

**Acceptability of male circumcision in HIV prevention among  
the males aged 18 years and above in Mufulira urban**

**By  
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**A dissertation in partial fulfillment of the master of Public  
Health at the University of Zambia, School of Medicine**

**June, 2011**

## **DECLARATIONS**

I George Chiwele, declare that this Dissertation represents my own work and that all the sources I have quoted have been indicated and acknowledged by means of complete references. I further declare that this Dissertation has not previously been submitted for a Degree, Diploma or other qualifications at this or other Universities. It has been prepared in accordance to the guidelines for Master of Public Health Dissertation of the University of Zambia

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**CERTIFICATE OF APPROVAL**

The University of Zambia approves this Dissertation on Acceptability of male circumcision in HIV prevention among the males aged 18 years and above in Mufulira urban in partial fulfillment for the requirements for award of Degree of Master of Public Health.

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## ABSTRACT

HIV/AIDS is a major public health problem, not only in Zambia but the world as a whole. Millions of new infections are still being reported especially in the Sub-Saharan Africa. This has resulted in a number of interventions being put in place to halt the spread of the HIV infection. Male circumcision is one of the interventions that is being considered in the prevention of HIV transmission from males.

The overall aim of this study was to determine the acceptability of male circumcision in HIV prevention among the males aged 18 years and above in Mufulira urban. The specific objectives were:

- To determine the proportion of uncircumcised respondents willing to undergo male circumcision.
- To determine the reasons why circumcised respondents got circumcised.
- To identify socio-cultural factors associated with the uptake of male circumcision.
- To determine association between knowledge on male circumcision and willingness to undergo male circumcision.

A cross sectional study was conducted in Mufulira urban in December, 2009 by the research team. The study comprised face to face interviews of 407 respondents using a structured interview schedule and two FGDs involving males aged 18 to 30 years and those aged 31 years and above respectively.

Respondents were drawn from one high density area with a high HIV prevalence (Kantanshi Township). The Township was purposively selected. The households were systematically selected. One randomly selected male aged 18 years or older was interviewed from each selected household using a structured interview schedule. Individuals for the FGDs were purposively selected to ensure that groups were homogeneous.

The confidence interval was set at 95%, and a result yielding a P value of 5% or less was considered to be statistically significant. The Chi Square test was used to compare the proportions. A full report of the FGDs was written using participants own words. The main ideas and key statements that were expressed were listed down. Data was coded and responses from the two FGDs were compared and a summary was in narrative form.

The study findings revealed that only 18.7% of the respondents were circumcised. The Study further revealed that 60.7% of the respondents expressed willingness to be circumcised if male circumcision could offer partial protection against acquisition of HIV/AIDS. 69% of the respondents had high knowledge on male circumcision. There was no association between knowledge and willingness to undergo male circumcision.

The only significant association was between improvement in genital hygiene and willingness to undergo male circumcision.

The results showed that though the level of male circumcision was low in Mufulira Urban, the procedure was perceived positively.

## **DEDICATIONS**

It is with great pleasure that I dedicate this Study to my beautiful wife, Audrey Nawakwi Nakazwe Chiwele.

To my mother, Mrs. Mirriam Chiwele, who has always been there for me.

To my brothers and sisters, who have always supported and encouraged me.

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## **LIST OF ABBREVIATIONS**

AIDS	-	Acquired Immune Deficiency Syndrome
CSO	-	Central statistics Office
DHMT	-	District Health Management Team
FGD	-	Focus Group Discussion
HIV	-	Human Immuno- deficiency Virus
MoH	-	Ministry of Health
RCTs	-	Randomized Controlled Trials
RRGH	-	Ronald Ross General Hospital
SPSS	-	Statistical Package of Social Sciences
STIs	-	Sexually Transmitted Infections
USA	-	United States of America
UNAIDS	-	Joint United Nations Program on HIV/AIDS
USAID	-	United States Agency for International Development
WHO	-	World Health Organization

## **CHAPTER 1**

### **1.0 INTRODUCTION**

#### **1.1 BACKGROUND INFORMATION**

It has been estimated that 2.5 million people world wide were newly infected with HIV in 2007. Two thirds of these infections occurred in sub-Saharan Africa (Hankins et al, 2008). The sub Saharan Africa has the highest prevalence of HIV in the world. The region accounts for 32 million HIV infections out of 40 million people living with the HIV infection. In 2006, 2.9 million deaths world wide recorded from HIV and 2.1 million of these deaths were from sub- Saharan Africa (WHO/UNAIDS, 2007).

The high HIV infection rate is against a background of many preventive strategies being put in place. This has stimulated research on additional strategies of preventing the spread of HIV/AIDS. Recently, male circumcision has been considered as an additional strategy in the prevention of the spread of HIV/AIDS (WHO/UNAIDS, 2007).

Male circumcision is one of the oldest and common surgical procedures. It has been performed for cultural, religious, social and medical reasons (UNAIDS, 2007). In the second half of the 1980s, the hypothesis that male circumcision might play a significant role in reducing HIV infection was suggested (Hankins et al, 2008).

A number of observational studies have demonstrated an association between reduced HIV infection and male circumcision. These findings are consistent with the three randomized controlled trials which were done in South Orange farm, Kisumu Kenya and Rakai District in Uganda. These trials revealed that male circumcision can reduce heterosexual HIV transmission up to 60% (WHO/UNAIDS, 2008). There is also

substantial evidence that male circumcision offers partial protection from penile carcinoma, urinary tract infections and ulcerative sexually transmitted infections (Ronald, 1998).

Male circumcision is now being considered as an important intervention in the prevention of the spread of HIV heterosexually (WHO, 2007). Further studies suggest that male circumcision in sub Saharan Africa can prevent about 6 million new HIV infections and 3 million deaths could be averted over the next 20 years if all men in sub Saharan Africa became circumcised (William et al, 2006).

Male circumcision involves removal of the fore skin that covers the head of the penis. Suggestions have been made that male circumcision can prevent heterosexual HIV transmission in the following ways:

*The fore skin creates a moist delicate part of the penis and the inner surface of the fore skin contains cells that are especially vulnerable to infection by HIV. If the fore skin is removed, the skin on the head of the penis tends to become tougher and more resistant to infection. In addition, any small tears in the fore skin that occur during sex make it much easier for the virus to enter the body (Rob, 2008).*

The proven benefit of male circumcision applies to men. It is unclear whether it can also reduce HIV transmission from an infected circumcised man to a woman. However, if men are protected then later on women may stand lesser chances of being infected (WHO/UNAIDS, 2007),

The debate now is not whether male circumcision offers partial protection from HIV transmission or not, but how the program can be scaled up, made accessible and acceptable by the general populace.

## **1.2 STATEMENT OF THE PROBLEM**

For two decades now, Zambia has battled the spread of HIV/AIDS using different interventions. These interventions range from abstinence campaigns, messages of being faithful to one faithful partner, correct and consistent condom use. However, the epidemic continues unabated (Lafraniere, 2006). The HIV prevalence among males aged 18 years and above in Mufulira remains on a higher side, standing at 17% (District Quarterly Report, 2007).

Though there is sufficient strong epidemiological data suggesting that male circumcision can play a significant role in reducing HIV from females to males, the prevalence of male circumcision in the urban settings of Zambia is low standing at 13.6% (CSO, 2005). Male circumcisions are common in North-Western province where the HIV sero prevalence is lowest.

Data obtained from Ronald Ross General Hospital, the biggest Government health facility in the district reveals that an average of 4 male circumcisions is performed monthly. This is on the lower side for a hospital that has a capacity to perform 30 male circumcisions in a month (RRGH Theatre Register 2004-2008). The table on the next page shows the uptake of male circumcisions in various age categories.

**TABLE 1: MALE CIRCUMCSIONS AT RRGH FROM 2004 TO 2008**

<b>AGE IN YEARS</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
0 – 9	20 (58.8%)	30 (53.6%)	30 (46.2%)	37 (57.7%)	25 (46.3%)
10 - 19	9 (28.5%)	14 (25%)	17 (26.2%)	11 (17.2%)	11 (20.4%)
20 - 29	1 (2.9%)	4 (7%)	6 (9.2%)	5 (7.8%)	6 (11%)
30 - 39	3 (8.8%)	5 (8.9%)	11 (16.9%)	7 (10.9%)	8 (14.8%)
Above 40	1 (2.9%)	3 (5.8%)	1 (1.5%)	4 (6.3%)	4 (7.8%)
<b>TOTALS</b>	<b>34(101.9%)</b>	<b>56(100.3%)</b>	<b>65(100%)</b>	<b>64(100%)</b>	<b>54(100.3%)</b>

**Source: RRGH Theatre Register**

### **1.3 FACTORS INFLUENCING ACCEPTABILITY OF MALE CIRCUMCISION**

Factors contributing to acceptability of male circumcision can be classified into two broad categories:

- Socio- cultural and economic factors
- Service related factors

#### **1.3.1 SOCIO-CULTURAL AND ECONOMIC FACTORS**

##### **Cost**

Male circumcision is not a free procedure in Mufulira. It is hindered by the economic malaise the country is experiencing is preventing the people from accessing the service. There have been massive job losses in Mufulira since the privatization of the mines. This has severely affected people's income. Studies have shown that cost can be a significant barrier to medical interventions.

##### **Religion**

Religion is a major determinant of acceptability of male circumcision. Male circumcision is associated with Islam. Christians consider it to be a pagan practice. It is looked at as a forbidden practice. This perception may affect the uptake of male circumcision in Mufulira where the population is predominantly Christian.

##### **Culture**

Circumcision in some cultures is considered as an element of ethnic identity. There are tribes in Zambia that are associated with male circumcision especially in the north

western part of the country .Some traditionally non circumcising communities feel they may lose their cultural identity if they embrace the practice. These ethnic groupings may suffer rejection from the community by accepting male circumcision.

### **Effects on sexual pleasure**

There are misconceptions that male circumcision reduces sexual pleasure by reducing glans sensitivity. This may discourage a number of male adults from getting circumcised. They feel they can not fully enjoy sex with a circumcised penis.

### **Embarrassment**

Male circumcision involves manipulation of the private organs. Such procedures considered to be sensitive and highly private. This may affect the uptake of male circumcision. The majority of people if they are to seek male circumcision would rather have it where they will be assured of confidentiality.

### **Fear of pain**

Male circumcision is an invasive procedure. When the anesthetic agent wears off, pain is often experienced until complete healing takes place. The idea of experiencing pain is often detested and affects the uptake of male circumcision.

## **1.3.2 SERVICE RELATED FACTORS**

### **Lack of experts**

Safe male circumcision is achieved by well trained staff. There is few medically trained staff in Mufulira to handle male circumcisions. The few trained medical staff is likely to be overstretched by the increased number of people desiring to be circumcised. The

health sector in Zambia is already operating at half capacity. The Human resource available in Mufulira is inadequate and acts as a deterrent to people who may desire to be circumcised.

### **Inadequate sensitizations**

Inadequate sensitization about the benefits of male circumcision and its role in the prevention of transmission of HIV from females to males may result in people shunning the procedure. If there is effective communication about the benefits of male circumcision, a number of individuals are likely to take advantage of the procedure. Inadequate knowledge impacts negatively on the utilization of medical services like male circumcision.

