AWARENESS, KNOWLEDGE, ATTITUDES AND UP-TAKE OF MALE CIRCUMCISION AS AN HIV PREVENTION STRATEGY AMONG YOUTH IN ZAMBIA: A CASE STUDY OF LUSAKA DISTRICT

By

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I, MILLION PHIRI hereby declare that this dissertation;

(a) Represents my work;

(b) Has not previously been submitted for a degree at this or any other University ; and

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Signed.....

Date.....

APPROVAL

The dissertation of **MILLION PHIRI** is approved as fulfilling part of the requirements for the award of the degree of **Master of Arts in Population Studies** by the University of Zambia.

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ABSTRACT

Scientific evidence has clearly shown that male circumcision reduces the risk of HIV infection-by providing partial protection in heterosexual men from contacting HIV by at least 60%.The UNAIDS 2009, reports that one of the key drivers of the HIV epidemic Southern Africa and in particularly in Zambia is the low levels of male circumcision rates among others. The 2007 Zambia Demographic and Health Survey indicated that only 11.4 % of the male youths were circumcised.

This study investigated factors underlying uptake of male circumcision as an HIV prevention strategy among the youth in selected Zambian communities. A systematic exploratory study was adopted to undertake this survey. Data was collected using both qualitative and quantitative methods. A total of 360 male youths aged 15-24 were randomly selected for interviews. Data processed and analysis was done using EPI-DATA and Statistical Package for Social Sciences Software (SPSS). Bivarriate analysis was performed to ascertain existence of relationships between variables.

Generally, knowledge levels on whether male circumcision can prevent acquisition of HIV are low amongst all respondents. The findings of the survey revealed despite awareness level of male circumcision being universal only 27.8% of the youths reported to have enough information about male circumcision. Less than half of the sample believed male circumcision can prevent infection of HIV in heterosexual men. Youths who preferred to remain uncircumcised were concerned about the pain to be felt during surgical procedure. It has also been noted that campaigns to promote male circumcision have not been effective in persuading most young people to take up male circumcision as they have failed to communicate factual information about the operation.

Findings indicate that even though male circumcision has been shown to reduce men's risk of becoming infected with HIV through heterosexual sex, few Zambian youths are aware of this prevention information. There is need to provide the people, particular young men, with adequate information on the health benefits, and risk-reduction related to male circumcision.

To my late sweet mum Winnie

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TABLE OF CONTENTS

LIST OF TABLES

APPENDICES

ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ART	Antiretroviral treatment
ARVs	Antiretroviral Drugs
CIDRZ	Centre for infectious Disease Research in Zambia
HIV	Human Immunodeficiency Virus
JPHIEGO	John Hopkins Program for International Education in Gynecology and Obstetrics
MC	Male Circumcision
MSI	Multimedia Services International
NAC	National HIV/AIDS Council
NGO	Non-Governmental Organization
PSI	Population Services International
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nation International Children Emergency Fund
VCT	Voluntary Counseling and Testing

CHAPTER ONE

BACKGROUND

1.0 INTRODUCTION

Since its discovery in the 1980s, the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have claimed over 20 million people around the world. Estimates indicate that about 38.6 million people were living with HIV in 2007, and of these, 24.5 million were in Sub-Saharan Africa. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), over 70% of the global total of HIV-positive people live in Sub-Saharan Africa. The adult prevalence rate in this region is about 9% when it is only 0.6% in the United States of America. (http://www.census.gov/ipc/www/p02.html). Further, the Joint United Nations Programme on AIDS (UNAIDS) and the World Health Organisation (WHO) recently estimated that nearly 3 million people died from the disease and about 2.7 million new infections were reported in the year 2008 alone even when the number of people living with HIV had reduced to about 33.4 million (http://www.hivandhe patitis.com/recent /2009). The Head of UNAIDS, Michele Sidebe recently revealed that since the pandemic broke out in the 1980s, 60 million people have been infected and 25 million have died (The Post Newspaper, March 30, 2010 P15).

By 2007, it was estimated that deaths from this pandemic had left about 13 million orphans worldwide, and among these, 12 million were in Sub-Saharan Africa. In addition, the large numbers of HIV infected and affected people overstretches the economies in most countries in the region. Deaths among teachers, for example, have left the education system devastated, while manufacturing and mining companies have seen significant deaths of productive laborers (http://www.enwikipedia.org/wiki/AIDS). In short, the impact of HIV/AIDS on societies especially those from the poor nations is

devastating and worsening the poverty situations in those nations. This complicates the whole issue of the pandemic since poverty is one of the major factors in spreading the disease.

