in most West and Central African countries was estimated to be 2% or below, while in Southern African countries it was around or exceeded 15% (UNAIDS, 2010). Suggestions were that the high spread of HIV in Southern Africa could be caused by low levels of MC compared to Western Africa (Government of Zimbabwe, 2009; Gruskin, 2007; WHO & UNAIDS, 2007).

### **2.1.4. Health benefits of MMC for HIV prevention**

Epidemiological modelling showed that expanding the coverage of VMMC to 80% among men in the age group 15-49 years within five years (2011-15) could avoid around 3.5 million people becoming newly infected with HIV in Eastern and Southern Africa representing cost savings of about US\$16.6 billion in anti-retroviral treatment cost (WHO/UNAIDS/UNICEF, 2011; Mavhu, 2012). For instance in Zimbabwe the potential infections to be averted was estimated at 565,751 people within five years (WHO & UNAIDS, 2011). A mathematical modelling study conducted by Rennie, Muula & Westreich (2007) also showed that an estimated two million new HIV infections and 300,000 HIV-related deaths could be averted over the next 10 years in sub-Saharan Africa if MMC is scaled-up.

The benefits of MC are huge in terms of curbing the epidemic as the epidemic is largely driven by men (Jackson, 2002). “Men have more opportunity to contract and transmit HIV; men usually determine the circumstances of intercourse; and men often refuse to protect themselves and their partners” (Jackson, 2002, p. 88).

MC provides a partial protective effect from STIs and HIV. Circumcised men have a lower risk of contracting sexually transmitted infections (STIs) such as HIV, chlamydia trachomatis; human

papilloma virus (HPV) which can cause cervical, penile or anal cancer; genital herpes; chancroid; genital mycoplasmas; hepatitis B; trichomoniasis; gonorrhoea and syphilis (Hankins, 2007; UNAIDS, 2011; UNAIDS/CAPRISA, 2007; Weiss, Halperin, Bailey, Hayes, Schmid & Hankins, 2008; WHO & UNAIDS, 2011). Penile hygiene was held as being exceptionally important and major benefit of MC (Westercamp & Bailey, 2006). Circumcised men were found to be less prone to germs, dirt, bacteria, and viruses as it was held that there is a greater opportunity for germs, dirt, bacteria, and viruses to thrive in the warm moist environment beneath the foreskin of uncircumcised men (Westercamp & Bailey, 2006).

Evidence gathered by Hankins (2007), supported by (Weiss, Halperin, Bailey, Hayes, Schmid & Hankins, 2008; WHO & UNAIDS, 2011) revealed that a reduction in new HIV infections among men who are circumcised would reduce the risk of women encountering a partner with HIV infection. The same studies also showed that there was lower risk of human papilloma virus (HPV) infection and cervical, cancer among women with circumcised partners. At the same time women benefited as sexual partners if men have fewer penile infections. MC also reduces the risk of urinary tract infections in infants and children (Weiss, Halperin, Bailey, Hayes, Schmid & Hankins, 2008; WHO & UNAIDS, 2011).

Evidence gathered by doctors opposing circumcision (2008), however, showed that circumcision had no HIV protective effects for women. Hankins (2007) also came to the same conclusion. In addition WHO & UNAIDS (2011) also noted that there was no evidence that supported that VMMC had a protective effect for men who have sex with men and transgender people.

### **2.1.5. Medical male circumcision an additional measure**

As a result of benefits cited above, WHO & UNAIDS, Montoux 2007 recommended that MC be promoted as an additional strategy for the prevention of heterosexually acquired HIV infection in men. However, emphasis was made that MC does not provide complete protection against HIV infection. Even when men are circumcised they still need to adhere to the existing prevention measures because MC is just an additional measure which on its own is not a solution to the global HIV epidemic (WHO & UNAIDS, 2007). The other caveat in the WHO & UNAIDS recommendations was that men who undergo circumcision should abstain from sexual activity for at least six weeks following the operation and evidence provided by Gruskin (2007, p. 50)

showed that men who engage in sexual intercourse before complete wound healing were likely to contract HIV and also likely to infect their partners if they are HIV positive.

#### **2.1.6. Behaviour change after circumcision**

Unsafe sex practices after adult circumcision could potentially offset the protective effect of MC (Weiss, et al, 2008). In Zimbabwe, concerns were growing about high prevalence rates among circumcised men of 15-49 years old (Yikoniko, 2012). Zimbabwe Health Demographic Survey (ZHDS) conducted during the period 2010-2011 showed that there was 14% HIV prevalence among circumcised men and 12% among uncircumcised men (Yikoniko, 2012). The impression given was that most men after circumcision harbour the false impression that they have been equipped with an invisible condom. The study by doctors opposing circumcision (2008) reported that MC removes nerves from the penis and causes substantial loss of sexual feeling and purpose and as a result, the majority of circumcised men are reluctant to use condoms. This could be the contributing factor for the high prevalence among circumcised men.

#### **2.1.7. Acceptability of MMC as an HIV prevention and a health measure**

A study conducted in 2000 revealed that Zimbabwe's acceptability to MMC was much lower, 45% as compared to 60% in Kenya, Uganda, South Africa, Tanzania and of over 80% in Botswana (Halperin; Fritz; McFarland & Woelk, 2005). Later, studies conducted by Hanskins (2007) in Botswana, Kenya, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe showed a high response towards MMC. The major reasons cited for the increase in acceptability were safety of operations, and affordability of the process and evidence that MC has a protective effect against HIV and STI's. A study conducted in Nkhosakota, Malawi for sex workers showed a high response towards MMC.

The reasons given were that uncircumcised men are more susceptible to contracting the disease as they harbour husks and sperm within the foreskin. The same group of participants also revealed that with circumcised men, partners enjoy sex more and give more pleasure to their partners than uncircumcised men (Hankins, 2007). In a study by Westercamp & Bailey (2006), penile hygiene was recognised as being extremely important and the driving force in women's acceptability of MMC, especially in Zambia and Malawi where women are responsible for cleaning their partners' penises after sexual intercourse.



### **2.1.8. Medical male circumcision prevalence**

Despite evidence gathered by Hankins (2007) of high acceptability of MMC in the Southern region and political declarations at global WHO & UNAIDS conferences to cover 80% of males 15-49 years within five years, only three countries (Kenya, Zambia and South Africa) recorded a sizeable number of MCs in 2010. Zimbabwe is among the countries that have performed very low in MCs. Kenya performed the greatest number of adult VMMC achieving 27% of the number of MCs needed nationally, followed by Zambia and South Africa which achieved 4.2% and 3.4% respectively (WHO & UNAIDS, 2011). Zimbabwe National Aids Council (ZNAC) reported a low uptake with only 13,977 men having been circumcised by end of September 2010 (Government of Zimbabwe, 2011b). Data presented to UNAIDS conference in 2010 showed that Zimbabwe had a gap of 1,912 595 MCs needed to reach 80% coverage of males 15-49 years old by 2015 (WHO/UNAIDS/UNICEF, 2011).

### **2.1.9. Barriers to MMC acceptability**

Many studies have documented barriers to MC and these include fear of death; pain during and after the procedure; cost of operation; and fear of complications such as excessive bleeding; risk of infection; and difficulty in healing. Other barriers that were mentioned are loss of penile sensitivity, reduction in penis size, decreased ability to satisfy women, excessive sexual desire, increased promiscuity and cultural reasons (Bailey, Muga, Poulussen, & Abicht, 2002; Kebaabetswe, Lockman, Mogwe, Mandevu, Thior, Essex, & Shapiro, 2003; Ngalande, Levy, Kapondo, & Bailey 2006; Scott, Weiss, & Viljoen, 2005; Westercamp, & Bailey, 2006). Studies conducted by Okeyo, Westercamp, Bailey and Kamango (2011) reported a high level of sexual satisfaction among women with circumcised partners. 92% of the women were satisfied with the appearance of their partner's penis and 91% found sex more enjoyable with circumcised men.

## **Conclusion**

Medical male circumcision was highly appreciated in many studies because of health related benefits. Barriers such as pain endured during and after operation, fear of complications, decreased ability to provide satisfaction to women and excessive sexual desire were reported in many studies.

## **Chapter 3: Methodology**

### **3. Introduction**

The study was conducted in September 2012 over a period of a month. As stated earlier, the main objective was to explore knowledge, perceptions, and attitudes towards MMC and to identify barriers to opting for MMC among men in Bindura urban.

#### **3.1. Study design**

The study took a cross-sectional approach whereby quantitative method of data collection was used as opposed to qualitative. Christensen, Johnson and Turner (2011) assert that in a cross-sectional study data is collected from research participants during a single, comparatively short-term period. The quantitative technique was selected because it allows collection of numerical data from respondents in a standard format within a relatively short time. It also minimises the researcher's bias compared to the qualitative approaches where the researcher collects non-numerical data that needs the researcher to actively interact with the participants. In some cases qualitative technique may need the researcher to observe the participants in their natural settings for a much longer time (Maxwell and Satake, 2006; Christensen Johnson and Turner, 2011).

#### **3.2. Study Area**

The study was conducted in the urban community of Bindura. Bindura is the provincial capital of Mashonaland Central Province and is situated 90 km north-east of Harare, the capital city of Zimbabwe. The choice of this study area was motivated by the fact that Bindura town has a diverse population with different backgrounds, because of the mines and former large-scale commercial farms that surround it. Ashanti Gold Fields and Bindura Trojan Nickel Mines are the two mines located within Bindura Municipality. The farming and mining economic activities attracted workers from other provinces in Zimbabwe and also workers of Malawian, Mozambican and Zambian origins. Given the enormous difference in culture, religion, social and value systems among these people, it is of particular importance to understand how they perceived MMC. The study covered all major business activity areas in the town.

#### **3.3. Sampling strategy**

Systematic random sampling was used for selecting the participants. This was carried out in

such a way that the first participant was chosen using random sampling and thereafter every third eligible and willing participant was chosen. In the event of refusal to take part, the next willing and eligible male was chosen and thereafter, the third willing and eligible male would be chosen. This procedure was restarted on each day of the sampling period. This sampling procedure was used because there was no comprehensive list or register of all males in Bindura urban making it difficult to apply the simple random sampling technique to select participants from the study site. Age was the first question in the study questionnaire (Annex 1). It was meant to determine eligibility of respondents to the study. Other demographic characteristics were asked at the last section because of their sensitivity.

### **3.4. Study population**

The study focuses on males aged 18-49 years. The age group is known to be the most sexually active group with high infection rates. According to Pelser, Ngwenya & Summerton (2004), men become sexually active at the age of 17-20 years and their sexual desire decreases as they reach the age of 50 years. Those under the age of 18 years were excluded because of anticipated problems in getting permission from their parents or guardians since they lack the legal right to participate in the study on their own.

The male population of the age group 15-49 years in Bindura urban (which is close to the study target) was 10 582 men as per the last national census of 2002 (Government of Zimbabwe, 2002). This number represented 61.7% of the total male population (17 164) in Bindura. Within the age group of 15-49 years, the 20-24 years age group had the highest representation (23.8%), followed by the 25-29 years (22.7%), and with the 15-19 and 30-34 age groups with 16.9% and 16.7% respectively. In addition the 35-39 years had a percentage of 9.6% followed by the 40-44 years (6.2%) and the 45-49 years (4.1%) (Government of Zimbabwe, 2002).

At the time of planning the study, Zimbabwe was due to start its national census for 2012 in August 2012. Zimbabwe conducts a national census after every 10 years since 1982.

### **3.5. Sample size**

As indicated above, the male population in Bindura urban from which the sample was to be drawn was about 10 500 from the last national census of 2002. If the recommended sampling

intensity of 20-30% for surveys of this nature was to be applied, the sample size would have been 2116 and 3175 participants respectively. Considering the cost of the study and time associated with a huge sample size, a sample size of 60 participants was used as it was considered large enough to allow meaningful exploratory analyses and at the same time being manageable in terms of costs and time constraints.

Without the limitation of time and financial resources, a sample size of 300-500 participants would have been ideal. This would have been large enough to achieve adequate representation in the different categories within each demographic characteristic or variables that is likely to influence responses. For instance, a demographic characteristic like educational level may have up to seven categories and for any meaningful statistical analysis to be conducted each cell of a contingency table need to have an expected frequency of at least five individuals.

### **3.6 Data collection methods**

An interview protocol containing several closed and a few open-ended questions were used by the interviewer to solicit responses from respondents (see Annex 1 and 2). According to Christensen, Johnson and Turner (2011) interviews are preferred to questionnaires because interviewer had more control over data collection and provided a chance to the interviewer to elaborate and probe for further information which would not be possible with a questionnaire due to the absence of the interviewer. Christensen, Johnson and Turner (2011) further asserted that probing are very important especially when open-ended questions are to be asked. Although responses from open-ended questions were difficult to analyse, they however allowed respondents to offer their own opinions on very important issues. The interview protocol was designed to collect data on the following broad issues:

- basic demographic variables such as age, education, marital status, religious affiliation; and ethnicity
- attitudes and perceptions about medical male circumcision as a tool for reducing HIV infections;
- knowledge levels about HIV prevention measures including male circumcision and;
- barriers towards male circumcision.