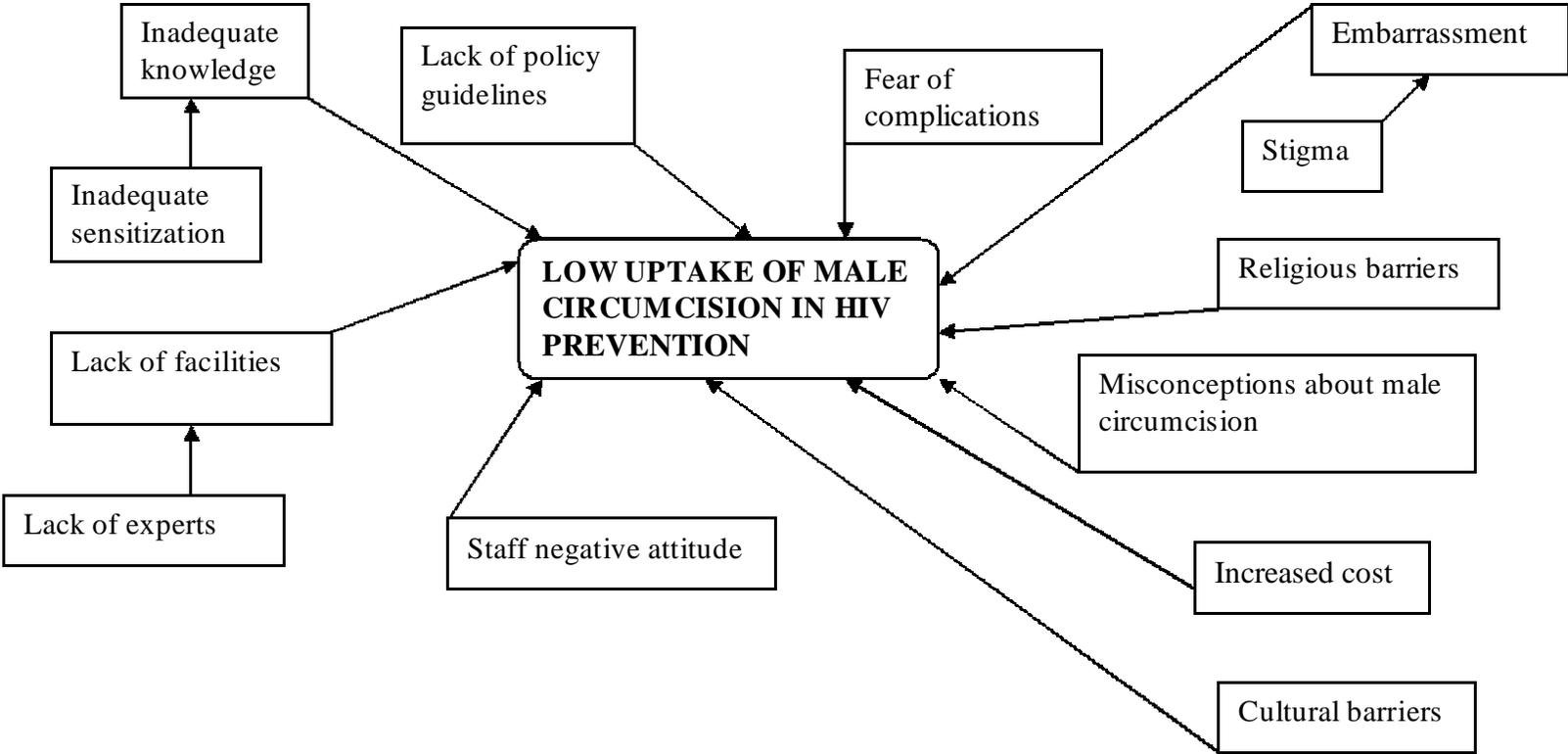
### **Staff negative attitude**

Staff attitude is one of the major determinants of the utilization of health services. Perceived staff negative attitude deters people from accessing health services like male circumcision. Positive staff attitude will encourage utilization of health services. Generally, the staff attitude in the health sector is perceived to be negative.

**FIGURE 1: ANALYSIS DIAGRAM: FACTORS INFLUENCING ACCEPTABILITY OF MALE CIRCUMCISION**

**Service related factors**

**socio economic and cultural factors**



## **1.4 RESEARCH QUESTION**

What are the factors that may be associated with the uptake of male circumcision among those aged 18 years and above in Mufulira urban?

## **1.5 RESEARCH OBJECTIVES**

### **1.5.1 GENERAL OBJECTIVE**

- To determine the acceptability of male circumcision in HIV prevention among males aged 18 years and above in Mufulira.

### **1.5.2 SPECIFIC OBJECTIVES**

- To determine the proportion of uncircumcised respondents willing to undergo male circumcision.
- To determine the reasons why circumcised respondents got circumcised.
- To identify socio cultural factors associated with the uptake of male circumcision.
- To determine association between knowledge on male circumcision and willingness to undergo male circumcision.

## **1.6 DEFINITION OF TERMS**

**Male circumcision** - removal of the fore skin that covers the head of the penis.

**Acceptability** – Having undergone male circumcision or willingness to undergo male circumcision

**Prevention** – Stopping something bad from happening.

**Religion** - a particular system of faith and worship.

**Culture** - the custom, art, social institutions of a particular group.

**Ethnic group** - group of people with a common cultural tradition

**Rite of passage** – special ceremony or action that is a sign of a new stage in one's life

## 1.7 VARIABLES, INDICATORS AND SCALES OF MEASUREMENT

VARIABLES	INDICATORS	SCALE OF MEASUREMENT
<b>INDEPENDENT VARIABLES</b>		
Knowledge on male circumcision	Correct responses rated into scale: High, moderate, low	Rate scale
Age	Age at last birthday	In years
Educational level	College/University, Secondary, Primary, Non	Rate scale
Religion	Christian, Muslim, Others	Rate scale
Income	Monthly income >K2,000,000, between K2,000,000 and K1,000,000, <K1,000,000	Rate scale
Marital status	Single, Married, Widowed, Separated, Divorced, Cohabiting	Rate or proportion
Socio cultural belief	Preference of belief	Rate scale
Genital hygiene	Preferred response	Rate scale
<b>DEPENDENT VARIABLE</b>		
Acceptability of male circumcision	Acceptable or not acceptable	Rate or proportion

## **1.8 VARIABLES**

### **1.8.1 INDEPENDENT VARIABLES**

#### **Knowledge on male circumcision**

Knowledge on the benefits of health services has a significant impact on the utilization of Health services. Individuals that may be empowered with knowledge may take advantage of the available services. However, knowledge does not always lead to positive response.

#### **Socio cultural beliefs/religion**

Socio cultural beliefs are significant in determining how male circumcision is viewed in the community. It has been established that the major of male circumcision globally is religion; almost all Jewish men and Muslims are circumcised. Some males get circumcised for cultural reasons. Male circumcision is an important cultural practice in certain communities.

#### **Family income**

Economic status largely influences people's health seeking behaviors. Studies on male circumcision have shown that certain individuals may be willing to go for male circumcision if it is offered freely or at a minimal fee. Since there is a cost attached to male circumcision in most health facilities, there is likelihood that those who are economically disadvantaged may not easily access the service.

## **Genital hygiene**

Genital hygiene has been cited as one of the major facilitators to male circumcision. It is widely believed that a circumcised penis is easier to clean than the uncircumcised one. Uncircumcised penis is known to harbor a lot of dirty secretions giving rise to a terrible odor. Therefore, some males may opt to be circumcised for hygiene purposes.

## **Marital status**

One's marital status may play a big part whether to accept to be circumcised or not. A single man may find it easier to be circumcised because he has no spouse to consult. For a married man, he may be accused of infidelity if he chooses to get circumcised with the hope of preventing acquisition of HIV/AIDS.

## **1.8.2 INDEPENDENT VARIABLES**

### **Acceptability of male circumcision**

Acceptability of male circumcision is likely to be influenced by a number of factors. Age, religion, Socio cultural beliefs, knowledge and economic status are likely to be cardinal factors whether an individual may express willingness to be circumcised or not.

## **1.9 JUSTIFICATION FOR THE STUDY**

HIV/AIDS has been responsible for more than 25 million deaths since it was recognized in the early 1980's. This has made it to be the most destructive epidemic ever recorded in human history (UNAIDS, 2005).

The copperbelt province is one of the regions with a high prevalence of HIV (CSO, 2008). Several strategies are being considered to mitigate the spread and impact of the HIV/AIDS.

Following the compelling results from the 3 RCTs, it is logical to explore acceptability and factors influencing the uptake of male circumcision in Mufulira. Male circumcision could substantially reduce the burden of HIV in Mufulira. If the level of acceptability is determined, it will help in how to roll out or implement the male circumcision programs.

It is envisaged that the findings from this study will be helpful in guiding policy on the campaign to promote male circumcision and program implementation.

## **CHAPTER 2**

### **2.0 LITERATURE REVIEW**

#### **2.1 GLOBAL PERSPECTIVE**

In response to the urgent call to reduce the number of new HIV infections globally, WHO/UNAIDS has recommended the recognition of male circumcision as an important strategy in the reduction of HIV transmission from infected women to men. It has been proved that the efficacy of male circumcision in HIV prevention is beyond doubt (UNAIDS, 2007).

Dowsett (2007) reports that the African trials observed a protective effect of male circumcision, with efficacy somewhere in the order of 0% - 60%. Dowsett argues that this is not strong enough compared with the male condom with efficacy of 80% - 90%. He further argues that these are efficacy findings i.e. the results of a particular methodology and only an indication of potential effectiveness in a real world setting.

Bailey (2007) recognizes the global challenges in the rolling out of male circumcision safely. He emphasizes that male circumcision is not just a medical procedure; it is tied up in a complex web of cultural and religious practices and beliefs. This makes it difficult for leaders in non circumcising countries to quickly favor it.

Mishral et al (2007, quoted in Dowsett and Couch 2007) challenge the relationship between high male circumcision and low HIV prevalence in African countries as well as other developing countries, finding the protective effects only in some countries and no consistent relationship in others. They wonder if male circumcision is not the key factor at all times and in all places. They argue that these questions require special attention before male circumcision can be accepted as being protective towards HIV transmission.

Rob (2007) outlines that male circumcision is taken as a norm in some communities. Many cultures, however do not embrace this practice. For example the Hindu and Sikh communities are strongly opposed to circumcision. Therefore, it is unlikely that this intervention will be able to benefit all parts of the world. Further more, some men will have personal reasons to turn down male circumcision, even if there culture allows it.

Rennie et al (2007) suggest that global challenges may occur in the implementation of male circumcision because a conflict exists between male circumcision as a medical intervention and ethnic identity, differences in results of acceptability studies and actual circumcision, the impact of male circumcision on women's ability to negotiate condom use with circumcised partners, and potential confusion with policies prohibiting female genital mutilation

Dowsett and Couch (2007) argue that there is a tension on recognizing male circumcision as a global tool in the fight of HIV/AIDS. They wonder if this intervention is only an African solution. They further argue that the dilemma of accepting male circumcision comes from the confusing way the practice is talked about like: a one time intervention, offering life time protection and as an irreversible procedure.

Rennie et al (2007) suggest that future global initiatives to promote male circumcision as part of the HIV comprehensive strategy are likely to be received with skepticism if they are not based on respect for people, social justice, human rights and community values.

Rennie et al further remark that supporters of male circumcision argue that using circumcision and other available means to stop the spread of HIV is for the common good. They further argue that it would be unethical not to seriously consider one of the most promising – although also one of the most controversial new approaches to HIV prevention in the 25 year history of the epidemic.