Zambia, whose first AIDS case was reported in 1984, is one of the seven Sub-Saharan African countries with prevalence rate of over 10% of all the adult population aged 15-49. Within Sub-Saharan Africa, prevalence rates vary from one country to another. According to UNAIDS/WHO figures, seven countries, namely, Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia and Zimbabwe have a HIV prevalence rate of over 10% of all the adult population aged between 15 and 49 (www.census.gov.infor/idbnew.htm). As a result of HIV/AIDS, countries like Botswana and South Africa were projected to have a negative population growth by 2010 when the growth could have been well above zero in the absence of the HIV virus, while life expectancy in the most affected countries was projected to reduce to as low as 30 years by the same year (http://www.census.gov/ipe/www/idbnew.htm/).

In light of the devastating impact of the disease, efforts have been made in trying to find measures that can reduce its spread. Since there is no cure yet for HIV/AIDS, efforts and resources have been directed at measures to reduce the risk of infection and transmission of the HIV virus. Since the HIV virus is largely transmitted through sexual intercourse, emphasis has been on advocating and encouraging abstinence from sex, sticking to one equally faithful and uninfected partner, and, if these fail, consistent use of condoms. Like many other nations, the government of Zambia had, in the past, made efforts in trying to combat the spread of this incurable disease; these efforts included, among others, educational campaigns. Early campaigns involved distribution of pamphlets and posters warning people of the dangers of AIDS and

encouraging them to abstain. Condoms were also being advertised in both print and electronic media.

In the recent past, overwhelming scientific evidence, based on both observational and interventional studies, has demonstrated convincingly that male circumcision, which refers to the removal of the foreskin of the penis, and is common in many parts of the world, can, in addition to other health benefits, it confers among those who get circumcised, reduce men's risk of becoming infected with HIV through heterosexual sex by at least 60% (Plos Med, 2005). In fact, low male circumcision rates, together with multiple and concurrent sexual partners, low rates of condom use, untreated, especially ulcerating sexually-transmitted infections (STIs), denial, stigma and discrimination, socio-cultural practices and traditions, gender and sexual violence, high alcohol and drug abuse, cultural beliefs and low risk perception have been found to the major drivers of the HIV/AIDS epidemic in Zambia and elsewhere.

As a consequence of the proven efficacy of male circumcision in reducing HIV infection, and following the International AIDS conference in Toronto in 2006 which was organized by the International AIDS Society (IAS), and the plenary session on Male Circumcision, male circumcision has become an additional public health strategy in the fight against HIV particularly in Sub-Saharan Africa. The international AIDS conference is a biannual conference aimed at bringing key stakeholders world-wide to discuss strategies and challenges in the fight against HIV and AIDS. Governments and other stakeholders are seriously trying to find ways and means of integrating male circumcision services in national HIV programmes and, increasingly, there have been

calls for more research on factors affecting male circumcision uptake, especially among youths in Sub-Sahara Africa.

1.1 STATEMENT OF THE PROBLEM

Youths constitute a large proportion of the population world over. According to the United Nations, World Population Prospects, 2007, about 1 out of 5 (20.4%) of Africa's population comprising youths aged 15-24. The pattern is the same in Zambia where this age group constitutes 20 percent of the entire population. Studies have shown that the youth are the most vulnerable to HIV infection due to their sexual behaviours. In Zambia, 6.7% of the youths were reported to be infected with the deadly human immunodeficiency virus. (CSO, MOH, TDRC, UNZA & Macro International Inc, 2009).

The 2009 Zambia Sexual Behavior Survey results revealed that the median age at first sex for males (15-24) is 19.5 years. Fifty one percent of the young males reported being sexually active. Of these, just about 39% reported using a condom the first time they had sex while only 30.7% reported using a condom with the most recent partner. Fifteen percent reported having more than one sexual partner. Less than a quarter of the youths who had multiple and concurrent partnerships reported using a condom during their last sexual intercourse. These statistics clearly show that young people in Zambia are at great risk of HIV infection.