The Likert scale of measurement was used in the questions that sought to quantify perceptions on:

- scale of HIV in Zimbabwe;
- common reasons which motivate people to undergo MC;
- the importance of MC in reducing acquisition of HIV virus or its efficacy;
- social and institutional barriers in opting for MMC and accessing MMC services; and
- Involvement of other players (cultural, traditional, religious and political leaders) in promoting and delivery of MMC

In those questions referred to above, participants were asked to indicate the degree of importance in the way they perceive the phenomenon by selecting the appropriate answer on a 4 point categorical ordinal scale ranging from very important (or most common) to not important at all (or not common at all). An additional column for no response or those who do not know the answer was also provided in all questions. Using this rating scale had the following benefits:

- Helps to reduce ambiguity in defining the phenomenon of interest;
- Responses are recorded accurately and in a standard manner; and
- Summarising and analysing data is made easier (Christensen, Johnson and Turner, 2011)

The other closed questions required respondents to choose or indicate from a list the correct or appropriate responses. These questions were the ones which asked respondents to choose the sources of information and the other one was related to choosing the prevention strategies that must be used in conjunction with MMC. The two open ended questions were related to providing reasons for preferred attitude towards MMC and the other one was related to the last question which asked respondents to provide any information they thought was important.

### **3.7 Pre-testing**

Pre-testing of the research instrument was done in the city of Harare to 5 participants prior to actual data collection. The necessary adjustments/corrections of the research instrument were done on the question pertaining to perceptions on social and institutional barriers to and facilitating factors for opting for medical circumcision. The questionnaire was administered in either English or Shona (see Annex 2) depending on the language preferred by respondent and the researcher recorded the answers to ensure standardisation.

### 3.8 Data analysis

Data checking, cleaning and coding was done before entry into computer Excel Spread sheet. Responses from questionnaire were coded to allow data to be analysed. Coding of open-ended responses involved examination of themes and categories and then assigning codes to the themes/categories. The rest of the variables were categorized as outlined below:

**Age** was recorded in categories as indicated in questionnaire and the categories were assigned codes as indicated below:

- 1=18-19 years
- 2=20-24 years
- 3=25-29 years
- 4=30-34 years
- 5=35-39 years
- 6=40-44 years
- 7=45-49 years

For purposes of conducting association analyses, age was categorised into 4 groups as follows;

- 1=18-24 years
- 2=25-29 years
- 3=30-34 years
- 4=35-49 years

**Marital status** was presented in three categories as indicated in the questionnaire but for purposes of association analyses it was divided into two groups of married and single. The divorced were grouped with the single males. This was done because very few of the respondents were divorced and also that the sexual behaviour of divorced men may be closer to that of singles as they may not be dedicated to one sexual partner. As such, their means of satisfying their sexual needs is likely to be closer to that of singles than to the married men.

**Education level** was categorised in 7 groups ranging from nil (no formal education) to university degree as follows:

- Primary Level: Grade:7;

- Secondary Ordinary Level: Form 4;
- Secondary Advanced Level: Form 6;
- College or University Certificate Level;
- College or University Diploma Level
- University Degree Level
- Nil

For the purposes of testing for some association analysis, educational level was divided into 4 groups as shown below:

Level 1=Form 4 and below including those who did not respond;

Level 2=Form 6, certificate and diploma holders;

Level 3=University graduates.

**Religious denominations** were categorised into three, mainstream Christians (such as Methodists, Anglican, and Roman Catholic), Pentecostal (e.g. Zimbabwe Assemblies of God) and apostolic groups.

#### **Knowledge on measures that must be used in conjunction with MC:**

Each strategy selected by the respondent had a score of one mark and six was the highest mark.

Total scores or marks achieved by respondents were categorised as follows:

- Very poor knowledge when respondent selected 1 strategy out of 6
- Poor knowledge when respondent selected 2 strategies out of 6
- Fair knowledge when respondent selected 3 strategies out of 6
- Moderately good knowledge when respondent selected 4 strategies out of 6
- Good knowledge when respondent selected 5 strategies out of 6
- Very good knowledge when respondent selected 6 strategies out of 6

#### **No response and do not know**

When analysis was being done, no response and ‘do not know’ were combined since nonresponse shows that a respondent is not sure of his opinion. The summary data in the Excel Worksheet was exported into SPSS version 19 software for analysis. In addition to calculating frequencies and percentages, Chi-square test for independence was used to test for associations

between demographic characteristics and observed knowledge, attitudes and perceptions. Given that the government of Zimbabwe Policy on MC focuses on the age group between 15-29 years, it was worth comparing the responses of the under 29 years age groups and those older than 29 years. Of interest is to note that the two groups had equal number of respondents of 30 participants. Contingency tables were thus constructed with the two age categories constituting the column variables and responses on knowledge, perceptions and attitudes constituting the row variables. The data were subjected to Chi-square test for independence to determine whether the observed relationships in the contingency tables were statistically significant.

### **3.9 Ethical considerations**

Because of controversy associated with HIV/AIDS, ethical clearance was sought from University of Stellenbosch and Medical Research Council of Zimbabwe (Annex 4) and permission to conduct the research in Bindura urban was granted by Bindura Municipality (Annex 5) and National Aids Council of Zimbabwe (Annex 6). For purposes of maintaining confidentiality, the questionnaire did not require the respondent to provide his name. Each respondent was assigned a study identification number on the form, and no one had respondent identifier number except the researcher. Before answering the questionnaire, every willing participant was provided with a consent form (see Annex 3) which he read, followed by an explanation before signing the form to symbolise his voluntary acceptance to participate in the research.

Respondents were told of their right to withdraw from study at any time they felt like doing so and not to answer questions they were not comfortable with. During the study, respondents were assured that the collected data would be used anonymously and that the aim of the study was to investigate the low uptake of MMC.

### **3.10 Reliability**

To ensure consistency and precision of results, a structured questionnaire was used to collect data from respondents by the researcher. The questions were constructed using the aid of Zimbabwe MC Policy and other reviewed literature. To re-enforce the standardization and accurate recording of data, interviews and recording of the data were conducted by the researcher throughout the study. In addition the questionnaire was administered in either English or Shona depending on the language understood and selected by the respondent.



### 3.11 Generalizability

The findings of this study cannot be generalised to the adult male population in Bindura urban because the sample size was relatively small in relation to the population size. As stated earlier on, to allow generalizability the sample size must have been very large if the recommended sampling intensity of 20-30% was to be applied. A large sample size (300-500 participants) would have ensured representativeness of the sample. The findings however provide a picture of the knowledge, perceptions and attitudes of males who participated in the study and barriers they were confronting in opting for MMC.

### 3.12 Limitations

- Given the size of the target population of 10 582 as at 2002 national census, the sample size of 60 respondents may not have been large enough to meet the critical requirement of representativeness of the sample. Such surveys require a sampling intensity of 20-30%, but as indicated above, financial and time constraints could not permit having such a large sample size.
- The approach used to select participants to take part in the study might have introduced some bias. The approach could not be as effective as the approach where one selects participants from a comprehensive list or a register.

While there were these limitations, the central exploratory aim of the study was not badly affected since the results were meant to give an initial picture of the knowledge, perceptions and attitudes associated with MMC. As such, the results remain valid for such purposes.

**Conclusion:** Although the sample size was relatively small, the approach used to collect data ensured random selection of participants, and the structure of the questionnaire and the way interviews were conducted ensured recording of accurate and reliable data. Although the interview data collection methods used might have introduced some bias, it was the most appropriate as it allowed respondents to seek clarifications on questions being asked and some even sort clarifications on MMC issues they felt were not being addressed during awareness campaigns due to the absence of face to face or interactive sessions

## Chapter 4: Results

### 4. Introduction

This chapter presents the findings of the study and these are divided into five sections, namely:

- i) the socio-demographic profile of the study sample;
- ii) knowledge about MMC and HIV/AIDS prevention strategies;
- iii) perceptions about the importance of MMC;
- iv) perceptions on social and institutional barriers and facilitating factors that are key when one is considering opting for MMC; and
- v) attitudes towards MMC.

The findings are presented as descriptive summaries in the form of frequencies and percentages. Where appropriate, tests for associations between responses and respondent characteristics are also presented.

#### 4.1: Social-demographic characteristics of the study sample

Age, education qualifications, marital status, ethnic group and religious affiliation were identified as the ones that could potentially influence respondents' perceptions and attitudes towards MMC (Tables 1a to 1e). Below each table is a brief interpretation of the table contents.

**Table 1a: Age category profile**

Age category (years)	Frequency	Percentage
18-19	4	6.7
20-24	11	18.3
25-29	15	25
30-34	15	25
35-39	6	10
40-44	6	10
45-49	3	5
<b>Total</b>	<b>60</b>	<b>100</b>

The distribution of respondents by age group shows that there are fewer respondents in the extreme categories and more respondents in middle ages. Age groups of 25-29 years and 30-34 years have the highest frequencies with 25% of respondents each. The lower and upper end age groups of 18-19 and 45-49 years had the lowest frequencies of 6.7% and 5.0% respectively.

**Table 1b: Education level profile**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage</b>
Primary Level: Grade:7	4	6.7
Secondary Ordinary Level: Form 4	29	48.3
Secondary Advanced Level: Form 6	4	6.7
College or University Certificate Level	2	3.3
College or University Diploma Level	3	5
University Degree Level	15	25
Nil	2	3.3
No Response	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

Most of the respondents had some formal education, with only 3.3% indicating that they had never been to school. About 6.7% had attended primary school, 48% had completed secondary school up to the ordinary level ('O' Level) and 6.7% had completed advanced secondary school level ('A' Level). An additional 25% had completed degrees and few held diplomas (5%) and 3.3% had university or college certificates.

**Table 1c: Marital status profile**

<b>Marital status</b>	<b>Frequency</b>	<b>Percentage</b>
Married	39	65
Divorced	4	6.7
Single	17	28.3
<b>Total</b>	<b>60</b>	<b>100</b>

**Marital status:** The majority (65%) of the respondents were married. Nearly a third (28.3%) reported that they were single and 6.7% claimed that they separated with their wives.

**Table 1d: Religious affiliations profile**

<b>Religion</b>	<b>Frequency</b>	<b>Percentage</b>
Christianity	49	81.7
Islam	0	0
Baha'i faith	0	0
Traditional	10	16.7
Atheist	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

In terms of religious affiliation, the majority of the respondents indicated that they were Christians (81.7%) with 16.7% indicating they followed their traditional beliefs. Only one respondent (1.7%) reported that he was an Atheist.

Given the potential influence of teachings and beliefs of different denominations on how the followers view the real world including in this case, perceptions and attitudes towards MMC and other HIV prevention strategies, respondents who viewed themselves as Christians (81.7%) were further asked to indicate the denomination of their church. The denominations mentioned were grouped into mainstream Christians (such as Methodists, Anglican, and Roman Catholic), Pentecostal (e.g. Zimbabwe Assemblies of God or Forward in Faith, and United Family International Church) and Apostolic groups (Table 1d (i) below).

**Table 1d (i): Profile of Christians by denominations**

<b>Denomination</b>	<b>Frequency</b>	<b>Percentage</b>
Unspecified	3	6.1
Mainstream Christian churches	19	38.8
Pentecostal churches	17	34.7
Apostolic groups	10	20.4
<b>Total</b>	<b>49</b>	<b>100</b>

The largest number indicated that they belonged to mainstream Christians (38.8%), followed by Pentecostal (34.7%) and Apostolic groups (20.4%). The remaining 6.1% could not specify their denomination.

**Table 1e: Ethnic group profile**

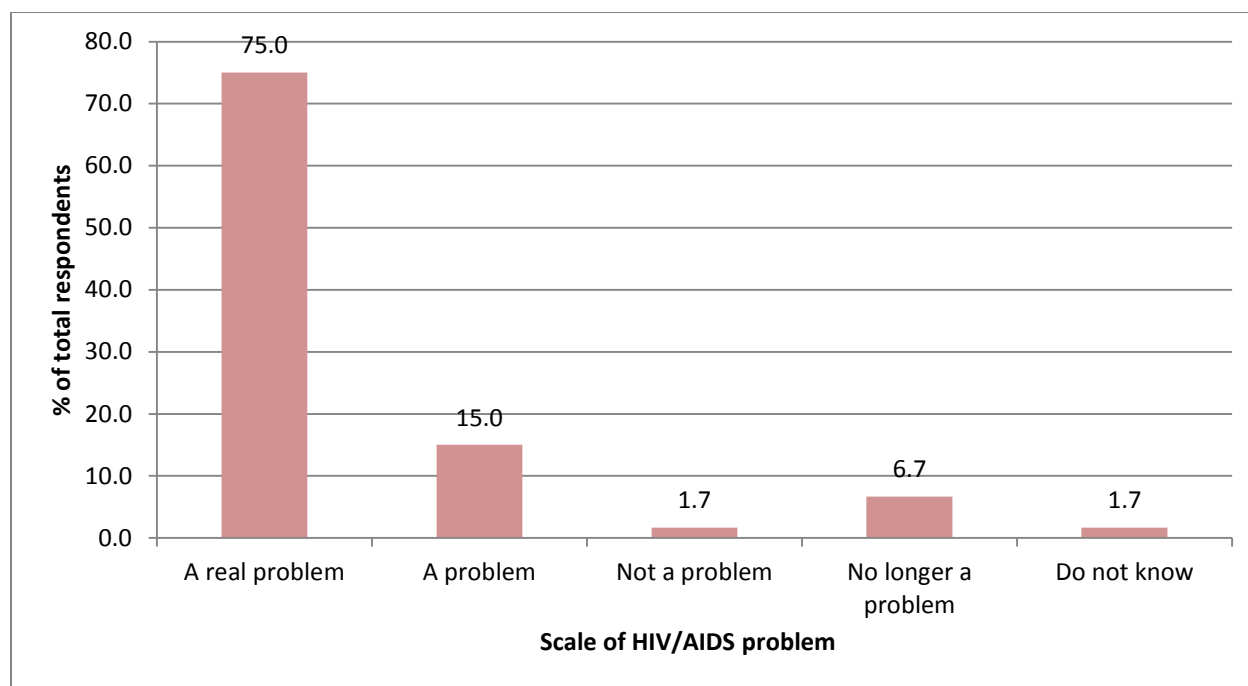
<b>Ethnic group</b>	<b>Frequency</b>	<b>Percentage</b>
Korekore	14	23.3
Zezuru	23	38.3
Karanga	10	16.7
Ndebele	1	1.7
Alien	6	10
Manyika	4	6.7
Mabudya	1	1.7
Matonga	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

The sample had diverse ethnic groups represented in Zimbabwe. The majority described themselves as Zezuru (38.3%), followed by those who reported that they were Korekore (23.3%), Karanga (16.7%) and 10% claimed that they were aliens. The other groups that had low representation in the sample were the Manyika (6.7%) and the Mabudya, Matonga and Ndebeles (1.7%) each.