## 2.2 REGIONAL PERSPECTIVE

An acceptability study on male circumcisions done in Botswana, Kenya, South Africa and Swaziland revealed that more adults, both men and women would agree to their sons being circumcised than their spouses or themselves. Approximately 75% of the parents would seek circumcision for their sons if it is safe, affordable, and shown to protect against transmission of HIV/AIDS (Bailey and Westcamp, 2006).

Auvert et al (2006) report that a community based cross sectional study in an area with a high HIV prevalence in South Africa revealed that two thirds of the respondents were circumcised. Though the level of circumcision in the area is relatively low, it is perceived positively.

Auvert et al (2006) further observe that male circumcision in Africa among some ethnic groupings is looked at as a rite of passage from boyhood to manhood. Therefore one might assume that the feasibility and acceptability of implementing male circumcision as a preventive strategy in HIV transmission would be high among the circumcising groups.

The Plus News of 11 February, 2009 reports that Rwanda a non traditional circumcising country is in the process of adopting male circumcision as part of its HIV prevention strategy. However, experts are worried that a spike in request before a planned public awareness has been launched could have negative implications. Clinics in the city had recently been overwhelmed by requests for the procedure largely as a result of media reports indicating lower risk of HIV acquisition in circumcised men.

According to Largade (2007), 72% of uncircumcised men who participated in his study in South Africa responded that they would want to get circumcised. However, they indicated that they would only undergo the procedure if it was protective against HIV and sexually transmitted illnesses

Studies in twelve African countries revealed that the barriers to male circumcision in non circumcising areas are cost, fear of pain and concern for safety, while the main facilitators are improved hygiene, reduction in sexually transmitted illnesses and attractiveness. The results from these countries seem to be consistent with a median of 60% of uncircumcised men saying they would accept male circumcision if it was proven to be safe and affordable (Moore et al, 2006).

Another study done in South Africa by Rain-taljard et al (2007) in an area with a high prevalence of HIV revealed that 59% of the uncircumcised men would accept to be circumcised if circumcision reduces transmission of HIV infection and sexually transmitted diseases.

Dowsket et al (2007) say that the question of acceptability of male circumcision is more complex than has been assessed so far. Though the orange farm study reported 70% of the uncircumcised men willing to undergo circumcision if it was protective against HIV, it has been noted with HIV testing that expressing desire to be tested does not often result in testing

Hallet et al (2008) argue that although acceptability of male circumcision has been reported at promisingly high levels in many settings, coverage seem implausible. Hallet et al further argue that it has been noted that male circumcision alone will not be the 'silver bullet' that will stop the HIV epidemic. There is need for it to be implemented along side other strategies.

### **2.3 LOCAL PERSPECTIVE**

An acceptability study by Lukobo (2004) concluded that male circumcision in Zambia is embedded in a complex web of cultural and religious issues. Many of the participants in the study felt that male circumcision was a Luvale and Lunda cultural tradition or Muslim or Chawa religion. This could be a potential barrier to acceptability of male circumcision.

USAID/JHPIEGO (2002) report that Focus Group Discussions were conducted in Zambia's urban and rural areas to assess male circumcision practices, opinions and acceptability among married and unmarried men aged 18 – 39 years. Most of the participants in the study were uncircumcised. Among groups not practicing traditional male circumcision, the men expressed limited interest in male circumcision. However, some informants said they wished they had been circumcised because there is common belief that circumcised men are preferred by women.

There are indications that male circumcision is becoming wide spread in Zambia, particularly among the young generation. The HIV pandemic has been changing people's attitude and making them more receptive to preventive interventions (Lukobo, 2004).

Lukobo and Bailey (2004) look at urbanization, ethnic mixing and exposure to other culture and religion as being conducive to higher acceptability of male circumcision in traditionally non circumcising ethnic groups. They further suggest that young men in Zambia and other neighboring countries were more likely to express the desire to be circumcised.

Male circumcision is gaining greater acceptance in Zambia among the health care providers as a public health intervention to arrest the spread of HIV. Male circumcision services being offered at the University teaching hospital have been said to have received an overwhelming response, with men coming from different parts of the country to come and access the service (Jhpiego, n.d)

In a study done to assess the acceptability of male circumcision as an intervention to improve male genital hygiene and to reduce STIs, including HIV in Zambia, Lukobo and Bailey (2007) indicate that in communities where male circumcision is traditionally practiced, the main facilitators for acceptance were improved genital hygiene, HIV/STI prevention and low cost. The main barriers were culture, high cost and concern for safety. Most of the participants indicated that they would seek circumcision for themselves or their partners or their sons if it was free or at a minimal fee.

Bowa and Lukobo (2006) report that the University Teaching Hospital in Zambia is offering male circumcision services under the urology department. They indicate that an acceptability study done prior the commencement of the services revealed that acceptability was high.

## **2.4 CONCLUSION**

From the literature reviewed, it is evident that there are different perceptions about male circumcision in different communities. Male circumcision remains a controversial surgical intervention even among the medical practitioners. This is despite compelling results from the RCTs suggesting that male circumcision can offer partial protection against transmission of HIV from infected female partners. The literature reviewed suggests that males from communities practicing traditional male circumcision are more likely to embrace the practice than non circumcising communities. It is also evident that there are differences in expressing willingness to be circumcised and to undergo the actual practice. Some literature view male circumcision as an African solution rather than a global solution.

## **CHAPTER 3**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter describes the research methodology comprising the study design, study setting, study population, sample selection, sample size, data collection techniques, ethical considerations, pre testing, dissemination and utilization of results and limitations of the study.

#### **3.2 STUDY DESIGN**

A research design is a plan, structure, and strategy of investigation of answering the research question. It is the overall plan the researchers select to carry out their study (Basavanthappa, 2007). The study adopted a descriptive cross sectional study design. It was descriptive in nature because it was designed to discover new meaning on the factors influencing the uptake of male circumcision in Mufulira urban. Data was collected to define or describe some phenomenon as they relate to the uptake of male circumcision. Data was collected at one point in time.

#### **3.3 RESEARCH SETTING**

Research setting is the physical location and conditions in which data collection takes place (Polit & Hungler, 1996). The study was done in Kantanshi Township in Mufulira District. Kantanshi Township is a high density area with an estimated population of 46,864. The total housing units in the Township is 3350 (MDHMT, 2007).

Mufulira is a mining town in the Copperbelt province of Zambia. The District has a population of 143, 930 with an estimated growth of 0.6% (CSO, 2004).The District is

serviced by two Government hospitals, one Mine hospital, fourteen (14) Government clinics, four Mine clinics and one military clinic.

According to Zambia VCT Service Quarterly report of 2007, the HIV prevalence for Mufulira stands at 17%. These figures are high and represented a suitable site for the study.

### **3.4 STUDY POPULATION**

The study population is the total group of individual or things meeting the designated criteria of interest to the researcher (Basavanthappa, 2007). In this study, the study population comprised of males aged 18 years and living in Kantanshi Town in Mufulira District. The male population above 18 years and above in Kantanshi were estimated at 8088.

### **3.5 SAMPLE SELECTION**

Sample selection is the process of selecting a portion of population to represent the entire population (Polit et al, 2001).

The Township where the sample was drawn from was purposively sampled. Kantanshi Township was picked because it is a high density area with a high prevalence of HIV in Mufulira.

At household level, the housing units were systematically sampled from a sampling frame of 3350 housing units. Systematic sampling of housing units was done to help achieve an essentially random sample, where all eligible respondents had an equal chance to participate in the Study. In order to obtain the sampling interval, the housing units were divided by the sample size. The first housing unit was randomly selected, using the table of random numbers. One randomly selected man aged 18 years or older was interviewed using a structured interview schedule guide.

Individuals for the FGD were purposively sampled. There were two FGDs, one comprising males aged 18 years to 30 years and the other one involving those aged 31 years and above.

### 3.5.1 Inclusion criteria

- Only males above 18 years residing in the sampled towns included.
- Only those who consented were included in the study.

### 3.5.2 Exclusion criteria

- All women
- Men below 18 years.
- Men above 18 years who did not consent

## 3.6 SAMPLE SIZE

The sample size was calculated using EPI info Version 6 for descriptive Studies.

Population size = 8086

Expected frequency = 50

Worst acceptable = 45

Confidence Interval = 95%

n = 367

To allow for non response, the Sample size was adjusted upwards thus:

$367/0.90$

**n = 407**

## **3.7 DATA COLLECTION TOOLS**

In this study, a structured interview schedule and a focus group discussion guide were used. Data was collected over a period of two months starting from the first week of November to December, 2009.

### **3.7.1 Structured interview schedule**

A structured interview schedule is a formal instrument used in structured self report studies that specifies the wording of all questions to be asked to respondents (Polit et al, 2007). In this study, a structured interview schedule was used to collect quantitative data. The interview schedule captured demographic data, knowledge on male circumcision, socio cultural issues influencing the uptake of male circumcision and acceptability of male circumcision. The interview schedule had both open and closed ended questions. The open ended questions permitted the respondents to give responses in their own words and to verbally express themselves. Closed ended questions helped to capture specific and guided responses. The questions on the interview schedule were translated in various local languages to accommodate respondents who were not conversant with the English language.

### **3.7.2 Focus Group Discussion**

Focus group discussion is a method that allows the researcher to examine the points of view of a number of individuals in a group as they share their opinions or concerns about a topic (Dempsey & Dempsey, 2000). The Focus group discussions (FGDs) comprised 6 persons each who were guided by the facilitator. The facilitator led the discussions in the appropriate languages. Each FGD lasted for 45 minutes. The Facilitator ensured that participants in the FGDs were homogenous. This was achieved by getting background information prior to the discussions. The participant's background information included age, educational level, marital status and socio economic status. Participants of similar

background were invited to discuss acceptability of male circumcision HIV prevention in Mufulira urban. The participants were invited at least two days prior to the discussion and the purpose of the Focus group discussion was explained before hand. Two focus group discussions were conducted. The first group consisted of men aged 18 – 30 years and the second group had men aged 31 years and above.

The research team ensured that the participants were at ease by introducing themselves, stating the purpose of the discussions, the kind of information needed and how the information will be used. Each participant was given an opportunity to express his views to avoid the discussion being dominated by an individual. The discussions were audio taped after getting consent from the participants. Focus group discussions were transcribed and translated after each discussion.

### **3.7.3 Validity**

Validity is the determination of whether a measurement instrument actually measures what it is purported to measure (Basavanthappa, 2007). In order to ensure validity, all the variables under study were covered in the interview schedule and Focus Group Discussion Guide. The questions were clearly constructed to avoid ambiguity. The instruments were pre tested before embarking on the main Study to ensure that they were capturing the required information. Selection bias was avoided by making sure that proper sampling techniques were used.

### **3.7.4 Reliability**

Reliability is the stability of the measuring instrument over time. It also measures the extent to which random variation may have influenced stability and consistency of results (Dempsey & Dempsey, 2000). Reliability of the instrument was measured during the pilot study. At the end of each interview during the pilot study, the respondents were asked for any questions that they did not understand clearly. Appropriate adjustments were made.

### **3.8 DATA COLLECTION TECHNIQUE**

Data collection technique is the procedure of collection of information needed to address a research problem (Polit & Hungler, 1999). Interviews and Focus group discussions were used as data collection procedures. Data collection was done with the help of trained research assistants.