In the recent past, studies have shown that male circumcision (the removal of the foreskin of the penis), can significantly reduce the risk of HIV infection in men.

Notwithstanding the proven efficacy of male circumcision in the prevention of HIV transmission in heterosexual men, the 2007 Zambia Demographic and Health Survey indicated that only 11.4 % of the male youths were circumcised in Zambia. The 2009 Zambia Sexual Behaviour Survey findings indicate that, overall, 78 % of uncircumcised adolescents age 15-19 and 74 % of uncircumcised youths aged 20-24 reported they were not willing to be circumcised. (CSO, MOH, TDRC, UNZA & Macro International Inc, 2009).

Zambia has recognised the significant (although partial) HIV protection from male circumcision, and because of this, the country, in partnership with other stakeholders, has embarked on campaigns to scale up male circumcision as one of the strategies to reduce HIV infection. So far, there is little evidence of any serious research having been done to investigate knowledge, attitudes and circumcision uptake among the youths in Zambia. Undeniably, some attempts have been made to investigate a number of issues pertaining to male circumcision. However, the limited research (e.g. Kalonga 2010, Chayinda 2010) that has been carried out has tended to focus mainly on adult males to the unexplained exclusion of young people who are among the most affected groups by the HIV pandemic. This is a serious gap that needs to be urgently addressed in order to come up with evidence-based and scientifically derived information to inform policy and interventions aimed at increasing male circumcision uptake especially among the young people. This is the gap this study was designed to bridge.

1.2 RESEARCH OBJECTIVES

1.2.1 General Objective

The general objective of this study was to investigate awareness, knowledge, attitudes and uptake of Male Circumcision as an HIV Prevention Method among the Youth in Zambia.

1.2.2 Specific Objectives

In order to address this general objective, the study specifically examined, among others:

1. Awareness of male circumcision and sources of information about the operation among youths
2. Knowledge of, and attitudes towards male circumcision as an HIV prevention method
3. Exposure to, and attitudes towards male circumcision advocacy messages
4. Uptake (acceptability) of male circumcision among the study population

1.2.3 Research questions

1. To what extent are the youths aware of male circumcision?
2. To what extent are the youths aware about the protective function of male circumcision against HIV?
3. To what extent have the youths been exposed to advocacy messages on male circumcision?

4. What is level of uptake (acceptability) of male circumcision among the study population?

1.3 RATIONALE OF THE STUDY

The efficacy of male circumcision and its high cost-effectiveness in the face of a persistent heterosexual HIV epidemic has already been proven beyond dispute and therefore argues overwhelmingly for its immediate and rapid adoption, especially in high HIV–prevalence settings like Zambia. This is particularly important given the limited success of existing prevention strategies in the face of the still growing epidemic. However, any intervention, and this includes, circumcision, is unlikely to be adopted unless it is known and acceptable by those being targeted (Mitchell *et al*, 2002). Because of this, it is imperative to assess, not only the knowledge and attitudes but also the factors underlying knowledge and attitudes among the targeted population. This study was therefore important in that it sought to investigate possible determinants of low rates of male circumcision among the youth by examining their knowledge, attitudes and perceptions regarding male circumcision which is one of the proven effective strategies currently available that can be adopted in order to reduce HIV infections.

It is hoped that the research-based findings that this study provides, will not only contribute to the existing body of knowledge and provoke further research on the subject but useful to organizations, the Government of Zambia, and other advocates of male circumcision in their quest to come up with effective policies, programmes, interventions and strategies that will effectively stem the current unacceptable levels of HIV infections.

CHAPTER TWO

LITERATURE REVIEW

2.0 Observational studies

That male circumcision reduces the chances of HIV transmission is now almost beyond dispute. The issue has been researched and supported by many observational as well as interventional studies in different parts of the world. Evidence for the effect of male circumcision on reducing HIV acquisition in men has accumulated since the emergence of the HIV epidemic. Observational studies have demonstrated that the geographical regions in Sub-Saharan Africa where men are more commonly circumcised overlap with areas of lower HIV prevalence. The Joint United Nations Programme on HIV/AIDS (UNAIDS) sponsored an ecological study involving 188 developing countries to investigate possible association between male circumcision and the prevalence of HIV. Findings showed that in Sub-Saharan Africa, HIV prevalence was higher (16.5%) among countries with low male circumcision compared to 3.0% among

nations with high male circumcision prevalence (http://www.biomedicentral.com/147-2334/6/172).