## **4.2: Awareness on HIV severity and knowledge on medical male circumcision as an additional HIV/AIDS prevention strategies**

### **4.2.1: Perceptions on scale of HIV/AIDS epidemic in Zimbabwe**

To gain an understanding of the knowledge and level of awareness about HIV/AIDS, respondents were asked how they perceived HIV/AIDS epidemic in Zimbabwe. As indicated in Figure 1, the majority (90%) perceived the HIV/AIDS epidemic in Zimbabwe as a real problem or a problem, while a few (8.4%) believed that it was not a problem or no longer a problem. An additional 1.7% had no opinion.



**Figure 1: Perception on the scale of HIV epidemic in Zimbabwe**

There were no significant associations between all demographic characteristics and the responses on the perceptions on scale of HIV/AIDS in Zimbabwe (Table 2.1.1 below). This means that irrespective of the social demographic characteristics of the respondent the awareness of HIV severity is the same.

**Table 2.1.1: Associations between some demographic characteristics and responses on perception scale of HIV/AIDS in Zimbabwe**

Association	df	ChiSq	p-value	Significance
Age and HIV scale	12	12.53	0.404	Ns
Education and HIV scale	8	6.65	0.574	Ns
Marital status and HIV scale	4	3.74	0.443	Ns
Religion and HIV scale	16	20.85	0.1844	Ns
Ethnicity and HIV scale	28	14.94	0.9791	Ns

Ns= Not statistically significant

All respondents (100%) in the younger (18-29 years) age group perceived the scale of the HIV/AIDS epidemic to be a real problem or a problem as compared to 80% in the older group

(Table 2.1.2 below). The younger age group had a higher level of awareness than the older group. The differences were, however, not statistically significant.

**Table 2.1.2: Perceptions on scale of HIV/AIDS by age groups**

<b>Perception scale</b>	<b>Frequencies and within column percentages</b>	<b>18-29 years</b>	<b>30-49 years</b>
<b>A problem</b>	Frequency	30	24
	% within age group	100%	80.00%
<b>Not a problem</b>	Frequency	0	5
	% within age group	0.00%	16.70%
<b>No idea</b>	Frequency	0	1
	% within age group	0.00%	3.30%

#### **4.2.2 Sources of information on MMC as an additional HIV prevention strategy**

Respondents were asked to indicate from a list, their sources of information on MMC as an HIV prevention strategy in order to get an indication of availability of and access to knowledge and information on HIV and MMC to respondents. The responses are presented below in Table 2.2.1 below. The most popular sources of information mentioned by more than 50% of respondents were Radio (70%), Print media (66.7%), Electronic media (65%), Clinic or Hospital staff (61.7%), Friends (60%), Ministry of Health and Child Welfare (MoH) campaigns (56.7%) and HIV Voluntary Counselling and Testing (HIV VCT) (55%). Traditional leaders were indicated as the least used (11.7%) source of information. Posters were additional sources indicated by a quarter of the respondents.

**Table 2.2.1 Selected sources of MMC information**

<b>Sources of information</b>	<b>Frequency</b>	<b>Percentage</b>
Radio	42	70
Print media	40	66.7
Electronic media	39	65
From visits to Clinics or Hospitals	37	61.7
Ministry of Health Campaigns	34	56.7
HIV Voluntary Counselling and Testing centres (HIV VCT)	33	55
Magazines/pamphlets	25	41.7
Friends	36	60
At Work	20	33.3
Non-Governmental Organizations (NGOs) campaigns	15	25
Traditional leaders	7	11.7
Other (Posters)	15	25

For sources of information which attracted more than 50% of the respondents, a contingency table was constructed to compare responses between age groups of 18-29 and 30-49 years (Table 2.2.2 below). The electronic media was the only source which was more popular among the younger age group (18-29 years) with proportion of 76.7% compared to 53.3% for the older age group. Radio and MoH campaigns had equal representations in the two age groups at 70% and 56.7% respectively. The other sources [print media (70.0% versus 63.3%), clinic and hospital (63.3% versus 60%), friends (66.7% versus 53.3%) and HIV VCT (60% versus 50%)] were all more popular among the older age group compared to younger age group.



**Table 2.2.2: Sources of MMC information by age groups**

<b>Source of MMC information</b>	<b>Frequencies and within column percentages</b>	<b>18-29 years</b>	<b>30-49 years</b>
Radio	Frequency	21	21
	% within age group	70.00%	70.00%
Print media	Frequency	19	21
	% within age group	63.30%	70.00%
Electronic media	Frequency	23	16
	% within age group	76.70%	53.30%
Clinic/Hospital staff	Frequency	18	19
	% within age group	60.00%	63.30%
From friends	Frequency	16	20
	% within age group	53.30%	66.70%
MoH Campaigns	Frequency	17	17
	% within Age Group	56.70%	56.70%
HIV VCT	Frequency	15	18
	% within Age Group	50.00%	60.00%

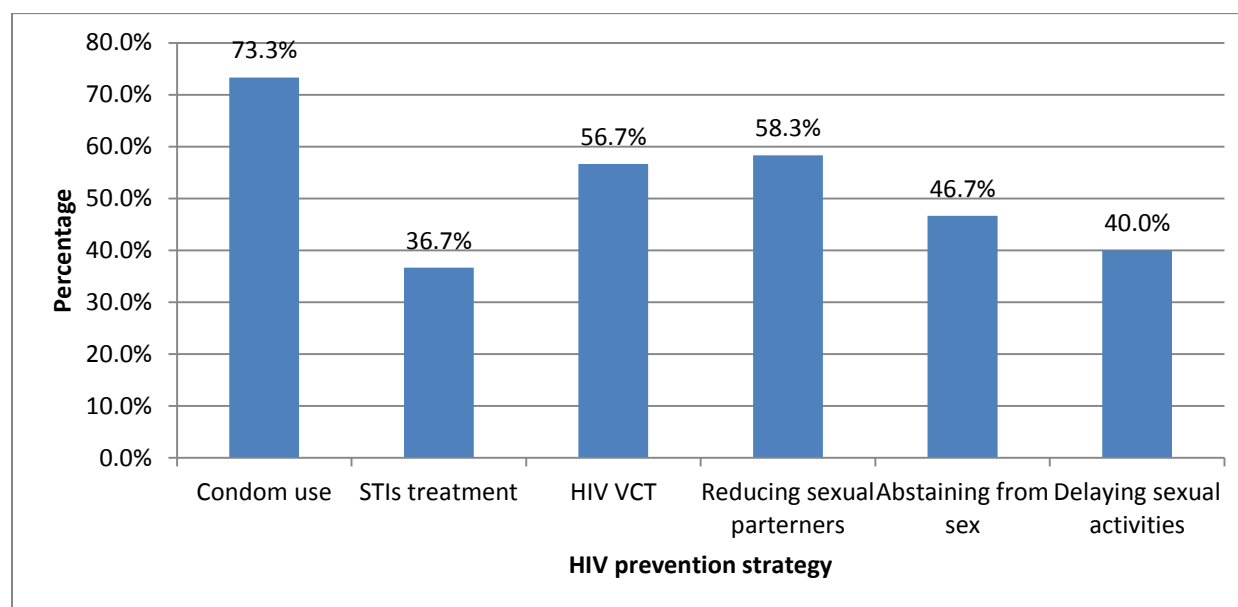
#### **4.2.3 Knowledge on prevention strategies that must be used in conjunction with MMC**

With the aim of establishing whether respondents had a good knowledge or understanding on other prevention strategies that must be used in conjunction with MMC, respondents were asked to indicate from a list of six prevention strategies (condom use, reducing sexual partners, HIV Voluntary Counselling and Testing, treatment of STIs, delaying sexual activities and abstaining from sex) they knew could be used in conjunction with MMC. Each strategy selected by a respondent is one mark, and a respondent could achieve a maximum score of 6 points. About a third (30.0%) of respondents performed very poorly on their knowledge levels achieving a mark of 16.7% (Table 2.3.1). More than a third (63.3%) of the respondents achieved a 50% mark or better with only 15% achieving 100%.

**Table 2.3.1: Scores on selection of HIV prevention strategies that must be used in conjunction with MMC**

Total score (percentage)	Subjective grading	Frequency	Percentage
1 (16.7%)	Very poor	18	30.0
2 (33.3%)	Poor	4	6.7
3 (50.0%)	Fair	11	18.3
4 (66.7%)	Moderately good	11	18.3
5 (83.3%)	Good	7	11.7
6 (100.0%)	Very good	9	15.0

As shown in Figure 2 below, strategies that were selected most were condom use (73.3%), followed by reducing sexual partners (58.3%) and then HIV Voluntary Counselling and Testing (56.7%). Treatment of STIs was least selected (36.7%) followed by delaying sexual activity (40.0%) and abstaining from sex (46.7%).

**Figure 2: Frequencies on selection of different HIV prevention strategies**

Tables 2.3.2 and Table 2.3.2 below present a comparison of responses between the 18-29 and 30-49 years age groups. The average score of the older group is higher than that of the younger age group (Table 2.3.2). The variation in performance is wider in the older than the younger age

group.

With the exception of knowledge related to the usefulness of delaying sexual activities, the older age group showed more understanding of the usefulness of all other strategies compared to the young age group. The gaps in proportions were widest in relation to knowledge of usefulness of HIV VCT where the proportion of the older age group was 63.3% compared to 50.0% of the younger age group. The gap in knowledge of usefulness of delaying sexual activities, where the younger age group had a higher representation, was also comparatively very wide with the proportion of the younger age group being 46.7% compared to 33.3% of the older age group.

**Table 2.3.2: Scores on selection of HIV prevention strategies by age groups**

Age group	Mean score out of 6	Standard Deviation	Standard Error
18-29 years (n=30)	2.9	1.73	0.315
30-49 years (n=30)	3.5	1.80	0.342

**Table 2.3.3: Prevention strategies selected by age groups**

Prevention strategy	Frequencies and within column percentages	18-29 years	30-49 years
Condom use	Frequency	23	26
	% within age group	76.70%	86.70%
STIs treatment	Frequency	7	15
	% within age group	23.30%	50.00%
HIV VCT	Frequency	15	19
	% within Age Group	50.00%	63.30%
Reducing sexual partners	Frequency	15	20
	% within age group	50.00%	66.70%
Abstain from sex	Frequency	13	15
	% within age group	43.30%	50.00%
Delaying sexual activities	Frequency	14	10
	% within age group	46.70%	33.30%

### 4.3 Perceptions on MC

#### 4.3.1 Perceptions on common reasons why people undergo MC

With the view of establishing perceptions on common reasons why people undergo MC, respondents were asked to rank on a Likert scale, the reasons why people undergo male circumcision. As shown in Table 3.1.1 below, a significant proportion (81.6%) rated medical reasons as the most common or common reason, while 51.7% and 36.6% rated cultural and religious as most common or common reasons respectively. Compared to other questions, a relatively significant proportion did not know how to respond or did not provide a response under cultural (28.3%), religious (31.7%) and medical (5.0%), reasons.

**Table 3.1.1 Perceptions on common reasons why people undergo MC**

Perception scale	Cultural		Medical		Religious	
	Freq.	%	Freq.	%	Freq.	%
Most common	7	11.7	26	43.3	5	8.3
Common	24	40	23	38.3	17	28.3
Not Common	6	10	6	10	12	20
Not Common at all	6	10	2	3.3	7	11.7
No response	17	28.3	3	5	19	31.7
<b>Total</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>

As indicated in Table 3.1.2 below, significant associations were only detected between MMC being motivated by medical reasons and demographic characteristics of age and marital status. From Table 3.1.3, the association between age and medical reasons is such that 80% of the youngest age group (under 25 years) regarded medical reasons as the most common or common motivation for MC, 73.3% of those in the next age group (25-29 years) feel medical reasons are most common or common, 93.3% of those in the third age group (30-35 years) feel medical reasons are most common or common and 80% of those in the oldest age group (35 years and over) also had that opinion about reasons for motivation for MC. This means that the youngest and the oldest age groups are equally represented with 80.0% which is higher than the 25-29 years age group but lower than the 30-34 years age group which has the highest proportion of respondents believing in medical reasons as the motivation behind MC.