The purpose of the Study was explained to the respondents and permission was sought from them to allow the research team to conduct interviews or Focus group discussions.

During the interview, privacy was maintained and confidentiality was assured. One person was interviewed at a time in a convenient place. Numbers were indicated on the interview schedules and no names were obtained to promote confidentiality.

Each respondent was interviewed for approximately 15 – 25 minutes. Each research assistant was asked to interview at least 10 - 15 people per day. This allowed them to concentrate and avoided making mistakes due to exhaustion.

For the FGDs, a Focus group discussion guide was used. The researcher engaged two research assistants to assist in time keeping and recording. During the discussions, each participant was accorded time to express his views. Each FGD took at least 45 minutes.

### **3.9 PRE-TEST**

Pre test is the trial administration of a newly developed instrument to identify flaws or assess time requirements (Polit et al, 2001). The pilot study helped to test validity and reliability of the instruments. It also helped to determine the best time to collect data and the duration each interview took. The pilot Study was done in Kamuchanga Township in Mufulira. Kamuchanga Township was purposively chosen because it is representative of the socio economic status of the residents of Mufulira. Only 10% of the sample size was

interviewed during the pilot study. The respondents were using systematic sampling of the households. One FGD was done. The respondents for the FGD were purposively sampled to ensure that the group was homogenous in terms of age, socio economic status, marital status and educational level.

### **3.10 ETHICAL CONSIDERATIONS**

Ethical clearance was sought from the Biomedical Research and Ethics committee of the University of Zambia. Written permission was obtained from Mufulira District Health Management Team. Verbal permission was also obtained from the councilors in the concerned localities. The purpose of the study was explained to the study participants. Those who declined to participate in the study were not forced, but were assured that no privileges will be withdrawn from them for refusing to take part in the study. Those that were agreeable to take part in the study were asked to sign a consent form. The respondents were interviewed in their natural setting therefore were not exposed to any physical or emotional harm.

Privacy and confidentiality were maintained. The names of the respondents were not written anywhere on the forms. The respondents were assured that the information they provided will not be used against them in any way.

## **CHAPTER 4**

### **4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS**

#### **4.1 INTRODUCTION**

Data analysis is the systematic organization and synthesis of research data, and the testing of research hypothesis using those data (Polit et al, 2001). Data was collected using structured interview schedule and a focus group discussion guide. A total of 419 respondents were interviewed Two FGDs were held.

#### **4.2 DATA PROCESSING AND ANALYSIS**

##### **4.2.1 QUANTITATIVE DATA**

Following data collection, the structured interview schedules were sorted out and edited for internal consistency, legibility and completeness day after returning from the field. This was done to ensure quality control. The closed ended responses were coded to ensure easy entry and analysis of data when using a computer. The open ended responses were categorized and assigned suitable codes to bring related issues together under themes. The codes were then entered and analyzed using Epi- info version 6 soft ware and SPSS computer package.

The Chi – Square test was used to compare proportions. The confidence interval was set at 95%. A result yielding a P value of less than 5% was considered to be statistically significant.

The data was presented using frequency tables, cross tabulations, bar charts and pie charts which are effective ways of communicating research results.

#### **4.2.2 QUALITATIVE DATA**

A report was prepared which reflected the discussions of the FGDs. The participants own words were reflected, the key statements were listed, including the ideas and attitudes expressed. Statements for each topic were categorized. The researcher read through all the data to obtain the general meaning of the information obtained. Content analysis was done. The data were summarized using narratives. The responses from the two FGDs were compared. The findings were interpreted and the most useful quotations that emerged from the discussions illustrated the main ideas.

#### **4.3 DATA PRESENTATION**

##### **4.3.1 QUANTITATIVE DATA**

The responses have been presented according to the lay out of the questions and sections of the interview schedule. Some of the responses have grouped together to show an overall picture. The findings have been presented using tables, pie charts, bar charts and cross tabulations. The tables are easy to read and understand. The bar charts and pie charts provide alternative ways of presenting the findings and prevent the monotony of presenting data using tables. Cross tabulations are useful in showing the relationships between variables.

##### **4.3.2 QUALITATIVE DATA**

Data obtained from the focus group discussions has been presented in narratives. The findings were interpreted and some quotations have been recorded verbatim.

**SECTION A**

**TABLE 2: SOCIO – DEMOGRAPHIC DATA**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>Age</b>		
18 – 30 years	306	75.2
31 years and above	101	24.8
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Marital Status</b>		
Single	299	73.4
Married	108	26.6
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Religion</b>		
Christian	384	94.3
Moslem	23	5.7
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Occupation</b>		
Student	121	29.7
Formally employed	150	36.9
Unemployed	86	21.1
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Income</b>		
Below k1,000,000	291	71.5
Between k1,000,000 and K2,000,000	94	23.1

Above k2,000,000	22	5.4
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Educational level</b>		
Secondary and below	310	76.2
Tertiary level	97	23.8
<b>Total</b>	<b>407</b>	<b>100</b>

\*Respondents who were separated, divorced and widowed categorized under those who were single

\*Respondents who were cohabiting were categorized under those who were married.

\*Respondents with college and university education were categorized as having tertiary education.

Table 2 shows that majority 75.2% (306) of the respondents were aged between 18 – 30 years. Most of the respondents 73.4% (299) interviewed were single. Almost all of the respondents 94.3% (384) were Christians by faith. The majority 76.2% (310) had secondary school education and below. 36.9% (150) of the respondents were in formal employment. Most 71.5 % ( 291) of the respondents earned less than K1, 000,000. Per month.

**SECTION B**

**KNOWLEDGE ABOUT MALE CIRCUMCISION**

**TABLE3: RESPONDENTS WHO HAVE HEARD ABOUT MALE CIRCUMCISION**

	Frequency	Percentage
Yes	403	99
No	4	1.0
Total	<b>407</b>	<b>100</b>

Table 3 Shows that almost all 99% (403) of the respondents had heard about male circumcision

**TABLE 4 SOURCES OF INFORMATION ABOUT MALE CIRCUMCISION**

	Frequency	Percentage
Friends	326	80.1
Church	153	37.6
Teacher	242	5.9
Media	158	38.8
Health Personnel	72	17.7

\* Multiple responses (respondents gave more than one source of information)

Table 4 shows that the commonest source of information 80% (326) about male circumcision are friends

**TABLE 5: WHETHER MALE CIRCUMCISION OFFERS PARTIAL PROTECTION AGAINST HIV**

	<b>Frequency</b>	<b>Percentage</b>
Yes	107	26.3
No	204	50.1
Not sure	96	23.6
Total	<b>407</b>	<b>100</b>

Table 5 shows that about half 50.1% (204) of respondents believed that male circumcision did not offer partial protection against transmission of HIV.

**TABLE 6: WHETHER MALE CIRCUMCISION CAN PROVIDE GENITAL HYGIENE**

	<b>Frequency</b>	<b>Percentage</b>
Yes	356	87.5
No	51	12.5
Total	<b>407</b>	<b>100</b>

Table 6 shows that the majority 87.5% (356) of respondents believe that male circumcision could provide genital hygiene.

**TABLE 7: WHETHER MALE CIRCUMCISION REDUCES SEXUAL PLEASURE**

	<b>Frequency</b>	<b>Percentage</b>
Yes	26	6.4
No	300	73.7
Not sure	81	19.9
<b>Total</b>	<b>407</b>	<b>100</b>

Table 7 Shows that the majority 73.7% (300) of respondents said that male circumcision did not reduce sexual pleasure.

**TABLE 8: WHETHER MALE CIRCUMCISION IS A HIGH RISK OPERATION WHEN PERFORMED IN A HOSPITAL**

	<b>Frequency</b>	<b>Percentage</b>
Yes	28	6.9
No	362	89.2
Not sure	16	3.9
<b>Total</b>	<b>407</b>	<b>100</b>

Table 8 shows that the majority 89.2% (362) of respondents said that male circumcision was not a risky procedure when performed in a hospital facility by competent health personnel.

**TABLE 9: WHETHER IT IS ADVISABLE FOR CIRCUMCISED MEN TO USE CONDOMS**

	<b>Frequency</b>	<b>Percentage</b>
Yes	391	96.1
No	16	3.9
Total	<b>407</b>	<b>100</b>

Table 9 indicates that the majority 96.1% (391) of respondents said that it was advisable for circumcised men to use condoms during sexual contact.

**TABLE 10: WHETHER RESPONDENT KNOWS OF ANY FACILITY IN THE AREA OFFERING MALE CIRCUMCISION SERVICES**

	<b>Frequency</b>	<b>Percentage</b>
Yes	296	72.7
No	111	27.3
Total	<b>407</b>	<b>100</b>

Table 10 shows that most 72.7% (296) of the respondents knew of a facility offering male circumcision services in their area.

**TABLE 11: FACILITIES WHERE MALE CIRCUMCISION SERVICES ARE OFFERD**

	<b>Frequency</b>	<b>Percentage</b>
<b>Health centres</b>		
Yes	6	1.5
No	290	71.3
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Hospitals</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	243	59.7
No	54	13.3
N/A	110	27
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Homes</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	12	2.9
No	285	70
N/A	110	27
<b>Total</b>	<b>12</b>	<b>100</b>
<b>Bush</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	156	38.3
No	140	34.4
N/A	111	27.3
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Mosque</b>		
Yes	3	0.7

No	404	99.3
<b>Total</b>	<b>407</b>	<b>100</b>

Table 11 shows that the majority 59.7% (243) of respondents mentioned the hospital as the place where male circumcision services were offered.

**TABLE 12: SCORES ON KNOWLEDGE QUESTIONS**

	<b>Frequency</b>	<b>Percentage</b>
Low	126	31
High	301	69%
<b>Total</b>	<b>407</b>	<b>100</b>

\*Respondents who had moderate knowledge were categorized under those who had high knowledge

Table 10 shows that the majority 69% (273) of respondents had high knowledge on male circumcision.

## SECTION C

### SOCIO – CULTURAL BELIEFS

**TABLE 13: RESPONDENTS FROM CIRCUMCISING TRIBES**

	<b>Frequency</b>	<b>Percentage</b>
Yes	62	15.8
No	345	84.2
<b>Total</b>	<b>407</b>	<b>100</b>

Table 13 shows that the majority 84.2 % ( 345) of respondents were from non circumcising tribes.

**TABLE 14: WHETHER RESPONDENT CAN LOOSE ETHNIC IDENTITY BY BEING CIRCUMCISED**

	<b>Frequency</b>	<b>Percentage</b>
Yes	36	8.8
No	310	76.2
N/A	61	15
<b>Total</b>	<b>407</b>	<b>100</b>

Table 14 Shows that the majority 76.2% (310) of respondents from non circumcising tribes felt that they would not loose their identity by being circumcised.

**TABLE 15: WHETHER MALE CIRCUMCISION IS CONSIDERED TO BE AN EMBARRASING PROCEEDURE IN THE COMMUNITY**

	<b>Frequency</b>	<b>Percentage</b>
Yes	40	9.8
No	367	90.2
<b>TOTAL</b>	<b>407</b>	<b>100</b>

Table 15 shows that most 90.2% (367) of the respondents felt that male circumcision was not considered to be an embarrassing procedure in the community.

**TABLE 16: WHETHER RESPONDENT CAN SUFFER REJECTION BY BEING CIRCUMCISED**

	<b>Frequency</b>	<b>Percentage</b>
Yes	14	3.4
No	393	96.6
<b>Total</b>	<b>407</b>	<b>100</b>

Table 16 shows that the majority 96.6% (393) of respondents indicated that they could not suffer rejection by being circumcised.