An extensive study by the Joint United Nations Programme on HIV/AIDS (UNAIDS) investigated behavioural and other factors that could account for the large disparities in HIV prevalence across different African regions (Dickson *et al*, 2009). A low prevalence of male circumcision emerged as the principal determinant of the differences in HIV rates. Research has shown that prevalence of HIV infection in a number of countries with low or high rates of male circumcision varies. Countries in Sub-Saharan Africa where male circumcision is common (>80%) generally have HIV prevalence levels well below those of countries where circumcision is less common (<20%), despite the presence of other risk factors for heterosexual HIV transmission, such as high frequency of multiple sexual partners, low rates of condom use and high prevalence of other STIs. HIV prevalence in the countries of South and South-East Asia where nearly all men are circumcised (Bangladesh, Indonesia, Pakistan, Philippines) remains extremely low, despite patterns of risk factors for HIV and other STIs similar to those found elsewhere in the region (WHO/UNAIDS, 2007)

The causal association between male circumcision and HIV infection has been confirmed by three large randomized, controlled trials (RCTs) conducted in South Africa, Kenya and Uganda (Plos Med 2005). The trials found that male circumcision provides a 50–60% reduction in the infection of HIV in circumcised men. A fourth RCT examining the safety of male circumcision among predominantly HIV-infected men, and effects of male circumcision on sexually transmitted infections (STIs) and sexual partners, has extended the available data of the effects of male circumcision. (Wawer MJ et al, 2009)

The World Health Organization (WHO; 2007), the Joint United Nations Programme on HIV/AIDS (UNAIDS; 2007), and the Center for Disease Control and Prevention (CDC; 2008) state that evidence indicates that male circumcision significantly reduces the risk of HIV infection by men during penile-vaginal sex. A systematic review and meta-analysis of 28 published studies found that uncircumcised men are 2–3 times more likely to be infected with HIV than circumcised men, with the difference being most pronounced in men with high exposure to HIV infection. A sub-analysis of 10 African studies, involving men considered to be at high risk of becoming infected, found a 3.4 times higher incidence of HIV infection among those who had not been circumcised (Wawer MJ *et al*, 2009). In a prospective study in Uganda of HIV-negative men whose partners were HIV-positive, none of 50 circumcised men became infected within two years, compared with 40 of 137 uncircumcised men (Bailey RC et al, 2007)

The Orange Farm Intervention Trial in South Africa, the first ever randomized controlled trial of male circumcision as a means of preventing HIV infection was conducted in 2005. The results were made public in July 2005 and subsequently published in November the same year. The study involved a total of 3,274 uninfected men, aged 18–24 years, who were randomly assigned to undergo circumcision either immediately or after 21 months. The incidence of HIV infection was found to be 60% lower among those who were circumcised. On the strength of these results, the Independent Data Monitoring Committee recommended that the men initially assigned to the delayed circumcision group should be offered the procedure, without waiting the full 21 months.

Two further trials on male circumcision and HIV infection were stopped in December 2006 and published in early 2007. Both trials involved random allocation of HIV-negative volunteers to either immediate circumcision, performed by trained medical

professionals in a clinic setting (intervention group), or circumcision delayed for 2 years (control group). The first trial, in Kisumu, western Kenya, was conducted among men aged 18–24 years, and showed a 53% reduction in HIV incidence. The second study was conducted in Rakai, Uganda, among men aged 15–49 years, and showed a 51% reduction in HIV incidence (Freeman EE et al, 2006). Following release of the study results, circumcision was offered without further delay to the men in both non-intervention groups.

In 2005, Auvert Talgaard and his colleagues presented the results of their randomised controlled trial on efficacy of male circumcision to prevent HIV transmission. They concluded that male circumcision reduced the risk of HIV infection by 60%. The trail confirmed observational studies which came to the same results.

A 1986 study in Zambia carried out by the University of Zambia School of Medicine also concluded that "the people at greater risk of acquiring HIV in Zambia appear to be uncircumcised men who are frequently infected by STI pathogens." (http://www.medguide.org.zm/aidsbibl/std.htm.).