**Table 3.1.2: Associations between demographic characteristics and perceptions on common reasons why people undergo MC**

Association	df	ChiSq	p-value	Sig. level
<b>Cultural reasons</b>				
Age and Cultural reasons	12	14.33	0.28	Ns
Education and Cultural reasons	8	10.9	0.207	Ns
Marital status and Cultural reasons	4	1.79	0.775	Ns
Religion and cultural reasons	16	25.72	0.0581	Ns
Ethnicity and cultural reasons	28	23.85	0.6893	Ns
<b>Medical reasons</b>				
Age and Medical reasons	12	29.81	0.003	Sig
Education and Medical reasons	8	10.16	0.254	Ns
Marital status and Medical reasons	4	14.04	0.007	Sig
Religion and Medical reasons	16	22.02	0.1427	Ns
Ethnicity and Medical reasons	28	47.030	0.0136	Ns
<b>Religious reasons</b>				
Age and Religious reasons	12	3.64	0.989	Ns
Education and Religious reasons	8	8.53	0.383	NS
Marital status and Religious reasons	4	1.06	0.901	NS
Religion and Religious reasons	16	11.636	0.7686	Ns
Ethnicity and Religious reasons	28	35.988	0.1429	Ns

Sig=Statistically significant: NS=Not statistically significant

**Table 3.1.3: Perceptions on medical reasons by age groups**

Perception strategy	Frequencies and within column percentages	18-24yrs	25-29yrs	30-34yrs	35-49yrs
Most common or	Frequency	12	11	14	12

common	% within age group	80.00%	73.30%	93.30%	80.00%
Not common or	Frequency	1	3	1	3
not common at all	% within age group	6.70%	20.00%	6.70%	20.00%
No response	Frequency	2	1	0	0
	% within age group	13.30%	6.70%	0.00%	0.00%

The nature of association between medical reasons and marital status is shown in Table 3.1.4 below. Of the 39 married respondents, 31 (79.5%) believed that it was common or most common to undergo MMC for medical reasons while 85.7% of the single respondents believed so. That means there were more single respondents that believed that medical reasons were the most common motivation for MC than the married ones.

**Table 3.1.4: Perceptions on medical reasons by marital status**

Perception scale	Frequencies and percentages within columns	Married	Single
Most common or common	Frequency	31	18
	% within marital status category	79.50%	85.70%
Not common or not common at all	Frequency	7	1
	% within marital status category	17.90%	4.80%
No response	Frequency	1	2
	% within marital status category	2.60%	9.50%

Table 3.1.5 below presents the comparison of responses between the 18-29 years and 30-49 years age groups. The young age group had higher representations in those who perceived cultural and religious as most common or common reason, whilst the older group had a higher representation in those who perceived medical as most common or common reason. A much higher proportion (30.0%) had no idea or did not respond on cultural reasons in the older age group compared to younger age group which had proportion of 13.3%. These differences were, however, not

statistically significant.

**Table 3.1.5: Perceptions on common reasons why people undergo MC by age groups of 18-29 and 30-49 years**

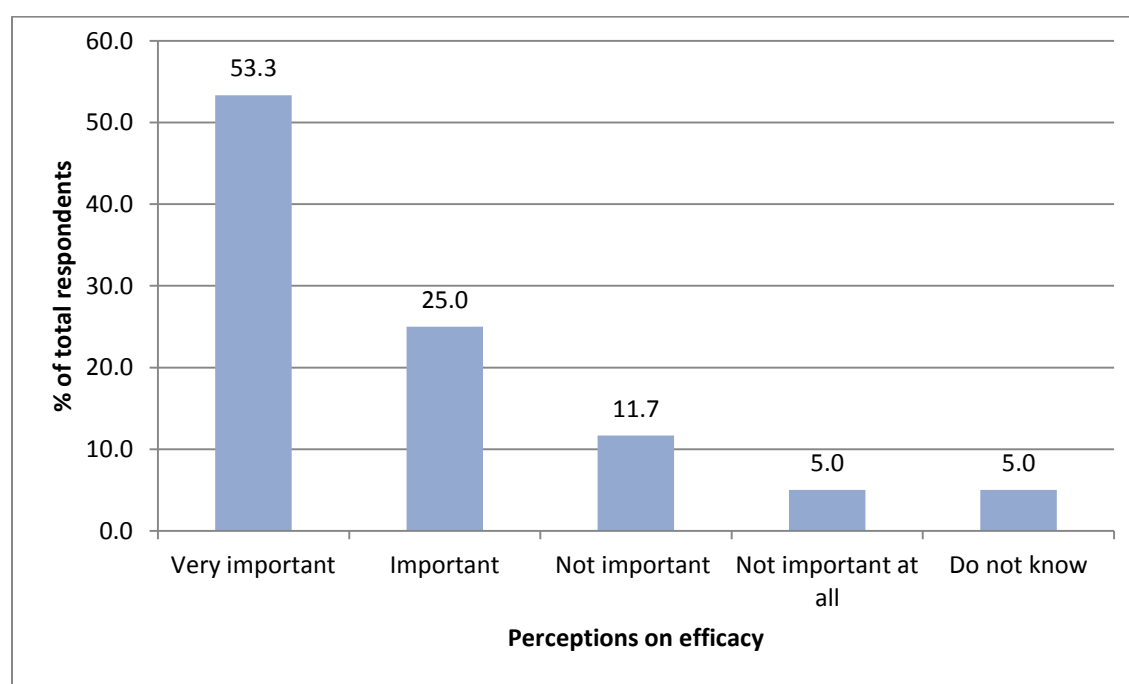
Perception scale	Frequencies and percentages within columns	Age Group	18-29 years	30-49 years	ChiSq value	p- value	Sig. Level	
Responses on cultural reasons								
Most common or common	Frequency % within group	19	12	63.3%	40.0%	6.756	0.1493	Ns
Not common or not common at all	Frequency % within group	5	7	16.7%	23.3%			
No response	Frequency % within group	6	11	20.0%	36.7%			
Responses on medical reasons								
Most common or common	Frequency % within group	23	26	76.7%	86.7%	25.770	<.0001	Sig.
Not common or not common at all	Frequency % within group	4	4	13.3%	13.3%			
No response	Frequency % within Group	3	0	10.0%	0.0%			
Responses on religious reasons								
Most common or common	Frequency % within group	13	9	43.3%	30.0%	2.0678	0.7233	Ns
Not common	Frequency	8	11					

or not common at all	% within group	age	26.7%	36.7%
No response	Frequency		9	10
	% within group	age	30.0%	33.3%

Ns=Not statistically significant

#### 4.3.2 Perceptions on efficacy of MMC

Given the controversy surrounding efficacy of MMC as an HIV prevention strategy, respondents were asked how they perceived MMC as an additional strategy in reducing the acquisition of HIV virus in men. A significant proportion (78.3%) viewed MMC as very important or important, while 16.7% perceived MMC as not important or not important at all (Figure 3). A few (5%) did not know what to say or did not respond.



**Figure 3: Perceptions on efficacy of MMC**

As shown in Table 3.2.1 below, there were no statistically significant associations detected between responses on MMC efficacy and the demographic characteristics. The observed responses were not associated with any of the 5 demographic characteristics measured in this study.



**Table 3.2.1: Associations between demographic characteristics and perceptions on MMC efficacy**

Association	df	ChiSq	p-value	Sig.
Age and perceptions on MMC efficacy	12	18.58	0.099	Ns
Education and perception on MMC efficacy	8	11.55	0.173	Ns
Marital status and perceptions on MMC efficacy	4	4.91	0.297	Ns
Religious affiliation and perceptions on MMC efficacy	16	15.40	0.496	Ns
Ethnicity and perceptions on MMC efficacy	28	30.51	0.339	Ns

Ns=Not statistically significant

There were no huge differences in the representations of the younger (18-29 years) and older (30-49) age groups in the placement of importance of efficacy of MMC in HIV/AIDS prevention (Table 3.2.2). The older group had a slightly higher proportion of 80.0% compared to that of 76.7% for the younger age group.

**Table 3.2.2: Perceptions on MMC efficacy by age groups**

Perception scale	Frequencies and percentages within columns	18-29yrs	30-49yrs
Important	Frequency	23	24
	% within age group	76.70%	80.00%
Not important	Frequency	6	4
	% within age group	20.00%	13.30%
No response	Frequency	1	2
	% within age group	3.30%	6.70%

*p-value=0.0459* not statistically significant

#### 4.4 Potential social and institutional barriers and facilitating factors for opting for MMC

Investigations of perceptions on potential barriers or facilitating factors were limited to risk of exposure to complications; easiness of access to MMC services; cost of MMC services; consideration of traditional matters; consideration of family concerns; consideration of confidentiality; consideration of religious matters; availability of accurate information; and

potential stigma from peers and friends. In addition to presenting frequencies and proportions on perceptions, the results will also present contingency tables of the observed responses by the age groups of 18-29 and the 30-49.

#### 4.4.1 Perceptions on risk of exposure to complications

As shown in Table 4.1.1, a very large proportion (86.7%) considered risk of exposure to complications as a very important or important barrier when one is considering opting to undergo MMC. A few (8.3%) considered risk of exposure not important. Some (5.0%) opted not to provide a response. There were no significant associations between responses and demographic characteristics.

**Table 4.1.1: Perceptions on risk of exposure to complications**

Perception scale	Frequency.	Percentage
Very Important	41	68.3
Important	11	18.3
Not Important	5	8.3
Not important at all	0	0
No response	3	5

The representation of the younger age group (18-29 years) in those who placed importance on the risk of exposure was slightly higher (90.0%) than the representation (83.3%) of older age group (30-49 years) (Table 4.1.2). The differences were not statistically significant.

**Table 4.1.2: Perceptions on risk to exposure to complications by age groups**

Parameter	Frequencies and percentages within columns	18-29yrs	30-49yrs
Very important or important	Frequency	27	25
	% within age group	90.00%	83.30%
Not important or not important at all	Frequency	2	3
	% within age group	6.70%	10.00%
No response	Frequency	1	2
	% within age group	3.30%	6.70%

$p$ -value=0.711 not statistically significant.

#### 4.4.2 Perceptions on consideration of easiness of access to MMC services

Consideration of accessibility of MMC services was regarded to be a very important or important factor by 81.7% of the respondents (Table, 4.2.1 below). Only 10% considered the easiness of access to services not important while 8.3% did not respond. There were no significant associations detected between the observed responses and the demographic characteristics.

**Table 4.2.1: Perceptions on easy accessibility of MMC services**

Easy accessibility of MMC services	Frequency	Percentage
Very important	33	55
Important	16	26.7
Not important	6	10
Not Important at all	0	0
No response	5	8.3
<b>Total</b>	<b>60</b>	<b>100</b>

As with consideration of risk to exposure to complications, representations on perceptions on consideration of accessibility of MMC services between the two age groups (18-29 and 30-49) were generally similar (Table 4.2.2 below). The representation of the older age group was slightly higher (83.3%) than that of (80.0%) of the younger age group. The differences were not statistically significant.

**Table 4.2.2: Perceptions on consideration of easy accessibility of MMC services by age group**

Consideration of easy accessibility of MMC services	Frequencies and within column percentages	18-29 years	30-49 years
Very important or important	Frequency	24	25
	% within age group	80.0%	83.3%
Not important or not important at all	Frequency	3	3
	% within age group	10.0%	10.0%
No response	Frequency	3	2

% within age group	10.0%	6.7%
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*p-value*=0.973 not statistically significant

#### 4.4.3 Perception on consideration of cost of MMC services

The cost factor of MMC services was considered by about two thirds of the respondents (61.7%) to be very important or important while 32% believed it was not important or not important at all (Table 4.3.1). A few (6.7%) did not know or declined to answer the question. No significant associations were detected between responses and all demographic characteristics.

**Table 4.3.1: Perceptions on consideration of costs of MMC services**

Costs of MMC services	Frequency	Percentage
Very important	19	31.7
Important	18	30
Not important	18	30
Not Important at all	1	1.7
No response	4	6.7
<b>Total</b>	<b>60</b>	<b>100</b>

The younger age group category placed more importance on cost (66.7%) implications of MMC services compared to the older age group (56.7%) (Table 4.3.2 below). The difference in representations in responses were however not statistically significant.

**Table 4.3.2: Perceptions on consideration of costs of MMC services by age group**

Consideration of MMC services costs	Frequencies and within column percentages	18-29 years	30-49 years
Very important or important	Frequency	20	17
	% within age group	66.70%	56.70%
Not important or not important at all	Frequency	8	11
	% within age group	26.70%	36.70%
No response	Frequency	2	2
	% within age group	6.70%	6.70%

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*p-value*=0.4891 not statistically significant

#### 4.4.4 Perceptions on consideration of traditional matters in adoption of MMC

A significant proportion (71.7%) believed that consideration of traditional matters was not important at all while only 20% believed it was very important or important (Table 4.4.1). A few (8.3%) did not provide responses at all. There were no significant associations detected between the observed responses and the demographic characteristics.

**Table 4.4.1: Perceptions on consideration of traditional matters in adoption of MMC**

Traditional matters in adopting MMC	Frequency	Percentage
Very important	6	10.0
Important	6	10.0
Not important	0	0.0
Not Important at all	43	71.7
No response	5	8.3
<b>Total</b>	<b>60</b>	<b>100</b>

There were no statistically significant differences in representations of the young age (18-29) and the older age group (30-49) in their placement of importance of traditional matters (Table 4.4.2 below). The young age group had however a slightly higher proportion (23.3%) than the older group (16.7%).

**Table 4.4.2: Perceptions on consideration of traditional matters by age group**

Consideration of traditional matters	Frequencies and within column percentages	18-29 years	30-49 years
Very important or important	Frequency	7	5
	% within age group	23.30%	16.70%
Not important or not important at all	Frequency	19	24
	% within age group	63.30%	80.00%
No response	Frequency	4	1
	% within age group	13.40%	3.30%

*p-value*=0.3843 not statistically significant

#### 4.4.5 Perceptions on consideration of family concerns as barrier to opting MMC

Family concerns were perceived to be a very important or important consideration by 53.4% of respondents while 41.7% believed it was not an important consideration (Table 4.5.1). There were no statistically significant associations detected between the observed responses and all demographic characteristics.

**Table 4.5.1: Perceptions on consideration of family concerns in adoption of MMC**

Family concerns in adoption of MMC	Frequency	Percentage
Very important	13	21.7
Important	19	31.7
Not important	16	26.7
Not Important at all	9	15.0
No response	3	5.0
<b>Total</b>	<b>60</b>	<b>100</b>

Regarding the representation of the two age groups (18-29 and 30-49 years) in responses on the importance of family concerns, the older age group placed more importance (56.7% versus 50.0%) compared to the younger age group (Table 4.5.2 below). The differences were not statistically significant.