## SECTION D

### UPTAKE OF MALE CIRCUMCISION

**TABLE 17: RESPONDENTS WHO HAVE UNDERGONE MALE CIRCUMCISION**

	<b>Frequency</b>	<b>Percentage</b>
Yes	76	18.7
No	331	81.3
<b>Total</b>	<b>407</b>	<b>100</b>

Table 17 shows that the majority 81.3% (331) of respondents were not circumcised.

**TABLE 18: REASONS FOR UNDERGOING MALE CIRCUMCISION**

<b>Medical reasons</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	34	8.5
No	43	10.4
N/A	330	81.1
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Cultural reasons</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	53	13
No	24	5.9
N/A	330	81.1

<b>Total</b>	<b>407</b>	<b>100</b>
<b>Hygiene purposes</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	58	14.3
No	19	4.7
N/A	330	81
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Cosmetic reasons</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	2	0.5
No	75	18.4
N/A	330	81.1
<b>Total</b>	<b>407</b>	<b>100</b>
<b>HIV Prevention</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	52	12.8
No	24	5.9
N/A		
<b>Total</b>	<b>407</b>	<b>100</b>
<b>Other reasons</b>	<b>Frequency</b>	<b>Percentage</b>
Religious reasons	3	0.7
Not sure	3	0.7
N/A	401	100
<b>Total</b>	<b>407</b>	<b>100</b>

Table 18 shows that 14.3% (58) of respondents got circumcised for hygiene purposes

**TABLE 19: WHETHER RESPONDENT WOULD UNDERGO MALE CIRCUMCISION IF IT OFFERS PARTIAL PROTECTION AGAINST HIV**

	<b>Frequency</b>	<b>Percentage</b>
Yes	247	60.7
No	160	39.3
<b>Total</b>	<b>407</b>	<b>100</b>

Table 19 shows that the majority 60.7% (247) of the respondents said they would undergo male circumcision if it offered partial protection against transmission of HIV.

**TABLE 20: WHETHER RESPONDENT WOULD ADVISE MALE RELATIVES TO GO FOR MALE CIRCUMCISION**

	<b>Frequency</b>	<b>Percentage</b>
Yes	275	67.6
No	132	39.3
<b>Total</b>	<b>407</b>	<b>100</b>

Table 20 shows that the majority 67.6% (275) of the respondents indicated that they would advise their male relatives or friends to go for male circumcision

**TABLE 21: FEARS OF UNDERGOING MALE CIRCUMCISION**

	<b>Frequency</b>	<b>Percentage</b>
Yes	198	48.6
No	209	51.4
<b>Total</b>	<b>407</b>	<b>100</b>

Table 21 shows that the majority 51.4% (209) of respondents said they had no fears of undergoing male circumcision.

**TABLE 22: ASSOCIATION BETWEEN AGE AND WILLINGNESS TO UNDERGO MALE CIRCUMCISION**

<b>Age</b>	<b>Willingness to be circumcised</b>		<b>Total</b>	<b>Chi square</b>	<b>P Value</b>
	Yes	No			
18 – 30 years	189 (61.8%)	117 (38.2%)	306 (100%)	0.60	0.439
31years and above	58 (57.4%)	43 (42.6%)	101 (100%)		
<b>Total</b>	<b>247</b> <b>(60.7%)</b>	<b>160</b> <b>(39.3)</b>	<b>407</b> <b>(100%)</b>		

Table 22 shows the association between age and willingness to undergo male circumcision. The association was not statistically significant.

**TABLE 23: ASSOCIATION BETWEEN MARITAL STATUS AND WILLINGNESS TO UNDERGO MALE CIRCUMCISION**

Marital status	Willingness to be circumcised		Total	Chi square	P Value
	Yes	No			
Single	181 (60.5%)	118 (39.5%)	299 (100%)	0.01	0.916
Married	66 (61.1%)	42 (38.9%)	108 (100%)		
<b>Total</b>	<b>247</b> <b>(60.7%)</b>	<b>160</b> <b>(39.3%)</b>	<b>407</b> <b>(100%)</b>		

Table 23 shows the association between marital status and willingness to undergo male circumcision. The association was not statistically significant.

**TABLE 24: ASSOCIATION BETWEEN EDUCATIONAL LEVEL AND WILLINGNESS TO UNDERGO MALE CIRCUMCISION**

Educational level	Willingness to be circumcised		Total	Chi square	P value
	Yes	No			
Secondary level and below	192 (62.1%)	117 (37.9%)	309 (100%)	1.13	0.288
Tertiary level	55 (56.1%)	43 (43.9%)	98 (100%)		
<b>Total</b>	<b>247</b> <b>(60.7%)</b>	<b>160</b> <b>(39.3%)</b>	<b>407</b> <b>(100%)</b>		

Table 24 shows the association between educational level and willingness to undergo male circumcision. The association was not statistically significant.

**TABLE 25: ASSOCIATION BETWEEN RELIGION AND WILLINGNESS TO UNDERGO MALE CIRCUMCISION**

Religion	Willingness to be circumcised		Total	Chi Square	P value
	Yes	No			
Christian	228	156	384	1.56	0.211
Muslim	12	4	16		
<b>Total</b>	<b>240 (60%)</b>	<b>160 (40%)</b>	<b>400 (100%)</b>		

Table 25 shows association between religion and willingness to undergo male circumcision. The association was not statistically significant.

**TABLE 26: ASSOCIATION BETWEEN KNOWLEDGE ON MALE CIRCUMCISION AND WILLINGNESS TO UNDERGO MALE CIRCUMCISION**

Knowledge	Willingness to be circumcised		Total	Chi square	P Value
	Yes	No			
Low	75 (59.5%)	51 (40.5%)	126 (100%)	0.10	0.747
High	172 (61.2%)	109 (38.8%)	281 (100%)		
<b>Total</b>	<b>247 (60.7%)</b>	<b>160 (39.3%)</b>	<b>407 (100%)</b>		

Table 26 shows association between knowledge and willingness to undergo male circumcision. The association was not statistically significant.

**TABLE 27: ASSOCIATION BETWEEN WILLINGNESS TO UNDER GO MALE CIRCUMCISION AND FEAR OF EMBARRASSMENT**

FEAR OF EMBARRASSMENT	WILLINGNESS TO UNDERGO MALE CIRCUMCISION		TOTAL	Chi square	P value
	Yes	No			
Yes	24 (60%)	16 (40%)	40 (100%)	0.01	0.936
No	222 (60.7%)	144 (39.3%)	366 (100%)		
<b>TOTAL</b>	<b>246</b> <b>(60.6%)</b>	<b>161</b> <b>(39.4)</b>	<b>407</b> <b>(100%)</b>		

Table 27 shows association between willingness to undergo male circumcision and fear of embarrassment in the community. The association was not statistically significant.

**TABLE 28: ASSOCIATION BETWEEN WILLINGNESS TO UNDERGO MALE CIRCUMCISION AND FEAR OF REJECTION FROM THE COMMUNITY**

FEAR OF REJECTION	WILLINGNESS TO UNDERGO MALE CIRCUMCISION		TOTAL	Chi Square	P Value
	Yes	No			
Yes	7 (50%)	7 (50%)	14 (100%)	0.69	0.405
No	240 (61.1%)	153 (38.9%)	393 (100%)		
<b>TOTAL</b>	<b>247</b> <b>(60.7%)</b>	<b>160</b> <b>(39.3)</b>	<b>407</b> <b>(100%)</b>		

Table 28 shows association between willingness to undergo male circumcision and fear of rejection from the community. The association was not statistically significant.

**TABLE 29: ASSOCIATION BETWEEN WILLINGNESS TO UNDERGO MALE CIRCUMCISION AND FEAR OF LOOSING ETHNIC IDENTITY**

FEAR OF LOSS OF ETHNIC IDENTITY	WILLINGNESS TO UNDERGO CIRCUMCISION		TOTAL	Chi Square	P Value
	Yes	No			
Yes	17 (47.2%)	19 (52.8%)	36 (100%)	3.00	0.083
No	230 (62%)	141 (38%)	371 (100%)		
<b>TOTAL</b>	<b>247 (60.7%)</b>	<b>160 (39.7%)</b>	<b>407 (100%)</b>		

Table 29 shows association between willingness to undergo male circumcision and fear of losing ethnic identity by being circumcised. The association was not statistically significant.

**TABLE 28: ASSOCIATION BETWEEN WILLINGNESS TO UNDERGO MALE CIRCUMCISION AND IMPROVEMENT IN GENITAL HYGIENE**

IMPROVEMENT IN GENITAL HYGIENE	WILLINGNESS TO UNDEGO CIRCUMCISION		TOTAL	Chi Square	P Value
	Yes	No			
Yes	223 (62.8%)	132 (37.2)	355 (100%)	5.86	0.015
No	23 (45.1%)	28 (54.9%)	51 (100%)		
<b>TOTAL</b>	<b>246</b> <b>(60.6%)</b>	<b>160</b> <b>(39.4)</b>	<b>406</b> <b>(100)</b>		

Table 28 shows association between willingness to undergo male circumcision and improvement in male genital hygiene. The association was statistically significant (P value 0.015) with respondents indicating improvement in genital hygiene more likely to be willing to undergo male circumcision (OR 2.06; 95% Confidence Interval [1.09, 3.87]).

## **4.4 FOCUS GROUP DISCUSSION**

### **4.4.1 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS**

All the participants were from Kantanshi Township, a high density area with a high HIV prevalence in Mufulira District. Two Focus Group Discussions were conducted. Each FGD comprised six participants.

The first group comprised males aged between 18 and 30 years. These were all single and had completed their secondary education. None of them was in formal employment. They were all Christians by faith. The group was ethnically diverse.

The second group comprised males aged 31 years and above. All the participants in this age group were married and had children. They all had their secondary education. All of them were in formal employment. The group was also ethnically diverse and all of them were Christians by faith. All the participants belonged to low socio economic grouping.

The two main themes identified during data analysis were:

- Knowledge on male circumcision
- Uptake of male circumcision

### **KNOWLEDGE ON MALE CIRCUMCISION**

When participants in the age group 18 to 30 years were asked what male circumcision is, all of them said that it is the removal of the foreskin. However, participant 2 and 3 went further to say that it is done to prevent transmission of STIs. Participant 5 further stated that *“circumcision can also be done in females”*.

In the age group 31 years and above, they also indicated that male circumcision is the removal of the foreskin. Participant 4 and 5 went further to say “*ukuputula inkanda kubwaume pamulandu wakucingilila amalwele*” (meaning removal of the foreskin to prevent sexually transmitted diseases)

When asked for the reasons why male circumcision is done, the following responses were elicited in the age group 18 and 30 years:

Most of the participants said it is done to prevent STIs. Participant 1 and 3 said it is also done to prevent transmission of HIV/AIDS. Besides preventing STIs, participant 6 said that “*male circumcision is also done for cultural reasons*”.

Those in the age group 31 years and above gave the following responses as reasons for male circumcision:

Most of them said it is done for prevention of STIs and hygiene purposes. One participant said “*ukicingilila utumalwele utunono ngo tusele*” (meaning prevention of minor sexually transmitted illnesses like Gonorrhoea). Besides the prevention of STIs and hygiene purposes, one participant said “*ni ntambi*” (meaning it is a traditional practice).