Studies outside Africa have also come up with similar findings on the protective function of circumcision against female-to male HIV transmission. For example, in New Zealand, a group of researchers evaluated data from a 25 year longitudinal birth cohort study to find out the relationship between male circumcision and the risk of STIs. The data points were circumcision status before the age of 15, and self-reported sexually transmitted diseases and the risk of STIs from ages of 18 to 25 years. This birth cohort consisted of 1,265 children born in an urban area in the mid of 1977. Of these 1,265, which was the target group, 510 males whose status on both circumcision and sexually transmitted infections was known, was the one that was considered.

Circumcision status was known by the help of parents and also the review of medical charts. Of the 510, thirty percent (154) were circumcised and seventy percent (356) were uncircumcised. At the age of 21, the individuals were asked if they suffered from any sexually transmitted diseases since the age of 18. At the age of 25, they were asked if they suffered from any sexually transmitted disease since the age of 21. Results indicated that 2.7% (14) STIs were reported at age of 21 and 6.6% (34) were reported at the age of 25.This gave a total number of 48 cases. Out of these, 7 cases (which is 4.5% of the 154 men) were from circumcised men while 41 cases (which is 11.5 of the 356 men) were from uncircumcised men. On the basis of these findings, it was concluded thus:

> "*Uncircumcised men are at greater risk of acquiring Sexually Transmitted Infections than circumcised males and that circumcision may reduce the risk of STI by one-half, suggesting that substantial benefits accrue from circumcision"(http://www.aaprandrounds.appublications.org/cgi/rjinkType=ABST&Journal code/118/5/1971).*

In India, a team of researchers carried out a study to investigate risk factors for HIV-1 infection among men attending STD clinics. Between 1993 and 2000, a total of 2,298 men who tested negative for HIV-1 were enrolled in the study. During subsequent visits, fewer circumcised than uncircumcised men tested positive for HIV". (http://www.aidsmap.com/news/newsdisplay2.asp?/newsld=2350). The group therefore concluded that uncircumcised men had an eight fold risk of HIV infection compared to the circumcised men.

The above and other findings caused great excitement among HIV experts, and led UNAIDS and the World Health Organization (WHO) to recommend circumcision as an

important new element of HIV prevention. Consequently, male circumcision has been recognized and accepted as an important intervention and is increasingly being incorporated into national HIV prevention programmes among Eastern and Southern African countries especially in settings where HIV prevalence is high and the prevalence of circumcision is low. Zambia is one of the countries in Southern Africa leading the region in the roll-out of adult male circumcision.

2.1 CONCEPTUAL FRAMEWORK AND HYPOTHESES

2.1.1 Social Acceptance Theory

Arising out of the socio-psychological tradition, Social Acceptance Theory is a theory that focuses on the internal processes of an individual's judgment or decision making with relation to a communicated message. Social Acceptance Theory was intended to be an explanatory method designed to detail when persuasive messages are most likely to succeed. Attitude change is the fundamental objective of persuasive communication. Social Acceptance Theory seeks to specify the conditions under which this change takes place and predict the direction and extent of the attitude change. In sum, the researchers strove to develop a theory that addressed the following: a person's likelihood to change his position based on the information he has received, the likely direction of his attitude change, a person's tolerance of other positions, and the level of commitment to his own position (Sherif, & Nebergall, 1965). The Social acceptance theory researchers claim that expectations regarding attitude change could be based on the message individuals have received and the value (credibility) of the source of that message. This theory is appropriate in explaining low levels of male circumcision uptake among the youths.

2.1.2 STATEMENT OF HYPOTHESES

1. Inadequate knowledge about MC HIV prevention capability negatively affect attitude and uptake of MC among the youth.

2. Information deprivation deters adoption of effective methods for HIV prevention

CHAPTER THREE

METHODOLOGY

3.0 Study Design

The adopted study design was purely a post-test non-experimental design which employed an exploratory investigation. This was for the simple reason that it was conducted in an uncontrolled and natural setting. There was no control group in the research. A survey approach was employed to solicit information from respondents pertaining to acceptability and utilization of male circumcision as an HIV prevention strategy amongst youths in Lusaka.

3.1 Population Definition

The study population was drawn from three (3) townships in Lusaka district. The sampling unit was a youth aged between 15 – 24 years living in a particular survey area at the time of the survey. The population included three townships that is; one high density (Chawama), one medium density (Libala) and one low density (Kalundu) which were purposively selected. The townships were selected based on considerations that male circumcision intervention programmes where in present in these areas. The townships were also easily accessible to the researcher.