**Table 4.5.2: Perceptions on consideration of family concerns by age group**

Consideration of family concerns	Frequencies and within column percentages	18-29 years	30-49 years
Very important or important	Frequency	15	17
	% within age group	50.00%	56.70%
Not important or not important at all	Frequency	13	12
	% within age group	43.30%	40.00%
No response	Frequency	2	1
	% within age group	6.70%	3.30%

*p-value*=0.464 not statistically significant

#### 4.4.6 Perception on protection of confidentiality

A significant proportion (78.4%) placed importance on protection of confidentiality. A small proportion (13.3%) perceived it not to be important (Table 4.6.1 below). There were no significant associations between observed on responses and demographic characteristics.

**Table 4.6.1: Perceptions on consideration of confidentiality concerns in adoption of MMC**

Confidentiality concerns in adoption of MMC	Frequency	Percentage
Very important	34	56.7
Important	13	21.7
Not important	8	13.3
Not Important at all	0	0
No response	5	8.3
<b>Total</b>	<b>60</b>	<b>100</b>

As shown in table 4.6.2 below, the younger age group (83.3%) was more concerned about protection of confidentiality compared to the older group (73.3%). The differences in representations in responses were, however, not statistically significant.

**Table 4.6.2: Perceptions on consideration of confidentiality by age group**

Consideration of confidentiality	Frequencies and within column percentages	18-29 years	30-49 years
Very important or important	Frequency	25	22
	% within age group	83.30%	73.30%
Not important or not important at all	Frequency	2	6
	% within age group	6.70%	20.00%
No response	Frequency	3	2
	% within age group	10.00%	6.70%

*p-value*=0.4322 not statistically significant

#### 4.4.7 Perceptions on consideration of religious matters in opting for MMC

As indicated in Table 4.7.1, about two thirds (63.3%) of the respondents perceived that religious matters were not important at all while 31.7% perceived otherwise. There were not statistically

significant associations detected between responses and the demographic characteristics.

**Table 4.7.1: Perceptions on consideration of religious matters in adoption of MMC**

Religious matters in adoption of MMC	Frequency	Percentage
Very important	7	11.7
Important	12	20.0
Not important	0	0.0
Not Important at all	38	63.3
No response	3	5
<b>Total</b>	<b>60</b>	<b>100</b>

Regarding representations of the younger (18-29 years) and the older (30-49 years) age groups, the proportion of the younger age group that placed importance on considerations of religious matters was much higher (40.0%) than the proportion (23.3%) in the older group (Table 4.7.1). The differences in representations in responses were however not statistically significant.

**Table 4.7.2: Perceptions on consideration of religious issues by age group**

Consideration of religious issues	Frequencies and within column 18-29 years 30-49 years percentages		
Very important or important	Frequency	12	7
	% within age group	40%	23.30%
Not important or not important at all	Frequency	16	22
	% within age group	53.30%	73.30%
No response	Frequency	2	1
	% within age group	6.70%	3.30%

*p-value*=0.407 not statistically significant

#### 4.4.8 Perceptions on availability of accurate information in considering opting for MMC

A very high proportion (91.6%) perceived that availability of accurate information was a very important or important factor while very few (3.3%) believed it was not an important consideration (Table 4.8.1). There were no significant associations detected between observed



responses and respondent demographic characteristics.

**Table 4.8.1: Perceptions on consideration of availability of information**

Availability of accurate information	Freq.	Percentage
Very Important	50	83.3
Important	5	8.3
Not Important	2	3.3
Not important at all	0	0
No response	3	5
<b>Total</b>	<b>60</b>	<b>100</b>

As indicated in Table 4.8.2, representations of the younger age group (18-29 years) was slightly higher (93.3%) than the representation of (90.0%) the older group (30-49 years) in supporting importance of availability of accurate information as a critical consideration factor. The differences in representation in the responses were not statistically significant.

**Table 4.8.2: Perceptions on availability of accurate information by age group**

Availability of accurate information	Frequencies and within column percentages	18-29yrs	30-49yrs
Very important or important	Frequency	28	27
	% within age group	93.30%	
Not important or not important at all	Frequency	0	2
	% within age group	0.00%	6.70%
No response	Frequency	2	1
	% within age group	6.70%	3.30%

*p-value*=0.4693 not statistically significant

#### **4.4.9 Perceptions on consideration of potential stigma from peers and friends in opting for MMC**

Potential stigma from peers and friends was perceived not to be important at all by 73.3% of the respondents while a minority (21.7%) perceived it to be very important or important (Table 4.9.1).

**Table 4.9.1 Perceptions on consideration of stigma**

Perception on stigma	Freq.	Percentage
Very Important	7	11.7
Important	6	10
Not Important	0	0
Not important at all	44	73.3
No response	3	5

Stigma by Education level association: *p-value* =0.015 statistically significant.

A statistically significant association was only detected between education level and stigma as a barrier for MMC. The association was such that those with lower educational level are not so much concerned about the stigma that may be associated with MMC compared to those with higher education (Table 4.9.2). A very high proportion (83.3%) of those with the lowest education levels believed that stigma is not important at all compared to 40.0% of those with the highest levels of education.

**Table 4.9.2: Perceptions on stigma and education levels**

Perceptions on stigma by education	Frequencies and within column percentages	At most Form 4	Post Form 4 Certificate	Degree
Very important or important	Frequency % within educational level	4 11.10%	1 11.10%	8 53.30%
Not important or not important at all	Frequency % within educational level	30 83.3	8 88.90%	6 40.00%
No response	Frequency % within educational level	2 5.6	0 0%	1 6.70%

Comparing representations in responses to importance of potential stigma in the 18-29 and 30-49 years age groups, a very high proportion (83.3%) of the older group believed that stigma was not important at all compared to 63.3% in the younger age group. Conversely, the older group had a lower representation (13.3%) than the younger age group (30.0%) in placement of importance on

stigma. There were no statistically significant differences in representations of responses of the two groups.

**Table 4.9.3: Perceptions on stigma by age group**

<b>Perceptions on stigma</b>	<b>Frequencies and within column percentages</b>	<b>18-29 years</b>	<b>30-49 years</b>
Important	Frequency	9	4
	% within age group	30.00%	13.30%
Not important	Frequency	19	25
	% within age group	63.30%	83.30%
No response	Frequency	2	1
	% within age group	6.70%	3.30%

*p-value*=0.376 not statistically significant

#### **4.5 Perceptions on importance of involving different leadership in promoting and delivering MMC**

As shown in Tables 5.1a to 5.1d below, involvement of all leaders was perceived by the majority to be very important or important with the highest proportion being attributed to involvement of Cultural leaders (83.2%) (Table 5.1a), followed by Religious leaders (80.0%) (Table 5.1c), Traditional leaders (70.0%) (Table 5.1d) and Political leaders (65.0%) (Table 5.1b) the proportion that perceived the involvement as not important or not important at all were likewise lowest for the involvement of cultural leadership (13.3%) followed by religious leadership (18.3%) and 28.3% for both political and traditional leadership. All the observed responses in the four leadership categories were not associated significantly with the demographic characteristics.

**Table 5.1a: Perceptions on involvement of cultural leadership**

<b>Cultural leadership</b>	<b>Frequency</b>	<b>Percentage</b>
Very important	28	46.6
Important	22	36.6
Not important	3	5
Not Important at all	5	8.3
No response	2	3.3
<b>Total</b>	<b>60</b>	<b>100</b>

**Table 5.1b: Perceptions on involvement of political leadership**

<b>Political leadership</b>	<b>Frequency</b>	<b>Percentage</b>
Very important	21	35
Important	18	30
Not important	5	8.3
Not Important at all	12	20
No response	4	6.7
<b>Total</b>	<b>60</b>	<b>100</b>

**Table 5.1c: Perceptions on involvement of religious leadership**

<b>Religious leadership</b>	<b>Frequency</b>	<b>Percentage</b>
Very important	27	45
Important	21	35
Not important	3	5
Not Important at all	8	13.3
No response	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

**Table 5.1d: Perceptions on involvement of traditional leadership**

<b>Traditional leadership</b>	<b>Frequency</b>	<b>Percentage</b>
Very important	23	38.3
Important	19	31.7
Not important	8	13.3
Not Important at all	9	15
No response	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

Tables 5.2a to 5.2d below present the representations of the 18-29 and 30-49 years age groups in responses on perceptions on the importance of involving different leadership. The representations of the younger and older age groups in proportions that placed importance in the involvement of cultural leaders were the same at 83.3% (Table 5.2c). In all other cases, the proportions of the older group placing importance on involvement of the political (Table 5.2a), religious (Table 5.2b) and traditional (Table 5.2d) leaders were all higher than the proportions in the younger age group. The differences in representations in all responses were not statistically significant.

**Table 5.2a: Perceptions on political leadership involvement by age group**

<b>Political leadership</b>	<b>Frequencies and within column percentage</b>	<b>18-29 years</b>	<b>30-49 years</b>
Very important or important	Frequency	18	21
	% within age group	60,0%	70,0%
Not important or not important at all	Frequency	9	8
	% within age group	30,0%	26,7%
No idea	Frequency	3	0
	% within age group	10,0%	0,0%
No response	Frequency	0	1
	% within age group	0,0%	3,3%

*p-value*=0.352 not statistically significant

**Table 5.2b: Perceptions religious leadership involvement by age group**

<b>Religious leadership</b>	<b>Frequencies and within column percentage</b>	<b>18-29 years</b>	<b>30-49 years</b>
Very important or important	Frequency	22	26
	% within age group	73,3%	86,7%
Not important or not important at all	Frequency	7	4
	% within age group	23,3%	13,3%
No idea	Frequency	1	0
	% within age group	3,3%	0,0%
No response	Frequency	0	0
	% within age group	0,0%	0,0%

*p-value*=0.357 not statistically significant

**Table 5.2c: Perceptions on cultural leadership involvement by age group**

<b>Cultural leadership</b>	<b>Frequencies and within column percentage</b>	<b>18-29 years</b>	<b>30-49 years</b>
Very important or important	Frequency	25	25
	% within age group	83,3%	83,3%
Not important or not important at all	Frequency	3	5
	% within age group	10,0%	16,7%
No idea	Frequency	2	0
	% within age group	6,7%	0,0%
No response	Frequency	0	0
	% within age group	0,0%	0,0%

*p-value*=0.348 not statistically significant

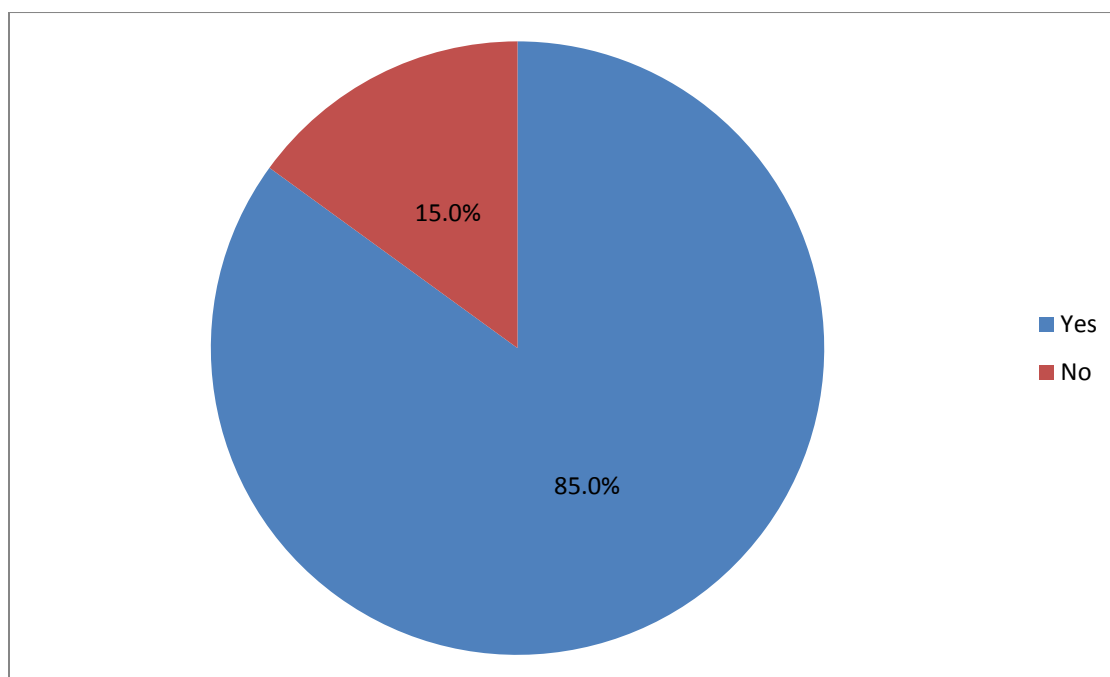
**Table 5.2d: Perceptions on traditional leadership involvement by age group**

<b>Traditional leadership</b>	<b>Frequencies and within percentage</b>	<b>18-29 years</b>	<b>30-49 years</b>
Very important or important	Frequency	18	24
	% within age group	60.00%	80.00%
Not important or not important at all	Frequency	12	5
	% within age group	40.00%	16.70%
No idea	Frequency	0	1
	% within age group	0.00%	3.30%
No response	Frequency	0	0
	% within age group	0.00%	0.00%

*p-value*=0.273 not statistically significant

#### **4.6 Attitude towards MMC**

In order to establish the attitude of respondents towards MMC, they were asked whether they would recommend someone close to them to under-go MMC for safeguarding from HIV infection. The majority of the respondents (85.0%) affirmed that they would recommend their loved ones to be circumcised while a small proportion (15.0%) indicated not to recommend (Figure, 4 below).