On the possibility of a circumcised male contracting HIV after having unprotected sexual contact with an infected partner, the participants in the age group between 18 and 30 years gave the following responses:

Most of the participants indicated that transmission of HIV is possible. For instance, one participant said “*it is possible to contract HIV but not possible to contract some other STIs*”. Another participant stated that “*male circumcision is not 100% safe; therefore there are chances of contracting HIV when having unprotected sexual contact with an infected partner*”. Another participant said that “*as long as there is contact with body fluids, contracting HIV is possible*”.

On the possibility of a circumcised male contracting HIV after unprotected sexual contact with an infected individual, all the participants aged 31 years and above mentioned that it is possible. One participant said that “*though it is possible for a circumcised male to*

*contract HIV, the chances are low*". The other participant said *"the chances of not contracting HIV by a circumcised man can only be low if the CD4 count of the Sexual partner is high"*.

All the participants in both groups agreed that an infected circumcised man can transmit HIV during unprotected sexual encounter.

On the knowledge of traditional beliefs that may negatively influence the uptake of male circumcision, both age groups gave similar responses by indicating that there are no such beliefs or they have never heard of them. One participant from the age group 31 and above said *"circumcision nipalobe tefyantambi"* (meaning circumcision is an individual decision not a cultural decision). Another participant from the age group 31 years and above said *"a long time ago such traditional beliefs were strong, t nowadays they are almost non existent"*.

When the participants were asked whether male circumcision has an effect on sexual pleasure, the following responses were given by the age group 18 to 30 years:

Most of the participants said that male circumcision has no effect on sexual pleasure. One participant said *"circumcision has an effect on sexual pleasure because circumcised men enjoy more pleasure than the uncircumcised ones"*.

For those aged 31 years and above, most of them said circumcised men are likely to enjoy sex more compared to the uncircumcised ones. One participant further stated that *"a circumcised man is more likely to satisfy a woman than an uncircumcised one"*.

On the preferred place to undergo male circumcision if the participants were to opt for the procedure, the majority of the participants in both groups chose the hospital because of the experts and the anesthetic agents that they may receive. Only one participant from the age group 18 to 30 years indicated that he would like it to be done *ku mukanda* (traditional circumcising camp) because confidentiality is likely to be maintained there.

When asked about the possibility of complications after male circumcision, half of the participants in the age group 18 to 30 years responded in the affirmative. Delayed wound healing, transmission of sti's if the same blade is used and contracting unspecified diseases in the traditional set up were expressed as possible complications.

All the participants in the age group 31 years and above mentioned that there are no complications that can arise following male circumcision. One participant said that "*there are many Zambians who are circumcised and are still alive*". Another participant said "*there may be no complications when male circumcision is done by an expert*".

#### **4.4.3 UPTAKE OF MALE CIRCUMCISION**

When asked if male circumcision is common in Kantanshi Township, all the participants in the age group 18 to 30 years said that it is not common. This was evidenced by what one participant said "*it is not common because many people do not know the benefits and some people think it is restricted to some tribes*". Another participant said "*people say Male circumcision is a traditional practice and we are now living in a modern world where it has no place*".

Most of the participants in the age group 31 years and above felt that male circumcision is common in Kantanshi Township. For instance, participant 1 said "*this is when it is becoming common, as at now it is not common*". Participant 2 stated that "*it is common because it started a long time ago*". Participant 4 said "*it is common only that we do not know the benefits*". Participant 6 said that "*the ones who are circumcised are few, but knowledge on male circumcision is becoming high*".

When asked if they would opt to be circumcised if male circumcision offers partial protection against transmission of HIV, half of the participants in the age group 18 to 30 years responded in the affirmative. This was evidenced by one participant saying "*why not if it offers partial protection against HIV*". The other half said they would not go for male circumcision regardless of the perceived benefits.

Most of the participants in the age group 31 years and above indicated that they would go for male circumcision if it offers partial protection inst HIV except for one. One participant said “*kuti naya nanombaline*” (meaning I can go for it even now).

On whether participants would advice a male relative or friend to go for male circumcision, most the participants in the 18 to 30 years age group responded in the affirmative except for one. One participant said “*I can only advice my male relatives or friends to go for male circumcision when they are young*”. Another participant stated that “*if my friend is willing to undergo the procedure I can encourage him to do so*”.

For those aged above 31 years, all of them indicated that they would advice their friends or relatives to undergo male circumcision because the procedure is beneficial.

When asked for the possible reasons why the uptake of circumcision was low in Kantanshi Township and Mufulira urban as a whole, the in the age group between 18 to 30 years gave the following responses:

Participant 1 said “*the introduction of condoms has negatively impacted on the uptake of male circumcision*”.

Participant 2 stated that “*lack of knowledge about male circumcision has a negat effect on the uptake of male circumcision*”.

Participant 3 said “*fear of pain prevents a number of main from accessing male circumcision*”.

Participant 4 said that “*lack of knowledge about the benefits of male circumcis on, fear of pain, introduction of condoms and people thinking that we are living in a modern world is affecting the uptake of male circumcision*”.

Participant 5 said that “*shamefulness to friends, introduction of condoms and of knowledge on male circumcision are causing people to shun the proceedure*”.

Participant 6 said “*ukutina abantu uku kumwenamo (meaning fear of being embarrassed), pain and ignorance have caused the uptake of male circumcision to be very low*”.

All the participants in the age group 31 years and above cited lack of knowledge and lack of sensitization as being responsible for the low uptake of male circumcision. This was evidenced by one participant who said that “*lack of knowledge about the benefits of male circumcision and lack of health education are responsible for the low uptake of male circumcision*”

## CHAPTER FIVE

### 5.0 DISCUSSION OF FINDINGS

#### 5.1 INTRODUCTION

The main objective of the Study was to determine acceptability of male circumcision in HIV prevention among the males aged 18 years and above in Mufulira Urban. Data was collected using a structured interview schedule and FGDs guide.

#### 5.2 KNOWLEDGE ON MALE CIRCUMCISION

The study shows that the majority of respondents (99%) had heard about male circumcision and the commonest source of information being friends (80%). All the participants in the FGDs and 97.5% of the respondents knew about male circumcision correctly. This shows that though the uptake of male circumcision is still low in Mufulira urban, the lack of knowledge on male circumcision is not the reason.

About half of the respondents (50.1%) said that male circumcision does not offer partial protection against HIV and 23.6% were not sure of its efficacy. Most of the participants from the FGDs also felt that male circumcision can not prevent transmission of HIV from an infected female to a male during sexual contact. This knowledge gap about the benefits of male circumcision in relation to prevention of HIV transmission is likely to be a barrier to acceptability of the procedure. Studies have shown that a number of males are willing to be circumcised if the procedure can offer partial protection against transmission of HIV (Bailey et al, 2002; Kebaabetswe et al, 2003; Rain-Taljaard et al, 2003; Largarde et al, 2003). This finding also gives an impression that male circumcision has not been widely publicized as one of the preventive strategies in the fight against HIV.

This study did not reveal a significant association between knowledge on male circumcision and willingness to undergo male circumcision.

### **5.3 GENITAL HYGIENE**

According to Caldwell and Caldwell (1994), the belief that male circumcision promotes genital hygiene has led to increased demand for the procedure in North Western Tanzania. Largarde et al (2003) also reports of similar trends in other regions of East and Southern Africa. The findings from this Study indicating that the majority of respondents (87.2%) expressed that male circumcision can help to enhance genital hygiene shows a positive attitude towards the procedure. This is likely to facilitate acceptability of male circumcision among the males aged 18 years and above in Mufulira urban.

This Study found a significant association between genital hygiene and willingness to undergo male circumcision.

### **5.4 FEAR OF ADVERSE EFFECTS**

Kigozi et al, (2007) state that male circumcision does not adversely affect sexual satisfaction or pleasure in men. Adverse events following male circumcision are likely to be possible barriers to male circumcision (Caldwell and Caldwell, 1994; Nnko et al, 2001; Kebaabetswe et al, 2003; Largarde, 2003). Therefore, the findings in this study that 73.7% of the respondents and most of the participants in the FGDs believed that male circumcision does not reduce sexual pleasure is likely to facilitate acceptance of the procedure. It is important to understand if male circumcision affects sexual pleasure in order to formulate the right health education messages to promote acceptability of the procedure as an HIV prevention strategy. In KwaZulu Natal, South Africa, the men in an acceptability Study who believed that circumcised men have sex more than the uncircumcised ones were more willing to be circumcised (Kigozi, 2007).

Risks during or following male circumcision have been identified as possible barriers to acceptability of the procedure (Largarde et al, 2003; Nnko et al, 2003). The penis is considered to be delicate and men are frightened to have any penile operation as expressed by one participant in the FGD that “*Kubwaume tekwakwangala*” (Meaning the penis is not something to play with). It is reassuring from this Study that 89.2% of the

respondents believed that male circumcision is not a risky procedure when performed in a health facility by competent personnel. The recognition of the health facilities and competent personnel as factors in achieving non risky circumcision operations is a good sign because potential adopters are likely to seek male circumcision services from the right places. This has been supported by most participants in the FGDs in this Study who expressed that their preferred place of choice to male circumcision services should they opt in are the health facilities because of safety concerns.

### **5.5 FEAR OF CREATING A FALSE SENSE OF PROTECTION**

There are fears that promotion of male circumcision as one of the strategies in the prevention of HIV infection is likely to create a false sense of protection .This may cause circumcised men to engage in risky sexual behavior (Plus News, 2007). Lukobo (2004) expressed similar fears that perceptions by some participants in her Study that male circumcision is fully protective against HIV has serious implications for acceptability and introduction of male circumcision as an HIV prevention strategy. She emphasizes on the need to educate potential adopters that male circumcis will not fully protect them against HIV acquisition to avoid increase in risky sexual behavior which may result in an increase of HIV incidences. In this Study the majority of respondents (96%) felt that even circumcised men should abstain from risky sexual behaviour by avoiding unprotected sex. These findings are reassuring and show that responsible sexual behaviour can be achieved alongside promotion of male circumcision.

### **5.6 SOCIO CULTURAL BELIEFS**

Lukobo (2004) believe that male circumcision is embed in a complex web of cultural and religious practices. Other authors have cited ethnic and cultural identity among the non circumcising tribes as possible barriers to male circumcision (Caldwell and Caldwell, 1994; Ntozi et al, 1994; Nnko et al, 2001; Bailey et al, 2002; Kebaabetswe et al, 2003; Ran Taljaard et al, 2003). However, this Study revealed that the majority (76.2%) of respondents from non circumcising tribe believe that they can loose their cultural

identity by embracing male circumcision. Most of the participants in the FGDs from non circumcising tribes stated that they were not aware of any traditions discouraging them to undergo male circumcision. One participant from the FGD further stated that such traditions were strong a long time ago, but nowadays such traditions are almost non existent. These sentiments demonstrate a positive attitude towards male circumcision. It also shows that culture is dynamic.

## **5.7 UPTAKE OF MALE CIRCUMCISION**

The finding from this Study that only 18.7% of the respondents have undergone male circumcision is consistent with the Zambia Sexual behavior survey of 2000 Which revealed that only 15.3% of the males in the urban areas were circumcised (CSO, 2004). The uptake of male circumcision is still on the lower in Mufulira Urban. This can be attributed to inadequate sensitization and lack of a well structured male circumcision Program in Mufulira.