**Figure 4: Responses on whether one would recommend a close relative to undergo MMC**

Table 6.1 below shows the association between responses and the age groups of 18-29 years and 30-49 years. The older age group had a higher proportion of 90% who recommended for MMC compared to 80% of the young age group who also supported MMC.

**Table 6.1: Attitude toward MC by age groups**

Willingness to recommend MMC	Frequencies and percentages within columns	Frequencies and percentages	
		18-29yrs	30-49yrs
Yes	Frequency	24	27
	% within age group	80,0%	90,0%
No	Frequency	6	3
	% within age group	20,0%	10,0%

Respondents were further asked to provide reasons for their options and the responses provided are presented in Table 6.2 below. The majority of respondents (78.3%) supported MMC on condition that accurate and adequate information about MMC is provided to clients. A few (3.3%) suggested that MMC should be made mandatory and that leaders must encourage MMC (1.7%).



Almost all respondents (11.7%) who did not support MMC proffered the reason that MMC is not 100% effective and that there is high risk of engaging in risk behaviour in circumcised men. One respondent argued that the effectiveness is still debatable and the other one claimed that he could not make an informed decision because he did not know much about male circumcision.

**Table6.2: Reasons given for and against recommending one to undergo MMC**

<b>Reasons or qualifications</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Respondents who agreed to recommend</b>		
Supported on condition that there is adequate education and awareness	47	78.3
Government should enact law to compel MMC	2	3.3
Use leaders to encourage MMC	1	1.7
No reason	1	1.7
<b>Respondents who recommended against</b>		
MMC is not 100% of effective and there is high risk of engaging in unprotected sex	7	11.7
Have no knowledge about MMC so cannot make informed decision	1	1.7
Its effectiveness is still debatable	1	1.7
<b>Total</b>	<b>60</b>	<b>100</b>

#### **4.7. Other important issues raised on MMC subject**

At the end of the interview, respondents were asked to provide any information they felt was important but not covered in the interview. More than a third (35%) had no suggestions, while 43.3% suggested that education and awareness on MMC was critically important (Table 7). Many important issues were raised including the suggestion that there was need to demystify the satanic issues associated with MMC (Table 7).

**Table 7: Other important issues rose by respondents**

<b>Issues raised</b>	<b>Frequency</b>	<b>Percentage</b>
Only trained personnel must perform MMC	1	1.7
Education on benefits and risks of MMC	26	43.3
All men must be circumcised	1	1.7
No suggestion	21	35
Maintaining of Confidentiality by health personnel is important	2	3.3
Have a policy to circumcise all boys at birth	1	1.7
Demystify rumour about MMC being linked to Satanism and “Juju”	4	6.7
MMC must be easily accessible	1	1.7
MMC is good carry on with programme and cover all communities	3	5
<b>Total</b>	<b>60</b>	<b>100</b>

## Chapter 5 Discussion

### 5. Introduction

This chapter presents a discussion made in relation to the study aim, objectives and reviewed literature. The study mainly provides information on knowledge, perceptions, attitudes, barriers and recommendations on improving adoption of MMC.

#### 5.1 Demographic characteristics

**Age profile:** The majority (75.0%) of the respondents were in the highly sexual active age group of 18-34 years. This age group is reported in many studies (Government of Zimbabwe, 2011b; Jackson, 2002; Niekerk & Kopelman, 2008; WHO & UNAIDS, 2011) as being at high risk of HIV infection. The representation of age groups in the sample was similar to the age distribution of the 15-49 years male population of Bindura in accordance with the 2002 national census that was reported in Chapter 3 under study population. This similarity could be a reflection of representativeness of the study sample.

**Educational qualification:** Zimbabwe has the second highest level of literacy of 92% (12 million people) in Africa after the Seychelles which has only 0.1 million people (United Nations Educational, Scientific, and Cultural Organisation Institute for Statistics, 2013). The sample reflected this reality as only two participants confirmed that they had never been to school.

**Ethnic group:** The ethnic groups and their representation in the sample reflected ethnicity representation in different provinces of Zimbabwe where Mashonaland Central is largely dominated by Zezuru and Korekore. The similarity in representation in sample and population may also be a reflection of representativeness of the sample.

**Religious affiliation:** The sample reflected that Bindura urban is highly religious with most (81.7%) of respondents being Christians. The representation of Christians in the sample is slightly higher than the estimated national representation of 60-70% (Wikimedia Foundation, 2013). Among Christians, the results reflected a growing tendency of following of Pentecostal churches (34.7%) and Apostolic groups (20.4%). Apart from preaching about holiness, the

doctrines of Apostolic groups also practice spiritual healing while Pentecostal churches preach about prosperity and practice spiritual healing as well. Some of the teachings and beliefs may have a strong influence in the way respondents perceive prevention measures such as the use of condoms, male circumcision and antiretroviral treatment.

The growth of followers of Pentecostals churches and Apostolic groups could be a reflection of social (e.g. health problems) and economic (e.g. high unemployment rates) hardships prevalent in the country. Without alternatives and lack of solutions, people may resort to divine intervention.

The sample did not pick any Muslims despite the presence of small Muslim community constituted by Aliens who predominantly work in the surrounding mines and farms. This could be a reflection that members of Muslims are largely confined to the older generation of 50 years and above. Like the national outlook where the majority of the people are Christians with a small percentage believing in tradition, the sample had also a small percentage that believed in tradition.

## **5.2 Perceptions on HIV/AIDS intensity in Zimbabwe**

The respondents portrayed a very high level of awareness about HIV/AIDS intensity in Zimbabwe since 82% of them perceived HIV/AIDS as a real problem. Their perceptions reflected the reality of Zimbabwe situation as it carries the third largest burden of HIV in Southern Africa (the epicentre of the HIV/AIDS epidemic globally), after South Africa and Mozambique with 5.6 and 1.4 million people living with HIV/AIDS respectively (USAID, 2011). With such a burden, every individual in the country must have been affected by HIV/AIDS in some way especially given realities such as:

- High levels of HIV/AIDS related mortalities with numbers of annual deaths as high as 123,000 in 2006 and 71,300 in 2010 (Government of Zimbabwe, 2011a ).
- Severe morbidity among HIV patients due to limited supply of anti-retroviral drugs and poor nutrition. The situation was so bad that the sharp reduction in HIV prevalence from a higher rate of 26.5% in 1997 to 13.1% in 2011 was largely attributed to positive change in behaviour induced mainly by fear of death and suffering from HIV as well as

improvement in the coverage of anti-retroviral treatment (Government of Zimbabwe, 2011b).

- A large cumulative number (about 1 million) of AIDS related orphans and this is believed to be the highest in the world (Government of Zimbabwe, 2011b).

The views of (8.4%) of those who believed HIV was not a problem (and all of them being in the 30 years and older age group) could be premised on the following:

- Reduction in AIDS related mortality and morbidity due improvement in provision of anti-retroviral treatment, management of TB/HIV co-infection and improved nutrition (Government of Zimbabwe, 2011a); or
- Mere ignorance of gravity of HIV or treating HIV/AIDS as one of any disease that affect people.

### **5.3 Sources of information on MC as an HIV prevention strategy**

Results of this study revealed that radio, print and electronic media were the most popular ways through which respondents got information about HIV/AIDS and MMC. This could be as a result of extensive media coverage of promotion of HIV VCT and MMC that was being undertaken by Government of Zimbabwe including coverage of voluntary HIV VCT and medical circumcision done to some male members of Parliament (MP) of Zimbabwe in mid-2012 (e.g. several articles in Zimbabwe Herald, Zimbabwe Daily News, and Zimbabwe News Day). There were also some debates on MMC including its efficacy in the local print media (e.g. Mavhu, 2012, Chipunza, 2012; Langa, 2012).

The older age group of 30 years and above seemed not to be as selective as the younger group of 29 years and below in the sources of information they depend on. Their representation was equal to or higher than the younger age group in all sources of information with the exception of electronic media. The popularity of electronic media in the younger age group is understood as television is more popular among the youth compared to the older people.

The popularity of diverse sources of information among the older group could be a reflection of their concern about the disease and this would motivate them to seek information from various sources. This could possibly explain their seemingly better understanding of the partial

protection effect of MC and the need to use other prevention strategies as their representation in selection prevention strategies was higher in all cases except for one strategy i.e. delaying sexual activity. Their average score was also slightly higher than that of the younger age group

The results also showed a very low recognition of traditional leaders and NGOs as sources of information. Given that the study was conducted in an urban centre, traditional leaders have little influence because most of them are rural based. Low recognition of NGOs could be as a result of limited NGO activity in Zimbabwe because of the current social, economic and political environment. The limited donor funding for HIV and AIDS programmes in Zimbabwe has been confirmed by regular progress reports of Government of Zimbabwe submitted to the WHO (Government of Zimbabwe, 2011b).

#### **5.4 Knowledge on prevention strategy that must be used in conjunction with MC**

The results of the study indicated that majority of the respondents had poor knowledge or understanding that MC should never replace any other known HIV prevention strategy and that MMC is just an additional measure that should be used in conjunction with other prevention strategy. Limited knowledge among respondents could be as result of poor dissemination of information on MC and this was reflected by huge request of education on benefits and risks of MMC made by respondents as shown in Tables 6.1 and 7 on reasons offered for and against recommending MMC and on additional information raised by respondents respectively. Major sources of information mentioned in the study (radio, print and electronic media) could also not be effective in educating as they are more suitable in raising awareness. Other sources of information that are good in educating people through face to face or interactive sessions (such as HIV VCT, workplace HIV programme and Ministry of Health campaigns) were rated lowly as sources of information. Given the high level of awareness demonstrated by respondents about the gravity of HIV (Figure 1), one would expect a high level of understanding and adoption of any measure that could reduce the acquisition of HIV virus.

#### **5.5 Perceptions on reasons why people undergo MC**

Findings from previous studies (Hankins, 2007; Government of Zimbabwe, 2009) revealed that MC was predominantly practised for religious, social and cultural reasons. The results of this study indicated a shift of placement of motivation for MC from cultural and traditional reasons to

health-related reasons. The majority of respondents (81.6%) in the study sample believed that medical reasons were the most common reasons why people undergo MC. Their beliefs concurred with studies conducted in Bungoma district, in Kenya, where a shift towards medical reasons was established among the Bukusu people (UNAIDS/CAPRISA, 2007).

The placement of medical reasons ahead of cultural, traditional and religious male circumcisions could be as a result of increase in information on the health-related benefits of MMC and also possible acknowledgement of risks associated with non-clinical circumcision done for cultural and traditional reasons. Although the majority of respondents were Christians (81.7%), cultural influence seemed to be stronger than religious since culture emerged as the second most common reason for MC. These results were explained by the reviewed literature (Government of Zimbabwe, 2009) which showed that historically, MC was mainly practiced among the traditional groups such as the Tonga, Xhosa, Venda and Shangani tribes whilst religious circumcision was confined to a small group of Chewa and Muslims predominantly found in the city of Harare.

## **5.6 Perceptions on the importance of MMC**

Male circumcision was believed to be important additional HIV prevention strategy by 78.3% of the respondents in this study while only 16.7% regarded it otherwise. The study by Okeyo, Westercamp, Bailey and Kawango (2011) also viewed MMC as important because of the health-related benefits.

Despite the majority of respondents showing limited knowledge about MC as an additional strategy for HIV prevention, they still believed MMC was important in reducing acquisition of HIV virus. As presented above, the perceptions of these respondents could have been shaped by massive promotions and campaigns of health related benefits of MMC undertaken by members of Parliament of Zimbabwe. The launch in 2009 and promotion of the MC Policy could also be another contributing factor.

Those who believed MMC not important could be the same respondents (15%) who did not approve MMC (Figure 4) as they felt its efficacy was still debatable and also that it may lead to risk behaviour. The issue of MMC efficacy therefore needs to be experimented extensively in

different set-ups and there is also need for education about its mode of operation of MC as a strategy in reducing acquisition of HIV virus including clearly articulating its partial protectiveness.

There seems to be congruency in perceptions about the efficacy of MC between the younger (29 years and below) and older (30 years and above) age groups. The older age group had, however, slightly higher representation in placing of importance of MC and as well as in recommending for MC.

### **5.7 Involvement of leadership in promoting and delivering MMC**

Generally, respondents felt that it was important to mainstream efforts of other players who promote male circumcision for other reasons into current efforts of promoting and delivering MC for medical reasons. Although the majority of respondents believed that medical reasons were the principal motivating factor for MC, they still believed that the involvement of players who promote MC for other reasons (cultural, religious and traditional) was important. Their views could be based on the realisation that these other players can reach out and influence people in their respective constituencies to undergo MMC. Given the importance attached to MMC by respondents as shown in figure 2, it is also not surprising that they felt it important to involve other players in its promotion and delivery. The placement of importance in involving other players concurred with Zimbabwe MC Policy which encouraged use of traditional and religious leadership in delivering and promoting health related MC.

### **5.8 Social and institutional barriers and facilitating factors for MMC**

The factors that can act as barriers to opting for MMC by individuals that were considered in the study can be divided into those that are external (outside control of potential candidate, thus mainly controlled by institutions that provide services) and those that are internal (those where the respondent has control or can do something about). Of the barriers that are considered to be external, the majority of respondents placed a lot of importance on availability of accurate information (91.6%), followed by risk of exposure to complications (86.6%), easiness of access to operation services (81.7%), protection of confidentiality (78.4%) and costs of MMC services (61.7%). Given the controversy and debate about MMC as an effective complementary HIV prevention strategy, and also about the risk of exposure to complications or death, it was sensible



for the majority of respondents to consider the availability of accurate information as an overarching important factor when one is considering undergoing MMC. The importance of providing accurate information through education was further reinforced in results on question about attitude towards MC (Table 6.2) and on the last question where respondents were asked to raise issues they reckoned were important to bring to the attention of the researcher (Table 7). When accurate information about MC is provided it may help to clarify facts and misconceptions on other important potential barriers such as risk of exposure to complications, the cost of services and confidentiality concerns in addition to explaining benefits.