The most expressed reason in this study for having undergone male circumcision among the circumcised respondents was improvement in genital hygiene. These findings are consistent with the study by Lukobo (2004) where most of her participants felt that male circumcision improves genital hygiene. It has been detailed that an uncircumcised penis harbors a lot of dirt and pathogenic micro organisms, urine and other fluids giving rise to a terrible smell. It is also believed that a circumcised penis is easier to clean. These observations are vital in formulating Public health messages to facilitate acceptability of male circumcision.

Rain-Taljaard et al (2003) report that a study in a South town with a high HIV prevalence revealed that 59% of the participants were willing to be circumcised if the procedure offered partial protection against acquisition of HIV infection. Similar results have been obtained in other sub Saharan African countries (Kebaabetswe et al, 2003; Largarde, 2003). This Study has also upheld these findings by showing that 60.4% of the respondents expressed willingness to undergo male circumcision if it can offer partial

protection against HIV. This shows that though the uptake of male circumcision in Mufulira urban is low, it is perceived positively.

## **5.8 LIMITATION OF THE STUDY**

The following were the limitations of this study:

- Only 10% of the total budget was made available to the researcher. This made it difficult for researcher to touch other areas of the district and make comparisons.
- The interview schedule which is a self report instrument was used and could have led to under reporting due to the sensitive nature of the topic.
- The study was only done in Mufulira urban which may make it difficult to generalize the findings to other parts of Zambia.

## **5.9 CONCLUSION AND RECOMMENDATIONS**

This study revealed an acceptability of 60.7% of male ircumcision in relation to HIV prevention. The study further revealed high knowledge vels (69%) on male circumcision. Though the knowledge levels were high, the uptake was on a lower side (18.7%).

During bivariate analysis only improvement in genital was found to be statistically significant.

Based on these findings, we re commend that information, education and communication strategies should be strengthened by the DHMT placing on the public health benefits of male circumcision like improvement in genital hygiene and prevention of sexually transmitted illnesses. Acceptability should be increased by increasing the knowledge levels. The DHMT should also develop a well and comprehensive male circumcision program.

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## **APPENDICES**

### **APPENDIX 1**

#### **INFORMED CONSENT**

#### **ACCEPTABILITY OF MALE CIRCUMCISION IN HIV PREVENTION AMONG THE MALES AGED 18 YEARS AND ABOVE IN MUFULIRA URBAN.**

#### **INTRODUCTION**

I, George Chiwele; a master of Public Health student at the University of Zambia, School of medicine is kindly requesting for your participation in the above mentioned Study. This Study is in partial fulfillment for the award of \_\_\_\_\_ of Public Health. Before you make up your mind whether to take part in the Study or not, I would like to explain to you the purpose of the study, any risk or benefits of \_\_\_\_\_ in the Study and what is expected of you. Your participation in this Study is voluntary. You are under no obligation to participate. If you choose not to participate, no privilege will be taken away from you. If you agree to take part in the study, you \_\_\_\_\_ I be asked to sign this consent form in the presence of a witness. Agreement to participate will not result in any immediate benefits.

#### **PURPOSE OF THE STUDY**

The Study will help to determine your acceptability of male circumcision in HIV prevention. This information is important in guiding the campaign to promote male circumcision as one of the tools in the HIV prevention strategy.

## **PROCEEDURE**

The Study involves a face to face interview. This will be done after you accept to part in the study. The interview will take approximately 15 to 25 minutes.

## **RISKS AND DISCOMFORTS**

There are no risks involved in this Study. However, you are free not to answer questions that may be very sensitive.

## **BENEFITS**

There is no direct benefit for you by participating in this Study. However, the information that will be obtained will be useful in the fight of the HIV pandemic. No monetary favors Will be given in exchange for information obtained, but education on HIV/AIDS will be given as need arises.

## **CONFIDENTIALITY**

The research records and all the information obtained will be treated as confidential. You will be identified by a number and not by name. Your personal information will not be released without your written consent except when required by law. The Ministry of health, the biomedical research and ethics committee may review your record again but this will be done with confidentiality.

## **INFORMED CONSENT FORM**

The reasons for conducting this Study have been explained to me and I fully understand that:

If I agree to take part in this Study, I can withdraw at any time without advancing any reason and that my participation in the Study is purely voluntary.

I .....

(Names)

Agree to take part in this Study.

Signed/Thumb print:                      Date: ..... (Participant)

Signed: .....                      Date..... (Witness)

Signed.....                      Date: ..... (Researcher)

## **CONTACT PERSONS IN CASE OF QUESTIONS**

1. George Chiwele, University of Zambia, School of Medicine, Department of Community Medicine, Box 50110, Lusaka. Cell: 0977200887.
2. Professor S. Siziya, University of Zambia, School of Medicine, Department of Community Medicine, Box 50110, Lusaka. 0955752649
3. The Chairperson, Biomedical Research and Ethics Committee, UNZA, Box, 50110, Lusaka. Telephone 256067

## APPENDIX II: BUDGET

<b>BUDGET</b>	<b>CATEGORY</b>	<b>UNIT COST</b>	<b>QUANTITY</b>	<b>TOTAL</b>
		<b>(ZMK)</b>		
<b>1. STATIONARY</b>				
a) Flash Disc		150,000.00	*2	300,000.00
b) Bond paper		30,000.00	*10	300,000.00
c) Pens		1,000.00	*10	10,000.00
d) Pencils		500.00	*10	5,000.00
e) Rubbers		1,000.00	*10	10,000.00
f) Correcting Fluid		10,000.00	*1	10,000.00
g) Note book		10,000.00	*1	10,000.00
h) Stapler		50,000.00	*1	50,000.00
I) Staples		10,000.00	*1Box	10,000.00
j) Scientific Calculator		70,000.00	*1	70,000.00
k) Bag for interview schedules		150,000.00	*1	150,000.00
<b>SUBTOTAL</b>				925,000.00
<b>2. SERVICES</b>				
a) Ethics Committee		450,000.00	1	450,000.00
b) Data entry		600,000.00	1	600,000.00
c) Data analysis		1,000,000.00	1	1,000,000.00
d) Typing proposal		3,000.00	70 pages	210,000.00
e) Photocopying proposal		200.00	280 pages	56,000.00
f) Typing questionnaire		3,000.00	8 pages	24,000.00

g) Photocopying questionnaire	200.00	10 pages *300	3,000.00
h) Typing report		90 pages	270,000.00
I) photocopying report		360 pages	72,000.00
j) Binding		5 copies	250,000.00
<b>SUBTOTAL</b>			2,935,000.00
<b>3. PERSONNEL</b>			
a) Lunch allowance			
Principal investigator	50,000.00	1* 40 days	2,000,000.00
Research assistant	30,000.00	3* 40 days	3,600,000.00
b) Transport allowance			
Principal investigator	30,000.00	1* 40 days	1,200,000.00
Research assistant	20,000.00	3* 40 days	2,400,000.00
<b>SUBTOTAL</b>			9,200,000.00
<b>TOTAL</b>			13,060,000.00
<b>CONTINGENCY 10%</b>			1,306,000.00
<b>GRAND TOTAL</b>			14,366,000.00

## JUTIFICATION OF THE BUDGET

### STATIONARY

The 10 reams of bond paper will be used for the research proposal development and the research report. The other papers will be used for the questionnaires to carter for 300 respondents.

The two flash discs will be used for coping, storage and safe keeping of data

The other accessories such as pens, pencils, rubbers,                   ators will be used for routine data collection

## **PERSONNEL**

Data collection will be done in places where the Principal researcher and research assistants do not reside. This entails need for transport and allowances for food during the entire period for data collection.

## **SERVICES**

The researcher will need funds for data entry, data analysis, typing services, photocopying services and contribution towards the ethics committee. Five copies of the proposal will be produced and submitted to the Post Graduate Committee.

## **CONTIGENCY**

The contingency fund has been put at 10% of the budget to cover for the extra costs due to inflation and other unanticipated eventualities.

**APPENDIX III: GANNT CHART**

no	Task to be performed	Responsible person	2008			2009										
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	Literature review	Researcher	→													
2	Proposal Development	Researcher	→													
3	Presentation to Graduate Forum	Researcher									→					
4	Approval by UNZAREC	Researcher										→				
5	Data collection	Researcher											→			
6	Data analysis	Researcher													→	
7	Report writing	Researcher													→	
8	Submission of draft report	Researcher														→
9	Submission of final report	Researcher														→
10	Dissemination	Researcher														

**APPENDIX IV**

**THE UNIVERSITY OF ZAMBIA  
SCHOOL OF MEDICINE  
DEPARTMENT OF COMMUNITY MEDICINE**

**STRUCTURED INTERVIEW SCHEDULE  
(ENGLISH VERSION)**

**TOPIC: ACCEPTABILITY OF MALE CIRCUMCISION IN HIV PREVENTION AMONG THE MALES AGED 18 YEARS AND ABOVE IN MUFULIRA URBAN.**

**DATE OF INTERVIEW** : .....

**PLACE OF INTERVIEW** : .....

**NAME OF INTERVIEWER** : .....

**SERIAL NUMBER** : .....

**INSTRUCTIONS FOR THE INTERVIEWER**

1. Introduce yourself to the respondent.
2. Explain the reason for the interview.
3. Assure the respondent of confidentiality and anonymity.
4. Do not write the name of the respondent on the interview schedule.
5. Circle the most appropriate response to the question or fill in the blank spaces provided.
6. Provide time to the respondent to ask questions at the end of the interview.
7. Thank the respondent at the end of each interview.

**SECTION A: DEMOGRAPHIC DATA**

1. Age at last birthday..... [ ]

2. Marital status [ ]

- 1. Single
- 2. Married
- 3. Divorced
- 4. Separated
- 5. Widowed
- 6. Cohabiting

3. Tribe \_\_\_\_\_ [ ]

[ ]

4. Religion

- 1. Christian
- 2. Moslem
- 3. Hindu
- 4. Buddhist
- 5. Others (specify) \_\_\_\_\_

[ ]

5. Educational level. [ ]

- 1. None
- 2. Primary
- 3. Secondary
- 4. College
- 5. University

6. Completed years in School..... [ ]

7. Occupation. [ ]

1. Student
2. Formally employed
3. Self employed
4. Unemployed

8. Income [ ]

1. Below K1, 000,000.
2. Between K1, 000,000. – K2, 000,000.
3. Above K2, 000,000

**SECTION B: KNOWLEDGE ON MALE CIRCUMCISION**

9. Have you ever heard of male circumcision? [ ]

1. Yes
2. No

10. If yes, which is your source of information? (Multiple responses permitted) [ ]

1. Health personnel
2. Media
3. Teacher
4. Relatives
5. Friends
6. Church
7. Others, (specify)\_\_\_\_\_ [ ]

11. What is male circumcision? [ ]

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12. Can male circumcision offer partial protection against HIV? [ ]

1. Yes
2. No
3. Not sure

13. Do you think male circumcision can provide genital hygiene? [ ]

1. Yes
2. No

14. Does male circumcision reduce sexual pleasure? [ ]

1. Yes
2. No
3. Not sure

15. Is male circumcision a highly risk operation when performed in a hospital facility with proper equipment and competent personnel? [ ]

1. Yes
2. No
3. Not sure

16. Do you think it is advisable for circumcised men to use condoms to protect themselves against HIV? [ ]

1. Yes
2. No

17. Do you know of any facility in your area offering male circumcision services?

- 1. Yes [    ]
- 2. No

18. If yes, where is male circumcision services offered in your area? (Multiple response permitted ) [    ]

- 1. Health Center
- 2. Hospital
- 3. Homes
- 4. Bush
- 5. Others, (specify)\_\_\_\_\_

**SECTION C: SOCIO- CULTURAL BELIEFS**

19. Do you come from a tribe that practices male circumcis [    ]

- 1. Yes
- 2. No

20. If No to Question 19, do you think you can loose your    nic identity by being circumcised?

- 1. Yes
- 2. No
- 333. N/A

[    ]

21. Is male circumcision considered to be an embarrassing procedure in your community? [ ]

1. Yes
2. No

22. Do you think you can suffer rejection from your community by accepting to be circumcised? [ ]

1. Yes
2. No

#### **SECTION D: UPTAKE OF MALE CIRCUMCISION**

23. Have you undergone male circumcision? [ ]

1. Yes
2. No

24. If yes, what was the reason? (Multiple responses permitted) [ ]

1. Medical reasons
2. Cultural reasons
3. Hygiene purposes
4. Cosmetic reasons
5. Prevention against STIs and HIV.
6. Others, (specify)\_\_\_\_\_

777. N/A

25. Would you undergo male circumcision if it offers partial protection against HIV?

- 1. Yes [    ]
- 2. No

26. If your answer is No, give reasons why [    ]

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27. Would you advice your male relatives or friends to go for male circumcision?