With the exception of consideration of family concerns (53.3%), all other potential internal barriers [religious concerns (31.7%) fear of being stigmatised (21.7%) and traditional concerns (20%)] were believed not to be important. Concerns from family members could arise from the fact that in the African traditional cultural context, the family and community regulate important issues such as adopting HIV prevention measures including undergoing medical circumcision (Airhihenbuwa & Obregon, 2000). Individuals may also be concerned about the potential effects on their sexual life that will inevitably affect their spouses. As noted above, potential complications of MC established in other studies include loss of penis or loss of sexual sensitivity, all which affect sexual life of an individual and ultimately the whole family.

Cultural, religious and stigma from peers and friends were found to be non-barriers in relation to MMC. These results are contrary to findings established in India where religion and culture were found as barriers to MMC and to communication of risks and benefits of MMC (UNAIDS/CRIPRISA, 2007).

Although there were no huge differences in representations in responses to perceptions on barriers between the younger age group (29 years and below) and the older age group (30 years and above) it seems the younger age group placed more importance on all potential barriers (with exception of easiness of access and family concerns) compared to the older group. It is understood for the younger to be more concerned about any change being introduced as they have limited experience about life; have limited resources to cope with potential mishaps as the majority are unemployed; and have more years to live as they are way below the average life expectancy.

### **5.9 Attitudes of respondents towards male circumcision**

Despite the odds associated with MC, such as pain during and after the operation, difficulty in healing, possible loss of penile sensitivity, reduction in penis size and decreased ability to satisfy women, reported in many studies (Bailey, Muga, Poulussen, & Abicht, 2002; Kebaabetswe, Lockman, Mogwe, Mandevu, Thior, Essex, & Shapiro, 2003; Ngalande, Levy, Kapondo, & Bailey 2006; Scott, Weiss, & Viljoen, 2005; Westercamp, & Bailey, 2006), MMC was highly acceptable among the study population. 85% of the respondents endorsed their willingness to recommend MMC to their loved ones on condition that there was adequate education on benefits and risks associated with MMC. The high acceptability could be as a result of appreciation of potential health-related benefits associated with MC. These results concurred with other studies conducted in Botswana, Kenya, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe where acceptability was reported to be high and linked to health related benefits of MC (Hankins, 2007, Westercamp and Bailey, 2007).

The remaining proportion of respondents (15.0%) was against MC because of reasons that MMC offers a partial protection against HIV infection and that it may lead to risk behaviour among circumcised men. No one mentioned fear of exposure to complications. Their perceptions concurred with Yikoniko (2012) who reported a 14% HIV prevalence among circumcised men compared to 12% among the uncircumcised. The explanation given was that circumcised men may harbour the false impression that they were equipped with an invisible condom leading to high risk of acquiring and spreading of HIV. The risk behaviour associated with circumcised men was also explained by doctors opposing circumcision (2008) by postulating that circumcised men experience loss of sexual feeling and purpose hence as a result the majority were reluctant to use condoms.

### **5.10 Other important issues raised by respondents**

It is important to note that all issues raised were concerned about how to make MC a better programme. The most important issue that came out was that education on benefits and risks of MC was important for people to make informed decision and also to fully benefit from MC. Without this education, many respondents alluded that MC would be useless. Knowledge gaps identified in responses related to question on other HIV prevention strategies that must be used

in conjunction with MC (Table 2.3.1) also re-enforced the point that education on MC as an additional strategy for HIV prevention is critically important. The need for provision of adequate information on benefits and risks and to clarify misconceptions was also emphasised by other researchers (UNAIDS/CRIPRISA, 2007).

The rumour that MMC was being promoted in-order to get foreskins for Satanism or African medicine (juju) that came out of this study was not found in other studies. This needs further investigation as issues of using human parts for Satanism and African juju are commonly reported in print media, not only in Zimbabwe, but in other Southern Africa countries.

## **Chapter 6: Conclusion and recommendations**

### **6.1 Conclusion**

The purpose of this study was to provide information about the knowledge, perceptions, attitudes and barriers confronting males aged 18-49 years in Bindura urban in accessing MMC

#### **Knowledge of MMC**

Respondents showed high levels of awareness of HIV intensity in Zimbabwe but they demonstrated that they have poor knowledge that MMC is just an additional HIV prevention strategy which on its own is not a solution in curbing HIV infection. Major sources of information acknowledged by respondents lacked the education component that is needed to effectively educate people about MMC and the associated benefits and risks.

#### **Perceptions on MMC**

The majority of respondents perceived MMC as very important in curbing the acquisition of HIV virus. They also perceived medical reasons as most common reason why people underwent MC. Political, religious, traditional and cultural leadership were found to be very important in delivering information on MMC.

#### **Attitudes towards MMC**

Respondents demonstrated a positive attitude towards MMC on condition that there was adequate provision of information on benefits and risks associated with MMC. A small percentage of respondents had a negative attitude towards MMC as they queried its effectiveness.

#### **Social and Institutional Barriers of MMC**

Risks associated with operation, its cost, protection of confidentiality and consideration of family concerns were considered by respondent as barriers to MMC. Provision of accurate information and easiness of access to MMC services were considered important facilitating factors. Consideration of matters of culture, tradition and religion, as well as potential stigma from peers and friends were believed by the majority of respondents as non-barriers of MMC.

### **Associations between observed responses and respondent demographic characteristics**

Statistically significant associations were only detected between responses on medical reasons for motivation for MMC and demographic profiles of age and marital status and between responses on concerns about potential stigma as a barrier to MMC and education levels profile. There were no significant differences between associations of responses between the age groups of 18-29 and 30-49 years.

## **6.2 Recommendations**

- There is need to conduct a similar study with a relatively large sample. This could provide results that could be generalized to the whole study population.
- There are greater chances of increasing MMC acceptability when face to face or interactive sessions are held as they clarify issues pertaining to MMC. During the study it was established that people had lots of unanswered questions.
- Provision of accurate information was found to be very important in order to educate people on benefits and risk associated with MMC. The Ministry of Health and Child Welfare must play a leading role in providing this information.
- The Ministry of Health must also address barriers to accessing MMC identified in this study in particular provision of accurate information about MMC, risks associated with the operation, its cost, maintaining of confidentiality, and easiness of access to MMC services.
- Since culture and religion were found to be non-barriers, focus should be centred on engaging these leaderships in MMC information dissemination.
- Given the influence that traditional, cultural, religious and political leaders have in society, it is highly recommended to engage them in delivering and promoting MMC.

## References

1. Airhihenbuwa, C. O. & Obregon, R. (2000). A Critical Assessment of Theories/Models Used in Health Communication for HIV/AIDS: Journal of health communication, volume 5 (supplement).
2. Bailey, R.C., Muga, R., Poulussen, R., & Abicht, H. (2002). The Acceptability of Male Circumcision to Reduce HIV Infections in Nyanza Province, Kenya. AIDS Care 14 (1), 27-40.
3. Bongaarts, J., Pelletier F. & Gerland P. (2009). Poverty, Gender and Youth. Global Trends in AIDS Mortality. Retrieved September 27, 2011, from <http://www.scribd.com/doc/83405276/perspective-in-public-health>
4. Chipunza, P. (2012 March). Circumcision for legislators. Retrieved January 10, 2013, from [www.herald.co.zw](http://www.herald.co.zw)
5. Christensen, L. B., Johnson, R. B., & Turner, I. A. (2011). Research methods, design, and analysis. Eleventh Edition, United States of America: Pearson Education, Inc.
6. Doctors Opposing Circumcision (2008). The use of male circumcision to prevent HIV infection. Retrieved January 22, 2011, from [www.ingcircumcision.org/.../hi](http://www.ingcircumcision.org/.../hi)
7. Global Health Observatory Data Repository. Retrieved January 10, 2013, from (<http://apps.who.int/ghodata/>)
8. Government of Zimbabwe. (2002). Mashonaland central, provincial profile, census report.
9. Government of Zimbabwe. (2009). National male circumcision policy for HIV prevention: Enhancing HIV prevention efforts.
10. Government of Zimbabwe. (2010). HIV/AIDS research priorities for Zimbabwe 2010-2012.
11. Government of Zimbabwe. (2011a). Zimbabwe national HIV/AIDS strategic plan [ZNASP] 2011-2015.
12. Government of Zimbabwe. (2011b). Global AIDS response progress report 2012: Follow up to the 2011 political declaration on HIV/AIDS: Intensifying our efforts to eliminate HIV/AIDS. Zimbabwe country report 2012.
13. Gruskin, S. (2007). Male Circumcision in So Many Words. Reproductive health matters, volume 15, No.29, 2007. Retrieved September 27, 2011, from

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1872047](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1872047)

14. Halperin, D.T., Fritz, K., McFarland, W., & Woelk, G. (2005). Acceptability of Adult Male Circumcision for Sexually Transmitted Disease and HIV Prevention in Zimbabwe. *Sexually Transmitted Disease*, 32 (4) 238-239.
15. Hankins, C. (2007). MC: Implications for Women as Sexual Partners and Parents: *Reproductive health matters* 2007; 15 (29):62-67.
16. Jackson, H. (2002). AIDS Africa continent in crisis. Zimbabwe: SAFAIDS.
17. Joint United Nations Programme on HIV/AIDS [UNAIDS]. (2010). Report on the global AIDS epidemic.
18. Joint United Nations Programme on HIV/AIDS [UNAIDS]. (2011). Terminology guidelines.
19. Joint United Nations Programme on HIV/AIDS and Centre for the AIDS Programme of Research in Southern Africa [UNAIDS/CAPRISA]. (2007). Consultation on social science perspectives on male circumcision for HIV prevention 18-19 January, 2007 summary report
20. Langa, V. (2012, 23 June). MPs circumcision testimonies: Zimbabwe News Day, p.2.
21. Mavhu, W. (2012 April). Confusion over circumcision. Retrieved January 10, 2013, from [http://www.herald.co.zw/index.php?option=com\\_content&view=article&id=38881:confusion-over-circumcision&catid=39:opinion-a-analysis&Itemid=132#.UO7BNG\\_q13p](http://www.herald.co.zw/index.php?option=com_content&view=article&id=38881:confusion-over-circumcision&catid=39:opinion-a-analysis&Itemid=132#.UO7BNG_q13p)
22. Maxwell, D. I. & Satake, E. (2006). Research and statistical methods in communication and disorders. Canada Thomson Delmar Learning
24. Niekerk, A.A., & Kopelman, L.M. (2008). Ethics and AIDS in Africa: The challenge to our thinking. South Africa: Retrieved April 27, 2012, from <http://connection.ebscohost.com/c/book-reviews/35368906/ethics-aids-africa-challenge-our-thinking>
25. Nyalande, R., Levy, J., Kapondo, C., & Bailey, R.C. (2006). Acceptability of Male Circumcision for HIV Prevention in Malawi. *AIDS and Behaviour*, 10 (4), 377-385.
26. Pelser, A.J., Ngweni, C.G. & Summerton, (2004). The HIV/AIDS epidemic in South Africa trends, impacts and policy responses.
27. Rennie, S., Muula, A. & Westreich, D. (2007). Male Circumcision and Prevention: Ethical, Medical and Public Health Trade-offs in Low-income Countries. *Medical Ethics*,

- 33 (10)357-361.
- 28 Scort, B.E., Weiss, H.A., & Viljoen, J.I. (2005). The Acceptability of Male Circumcision as an HIV Intervention among a Rural Zulu Population, Kwazulu-Natal, South Africa. *AIDS Care*, 17 (3), 304-313.
- 29 Setswe, G. (2011). HIV/AIDS prevention strategies.
- 30 United Nations Educational, Scientific, and Cultural Organisation Institute for Statistics, (n. d.). Zimbabwe literacy rate: Retrieved on 10 January 10,2013, from <http://www.indexmundi.com/facts/zimbabwe/literacy-rate>
- 31 United States Agency for International Development [USAID]. (2011). HIV/AIDS health profile Southern Africa.
- 32 Weiss, H.A., Halperin D., Bailey R.C., Hayes, R.J., Schmid, G. & Hankins, C.A., (2008). Male Circumcision for HIV Prevention, from Evidence to Action? *AIDS*, 2008 12;22 (5): 567-74.
- 33 Westercamp, N., & Bailey, R.C. (2007). Acceptability of Male Circumcision for Prevention of HIV/AIDS in sub-Saharan Africa: Review *AIDS*: 11 (3): 341-355.
- 34 Wikipedia Foundation, Inc, (n. d.). Religion in Zimbabwe. Retrieved May 5, 2012, from [en.wikipedia.org/wiki/Religion\\_in\\_Zimbabwe#List\\_of\\_Churches\\_in\\_Zimbabwe](http://en.wikipedia.org/wiki/Religion_in_Zimbabwe#List_of_Churches_in_Zimbabwe)
- 35 World Health Organisation and Joint United Nationals Programme on HIV/AIDS [WHO & UNAIDS]. (2011). Joint strategic action framework to accelerate the scale-up of voluntary medical male circumcision for HIV prevention in Eastern and Southern Africa: 2012-2016.
- 36 World Health Organisation and UNAIDS. (2007). New data on male circumcision and prevention: policy and programme implications: Conclusions and recommendations WHO &UNAIDS technical consultation.
- 37 World Health Organisation, Joint United Nationals Programme on HIV/AIDS and United Nations Children's Fund [WHO/UNAIDS/UNICEF]. (2011). Global HIV/AIDS response: Epidemic update and health sector progress towards universal access: Progress report 2011
- 38 Yikoniko, S. (2012, 8-14 July). Circumcised men not spared from HIV infection. *Zimbabwe Sunday Mail*, p.1.