- 1. Yes [    ]
- 2. No

28. Do you have any fears of undergoing male circumcision? [    ]

- 1. Yes
- 2. No

29. If yes, what are these fears? [    ]

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**APPENDIX V**  
**STRUCTURED INTERVIEW SCHEDULE**  
**(MU CIBEMBA)**

**UMUTWE: UKUSUMINA UKUSEMBULULA ABAUME NGE NSHILA YA KU  
CINGILILA AKASHISHI KA HIV MU BAUME ABA KWETE IMYAKA IKUMI  
LIMO NA CINE KONSEKONSE MU MUFULIRA**

**UBUSHIKU** : .....

**ICIFULO** : .....

**KEPUSHA** : .....

**IMPENDWA** :

**IFIPOPE KULI KEPUSHA**

1. Ilondololeni
2. Londololeni umulandu mulefwaila amasuko
3. Abeni abale asuka ukuti muli no kusunga inkaama
4. Mwilemba ishina lya baleasuka amepusho
5. Lembeni amasuko muncende iyi pelwe
6. Peleni inshita ya mepusho ilyo mwapwa ukwipusha
7. Toteleni abo mwaicilaipusha panuma ya mepusho

## SECTION A: IFYA PA MWEO WA BAKASUUKA

1. Imyaka..... [    ]
  
2. Bushe mwalyupa  
  1. Ndi mushimbe
  2. Nalyupa
  3. Twalilekana
  4. Twalipusana tatuli pamo nangu tatwalekana [    ]
  5. Nalifwilwa
  6. Ndekalapo na namayo nangu tatwaupana
  
3. Umutundu ..... [    ]
  
4. Icikumino..... [    ]  
  1. Umwina Kristu
  2. Umu Moslemu
  3. Umu Hindu
  4. Uwa kwa Buda
  5. Fimbi (Lumbuleni peshina).....
  
5. Apo bafika mumasambililo..... [    ]  
  1. Taba yako kusukulu
  2. Bapelele ku primary
  3. Ku secondary
  4. Ku college
  5. Ku university
  
6. Imyaka ba pwile musukulu..... [    ]

7. Imilimo babomba..... [ ]

1. Bana besukulu
2. Incito ya kufola pa mwenshi
3. Balaibombela
4. Tababomba

8. Indalama ba kwata mumwenshi [ ]

1. Tashicila K1, 000,000.
2. Pakati ka K1, 000,000 na K2, 000,000.
3. Shilacila K2, 000, 000

## **SECTION B: IFYO BAISHIBAPO PA LWAKUSEMBULULWA**

9. Bushe mwalyumfwapo pa kusembulula umwaume? [ ]

1. Nalyumfwapo
2. Nshaumfwapo

10. Ngamwalyumfwapo, nikwisa mwaumfwile? (*Kuti mwapela ifyasuko ukucila na palicimo*)

1. Kubabomfi bamu cipatala
2. Pa mulabasa na mu mapepala ye lyashi
3. Kuli bakafundisha
4. Kuli balupwa
5. Ku banandi
6. Ku kulongana
7. Kumbi (Lumbuleni).....

11. Ukusembulula umwaume cipilibula nshi? [ ]

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-----  
-----

12. Bushe ukusembulula umwaume kuti kwa afwilishako umuntu ukukana ambula akashishi ka HIV? [ ]

1. Kuti kwa afwilisha
2. Teti kwafwilishe
3. Nshishibe

13. Bushe ukusembulula umwaume kuti kwaleta ubusaka ku bwaume? [ ]

1. Kuti kwaleta
2. Teti kulete

14. Bushe ukusembulula umwaume kuti kwalenga umwaume ukukana sekelamo ukufikapo ilyo alekumana na namayo? [ ]

1. Kuti kwalenga
2. Teti kulenge
3. Nshishibe

15. Bushe kuti caba icakuleta ubusanso ukusembulula umwaume mucipatala umwaba ifibombelo ifyafikapo na babomfi abaishiba imilimo. [ ]

1. Teti cilete ubusanso
2. Kuti caleta ubusanso
3. Nshishibe

16. Bushe mulentonkanya ukuti cintu icisuma abaume abasembululwa ukubomfya  
imipila ya kubacingilila ku kashishi ka HIV? [ ]

1. Cisuma
2. Tecisuma

17. Bushe mwalishibako uko basembulula abaume muncende mwikalamo? [ ]

1. Nalishiba
2. Nshaishiba

18. Ngamwalishibako, nikwisa uko basembulula abaumemu kuncende mwikala? [ ]

*(kuti mwapela ifyasuko ukucila na pali cimo)*

1. Ku clinic
2. Ku Hospital
3. Mu mayanda
4. Mu mpanga
5. Kumbi (Lumbuleni).....

### **SECTION C: UBWIKASHI NE NTAMBI**

19. Bushe mwafuma kumutundu uko basembulula abaume? [ ]

1. Emukwai
2. Awe mukwai

20. Ngamufuma ku mutundu uko tabasembulula abaume, bus kuti mwalufya icishibilo ca mutundu nga mwasembululwa? [ ]

1. Emukwai
2. Awe mukwai
333. Ilipusho talinkumine

21. Bushe ukusembulula umwaume cintu cimo icileta insoni kucende uko mwikla? [ ]

1. Cilaleta
2. Tacileta

22. Bushe muletonkanya ukuti kuti bamikankamba kuci ukomwikala ngamwasumina ukusembululwa? [ ]

1. Kuti bankankamba
2. Tekuti bankankambe

#### **SECTION D: UKUSUMINA MU KUSEMBULULWA**

23. Bushe mwalisembululwa? [ ]

1. Nalisembululwa
2. Nshasembululwa

24. Nga mwalisembululwa, cinshi calengele? (*kuti mwapela ifyasuko ukucila na pali cimo*) [ ]

1. Kulwala
2. Intambi
3. Busaka
4. Kumoneka bwino nga ku bwaume kwasembululwa
5. Kucingilila amalwele ya lwambu na kashishi ka HIV
6. Fimbi (Lumbuleni).....

777. Ilipusho tali nkumine

25. Bushe kuti mwasembululwa nga cakuti ukusembululwa kwa cefya ukwambula HIV? [ ]

1. Kuti nasembululwa
2. Teti nsembululwe

26. Nga teti musembululwe, mulandu nshi? [ ]

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27. Bushe kuti mwakoselesha ba lupwa benu nagu abanenu aba sembululwa? [ ]

1. Kuti naba koselesha
2. Teti imba koseleshe

28. Bushe mula umfwa umwensu ukusembululwa? [ ]

1. Emukwai
2. Iyo mukwai

29. Nga mula umfwa umwensu, cinshi mutina? [ ]

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## APPENDIX VI. FOCUS GROUP DISCUSSION GUIDE

**Number of informants** \_\_\_\_\_

**Composition of informants** \_\_\_\_\_

**Language used during discussion** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Duration** \_\_\_\_\_

**Place:** \_\_\_\_\_

### INSTRUCTIONS

1. Welcome the participants
2. Introduce yourself and the recorder to the group. Ask participants to introduce themselves.
3. Get verbal consent from the group to continue with the discussion.
4. Explain the of the discussion
5. Assure the group of confidentiality
6. Give warm up questions to set the climate

**a) KNOWLEDGE ON MALE CIRCUMCISION**

1. What is male circumcision?
2. What are some of the reasons why male circumcision is done?
3. Is it possible for a circumcised male to contract HIV from an infected partner?
4. Is it possible for an infected circumcised male to transmit HIV during unprotected sex with the partner?
5. Do you know of any beliefs that may negatively influence the uptake of male circumcision?
6. Do you think male circumcision has any effect on sexual pleasure?
7. Where would you prefer to go and receive male circumcision services in case you need to undergo the procedure?
8. Are there complications that can arise as a result of male circumcision?

**b) UPTAKE OF MALE CIRCUMCISION**

1. Do you think male circumcision is common in your area?
2. Would you accept to be circumcised if it offers partial protection against HIV?
3. Would you recommend male circumcision to your relatives or friends?
4. What are the reasons that have made the uptake of male circumcision to be low in Mufulira?

**APPENDIX V. FOCUS GROUP DISCUSSION GUIDE  
(BEMBA VERSION)**

**Number of informants** \_\_\_\_\_

**Composition of informants** \_\_\_\_\_

**Language used during discussion** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Duration** \_\_\_\_\_

**Place:** \_\_\_\_\_

**INSTRUCTIONS**

7. Welcome the participants
8. Introduce yourself and the recorder to the group. Ask participants to introduce themselves.
9. Get verbal consent from the group to continue with the discussion.
10. Explain the aim of the discussion
11. Assure the group of confidentiality
12. Give warm up questions to set the climate

**(A) IFYO BAISHIBAPO PA KUSEMBULULA ABAUME**

1. Bushe ukusembulula umwaume ciplilibula nshi?
2. Bushe milandu nshi basembulwila abume?
3. Bushe umwaume uwa sembululwa kuti akwata akashishi ka        nga kumana no wakwata ukwabula ukubomfya umupila?
4. Bushe umwaume uwa sembululwa kuti atanda akashishi ka        nga kumana na namayo ukwabula ukubonfya umupila?
5. Mwalishibako intambi shimo ishilenga ukuti abaume belasembululwa?
6. Bushe mulatontokanya ukuti ukusembululwa kulalenga shitata ukukana sekelamo ukufikapo nga ba kumana na namayo?
7. Bushe nikwi mwingatemwa ukuya sembulwila nga cakuti mwafwaile ukucita ifi?
8. Bushe kuti kwaba ubusanso ubwanga fumamo mukusembululwa?

**(B) UKUSUMINA UKU SEMBULULWA**

1. Bushe ukusembulula caliba ica seeka uko mwikala?
2. Bushe kuti mwasumina ukusembululwa nga cakuti kuti kula cingililako ku kashishi ka HIV?
3. Bushe kuti mwakoselesha balupwa nangu abanenu ukuya sembululwa?
4. Bushe cinshi calenga ukuti impendwa ya abaume aba sembululwa icepe mu Mifulira?