**Annex 1: Questionnaire-English version**

**QUESTIONNAIRE VOLUNTARY MALE CIRCUMCISION SURVEY IN BINDURA  
URBAN, MASHONALAND CENTRAL PROVINCE, ZIMBABWE**

**Respondent code number**

**RESPONDENT SELECTION FACTOR**

**Age group**

- ☐ 18-19
- ☐ 20-24
- ☐ 25-29
- ☐ 30-34
- ☐ 35-39
- ☐ 40-44
- ☐ 45-49

**KNOWLEDGE ON MEDICAL CIRCUMCISION (MC) AND HIV/AIDS PREVENTION  
STRATEGIES**

**What is your perception about HIV/AIDS epidemic in Zimbabwe? Is it**

- ☐ A real problem
- ☐ A problem
- ☐ Not a problem
- ☐ No longer a problem
- ☐ Do not know

What are your sources of information on medical male circumcision as an HIV prevention method? Tell us all that is applicable

- ☐ Testing and counselling centres
- ☐ New papers
- ☐ Television
- ☐ Radio
- ☐ Magazines/pamphlets
- ☐ At work
- ☐ Clinic/hospital
- ☐ Ministry of health campaigns
- ☐ NGOs
- ☐ Traditional leaders
- ☐ Friends
- ☐ Other

**What do you reckon as the most common reason why people undergo male circumcision?**

**PERCEPTIONS ON THE IMPORTANCE OF MC**

**How do you perceive medical male circumcision as measure in reducing the acquisition of HIV virus? Is it**

- ☐ very important
- ☐ important
- ☐ not very important
- ☐ not important at all
- ☐ do not know

Which of the following prevention methods must be used in conjunction with MC? Please tell us what is appropriate.

- ☐ Use of male and female condoms
- ☐ Treatment of sexually transmitted infections
- ☐ HIV testing and counselling
- ☐ Reducing sexual partners
- ☐ Abstaining from sex
- ☐ Delaying sexual activities

## **ATTITUDE TOWARDS MC**

**Would you advise someone you love and care for his life to be circumcised for prevention of HIV acquisition?**

- ☐ Yes
- ☐ No

**If no, what are your reasons for not recommending medical male circumcision as an effective prevention method?**

**If yes, what do you think needs to be done to encourage uptake of MMC?**

## **PESORNAL DETAILS**

**Your highest education qualification**

- ☐ Primary level
- ☐ Secondary ordinary level
- ☐ Secondary advanced level
- ☐ Certificate level
- ☐ Diploma level
- ☐ Degree level
- ☐ Nil

**Your marital status?**

Married  Divorced  Single

**Your religious affiliation?**

- ☐ Christianity
- ☐ Islam
- ☐ Baha'i faith
- ☐ Traditional

- Other

**If Christianity, please indicate your denomination**

**Your ethnic group?**

- **Korekore**
- **Zezuru**
- **Karanga**
- **Ndebele**
- **Alien**
- **Other**

## **FINAL ISSUES**

**What important information do you want to bring to us about MMC which you think is important?**

### **Annex 2: Questionnaire-Shona version**

GWARO REMUVHUDZO PAMUSORO PEKUCHECHEUDZWA KWEVANHU RUME  
MUGUTA RE BINDURA MUDHUNHU RE MASHONALAND CENTRAL MU ZIMBABWE

Mucherechedzo wemududziri/mushanduri

### **Makore emududziri/mushanduri**

- 18-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49

**Zivo pamusoro pekuchecheudzwa kwevanhu rume kusvipatara pamwe nedzira dzekuzvidzivirira kuhutachiona hwechirwere chemukondombera.**

**Semaonero ako chirwere chemukondombera muZimbabwe ungachitora sedambudziko**

**here? ungachiisa muchikamu chipi paneizvi**

- Idambudziko chairo chairo
- Idambudziko
- Harisidambudziko
- Harichiri dambudziko
- Handina zivo

**Zivo yako pamusoro pekuchecheudzwa kwevanhu rume kusvipatara senzira yedziviro yehutachiona hwechirwere cheshuramatongo hunobvepi?**

**Taura kwese kunobva zivo yako**

- Nzvimbo dzinotarisirwa hutachiona nekupa zivo pamusoro pechirwere chemukondombera
- Pepanhau
- Chivhitivhiti
- Wairesi/radhiyo
- Magazini
- Pabasa
- Kiriniki/chipatara
- Hokero kubva kubazi rinoona nezveutano
- Mabazi akazvimirira pasina hurumende
- Madzimambo
- Shamwari

Zvimwe doma

**Vanhurume vanonyanya kuchecheudzirwa pfungwa ipi? pazvinhu**

**Maonero pamusoro pekukosha kwekuchecheudzwa kwevanhurume kuzvipatara.**

**Unoiona sei nzira yekuchecheudzwa kwevanhurume kuzvipatara pakudzivirira kwayo kubatira kwehutachiona hwechirwere chemukondombera? Ungayisa muchikamu chipi pane izvi**

- Yakakosha zvikuru

- Yakakosha
- Haina kukosha
- Haina kukosha zvachose
- Handina zivo

**Ndenzipi nzira dzinotevera dzinoshandiswa pamwechete nekuchecheudzwa kudzivirira hutachiona?**

- Kushandisa makondomu
- Kurapwa kwezvirwere zvejovhera
- Kuongororwa kwehutachiona netsanangudzo
- Kuderedza vanhu vakuenda navo pabonde
- Kurega bonde
- Kunonoka kuita nyaya dzepabonde

**Maonero kuzvinhu zvinokonesa nekukurudzira vanhurume kuti vaende kunochecheudzwa kuzvipatara.**

Tipe maonero ako ekukosha kwezvinhu izvi pakuita sarudzo yako yeku checheudzwa kuchipatara

**Mafungiro pamusoro pekuchecheudzwa kwevanhu rume kuzvipatara**

**Ungakurudzira here munhu waunodisisa uye waunoda kuchengetedza hupenyu hwake kuti ayende kunochecheudzwa kuchipatara kuti azvidzivirire kuchirwere cheshuramatongo?**

- Hongu
- Kwete

**Kana wati kwete tipe zvikonzero sei usingadi kupa kurudziro yekuchecheudzwa kuchipatara kune munhu waunodisisa?**

**Kana wati hongu ndezvipi zvaunofungidzira zvingaitwa kuti vanhu rume vaende kunochecheudzwa kuzvipatara?**

**Dudziro yezveupenyu hwako**

**Pafundo yako wakagumira mugwaro ripi?**

- Gwaro rekutanga (purayimari 1-7)
- Gwaro rechipiri (sekodhari 1-4)
- Gwaro rechitatu (sekodhari 5-6)
- Gwaro rechina (setifiketi)
- Gwaro rechishanu (dhipuroma)
- Gwaro rechitanhatu (dhigiriyi)
- Hadina kubhoenda kuchikoro

**Uri muchikamu chipi pane izvi**

- Ndine mukadzi
- Takarambana nemukadzi
- Handisati ndawana

**Tawura chitendero chako**

- Chikirisitu
- Islam
- Bahaí faith
- Chivanhu

Zvimwe

**Kanauri mukirisitu tawura sangano rako**

**Uriwerudzi rwupi?**

- Mukorekore
- Muzezuru
- Mukaranga
- Mudhevere
- Muvhakure

Zvimwe

**Pane zvakakosha here zvaunoda kutaura kwatiri maererano nedonzvo rekuchecheudzwa kwevanhu rume kuzvipatara?**

### **Annex 3. Consent Form**

Perceptions and attitudes of males towards Medical Male Circumcision in Bindura urban, Mashonaland Central Province, Zimbabwe

You are asked to participate in a research study conducted by Abigail Chimuti, an MPhil student in HIV/AIDS Management from the AIDS Centre, Faculty of Economic and Management Science and the Principal Investigator, Dr. Thozamile Qubuda at Stellenbosch University. You were selected as a possible participant in this study because your contributions might lead us to HIV free generations and also you fall within the age group the researcher is focusing on.

#### **1. PURPOSE OF THE STUDY**

The purpose of the research is to provide a better understanding on how males respond to the call for male circumcision by revealing perceptions, attitudes, knowledge and barriers. The information would assist health planners to design proper and tailored intervention strategies that would enhance uptake of male circumcision. The study would benefit the Ministry of Health and the entire urban community of Bindura. The research would assist to enrich the existing body of knowledge and it will also open up other areas for further research. In addition, the research study would recommend solutions that can be implemented to improve uptake of medical circumcision.

#### **2. INCLUSION AND EXCLUSION CRITERIA**

Only males aged 18-49 years old are required to voluntarily participate in the research. Men become sexually active at the age of 17-20 years and their sexual desire decreases as they reach 50 years. The lower limit of 18 years has been selected because it is the cut off age for participating in research without consent of parents

#### **3. PROCEDURES**

If you volunteer to participate in this study, we would ask you to do the following things:

To answer the interview questions truthfully and honestly.

The questions will be read to you by the researcher.

Your responses will be recorded anonymously by the researcher.



The session would take approximately 15-20 minutes of your time.

#### **4. POTENTIAL RISKS AND DISCOMFORTS**

There are no risks associated with interview protocol questionnaire apart from certain questions that might cause a certain level of discomfort especially those asking personal demographic data. Also the time spent during the interview session might lead to an inconvenience for some.

#### **5. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

You will derive no personal benefit from the study. Your participation will benefit entire population of Zimbabwe as we strive to achieve zero HIV infection. Also the information you will provide will enable social scientists to learn more about challenges confronting males in accessing medical male circumcision. This information may help in the development of solutions that can stimulate uptake of medical circumcision. You may request a copy of the study report.

#### **6. PAYMENT FOR PARTICIPATION**

There will be no reimbursement for participation, although the information you provide will benefit you and others by enabling social scientists to understand bottlenecks leading to low uptake of medical circumcision.

#### **7. CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of assigning codes or numbers to the questionnaires. Data will be stored in the researcher's study room. The room is secure with controlled access. The filing cabinet is steel with a reinforced steel bar and lock. Only the researcher has access to the keys for the cabinet and the room. The investigator and the supervisor are the only people that will have access to the unprocessed data.

The findings of the research study will be presented in a report without identifying the participants by name

## 8. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so

## 9. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Ms Abigail Chimuti on (00263) 772242550 or (0027) 734123112 or Dr. Thozamile Qubuda on (0027) 218083999.

## 10. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; (0027) 21808 4622] at the Division for Research Development, Stellenbosch University, South Africa.

### SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to me by Ms. Abigail Chimuti in Shona/English and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction. I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

---

**Name of Subject/Participant**

---

**Name of Legal Representative (if applicable)**

**Signature of Subject/Participant or Legal Representative**

**Date**

**SIGNATURE OF INVESTIGATOR**

I declare that I explained the information given in this document to \_\_\_\_\_. He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in [Shona/English]. No translator was used.

\_\_\_\_\_  
**Signature of Investigator**

\_\_\_\_\_  
**Date**

Telephone: 791792/791193

## Annex 5. Approval letter from Bindura Municipality



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# MUNICIPALITY OF BINDURA

All Communications To  
Be Addressed To The  
**TOWN CLERK**  
P O Box 15,  
BINDURA  
ZIMBABWE

Our Ref: **A1/0901**  
Your Ref:

565 Thurlow Avenue  
Bindura, Zimbabwe  
Phone: + 0712- 6430/6453/7391-4  
Tel/Fax: +0712- 6984

11 July 2012

Mrs Abigail Chimuti  
Unit & Peters Place  
Stellenberg Road  
Equestria  
**Pretoria**

Dear Madam

**RE: PERMISSION TO CONDUCT AN HIV/AIDS ACADEMIC STUDY IN BINDURA URBAN**

We acknowledge receipt of your letter to us concerning the above and wish to inform you that permission has been granted for you to undertake the study in Bindura.

We would also appreciate if you could avail a copy of the study to the Municipality as we view the study to be of great benefit to us as the responsible authority.

Our Municipal Health Department will gladly assist you should you need any further clarifications.

Thank you.

Yours faithfully

**S. Mavesera**  
**TOWN CLERK**

## Annex 6: Approval letter from National AIDS Council of Zimbabwe

Tel: 263-4-791171/2/8  
Cell No: 011 614 500

Telefax No.: 263-4-791243  
Email:  
[secretariat@nac.org.zw](mailto:secretariat@nac.org.zw)



P.O.BOX MP 1311  
MT PLEASANT  
HARARE  
ZIMBABWE

15 May 2012,

Mrs. Abigail Chimuti  
Stand No. 900  
Chipundura Stands  
Bindura

Dear Mrs. Chimuti,

**Re: Authority to conduct an academic HIV and AIDS study**

I write to inform you that your request for permission to conduct an academic study on acceptability, perceptions, knowledge and attitudes of make youths towards medical male circumcision is granted on the understanding that, you will:

- a) Share with NAC your protocol before you conduct the study,
- b) Apply for and obtain ethical clearance from the Medical Research Council of Zimbabwe before you conduct the study,
- c) On completion, share the findings of your study with NAC and the Ministry of Health and Child Welfare.

Please feel free to contact the National AIDS Council provincial secretariat in Bindura should you require any facilitation assistance in implementing your study

Yours Sincerely,

Dr. T. Magure  
**Chief Executive Officer**

Cc: Mr. David Nyamurera – Provincial AIDS Coordinator - Mashonaland Central