3.2 Sample Description

Since it was not feasible to include all the townships and all youths in the study, a representative sample was used. The youths were randomly selected from these communities. In each residential area a total of 120 households were selected. In each household a male youth age 15-24 was selected for interviews. A total of 360 male youths were interviewed

3.3 Sampling of Survey Sites

Three townships were selected based on certain considerations. The townships, were stratified in terms of population densities. One township in each category was selected. In each of the three townships households were selected using circular systematic sampling. A youth was identified for an interview from each selected household. If the selected household had no male youth aged (15-24) at that particular time a replacement was made using the sampling interval to select another household with a male youth.

3.4 Collection of data

Quantitative data was collected using semi-structured instruments. In order to complement the quantitative data that was obtained using semi-structured questionnaires, qualitative data was also obtained through focus group discussions. Two Focused Group Discussions (FGDs) were conducted in each of the selected township with the youths.

3.5 Data processing and Analysis

The data collected using semi-structured questionnaires were checked for uniformity, consistency and accuracy. Quantitative data were processed using Epi-data 3.10 software. This program was ideal for quantitative data since it has an advantage over other program in that it permits skip instructions for filter questions. Data validation was performed on at least 10% of the questionnaires entered. This was done using a double data entry system. The raw data was exported to the Statistical Package for Social Sciences Software (SPSS) via a data entry query for analysis. Frequency tables and cross tabulations were produced. Bivarriate analysis was performed on certain variables to establish existence of relationships. Contingency tables were used to

facilitate presentation of findings. Qualitative data obtained from focus group discussions was transcribed and then manually analyzed using themes.

3.6 Ethical Consideration

The study ensured that all information collected remained in privacy. Anonymity was taken into account by not disclosing names. The study also obtained informed consent from the informants.

3.7 Study Limitations

Since the study was conducted in only three townships out of all the available townships in Lusaka district the sample selected was not big enough to represent the entire population.

CHAPTER FOUR

FINDINGS

4.0 Demographic and socio-economic characteristics of respondents

A total of 360 male youths, equally distributed among the three study sites, were captured in the survey and Table 4.1 provides a summary of some of their demographic and socio-economic characteristics which included; age, marital status, education attainment, educational status and employment status.

Generally, majority of the youth were adolescents aged 15-19 (62.2%), unemployed (94.7%), and single (93.0%), at the time of the survey. The proportion unemployed ranged from 96.6% in Chawama to 95% and 92.5% in Libala and Kalundu, respectively indicating low levels of employment among the study population.

In terms of education, most of the respondents had attained either secondary (80.9%) or tertiary (15.9%) level of education. The proportions of respondents with either secondary or tertiary education ranged from 91.8% in Chawama, 98.4% in Libala to 100% in Kalundu. The latter had the highest (39.2%) proportion of respondents with tertiary but the least (60.8%) with secondary level of education. No single respondent from both Kalundu and Libala and only 5.7% among respondents from Chawama had never been to school. Overall, only 3.3% had either never been to school (1.9%) or had only completed primary level of education (1.4%).

The distribution of respondents by religious denomination reveals that a larger proportion (40%) of the youth belonged to the Protestant denomination while those claiming affiliation to the Catholic and Pentecostal denominations accounted for 27.2 percent and 26.1 percent, respectively.

Table 4.1: Percentage distribution of respondents by demographic characteristics according to residence

	Residence			
	Chawama	Libala	Kalundu	Total
Characteristics	(%)	(%)	(%)	**(%)**
Age				
15 – 19	72.5	70	44.2	62.2
20 – 24	27.5	30	55.8	37.8
Number	**120**	**120**	**120**	360
Total	**100**	**100**	**100**	100
Marital Status				
Never married	86.8	100	95	93.9
Married/Living together	13.2	0	5	6.1
Number	**120**	**120**	**120**	360
Total	**100**	**100**	**100**	100
Employment status				
Unemployed	96.6	95	92.5	94.7
Formal employment	0	3.3	5	2.8
Informal employment	3.3	1.6	2.5	2.5
Number	**120**	**120**	**120**	360
Total	**100**	**100**	**100**	100
Educational level				
No education	5.7	0	0	1.9
Primary	2.5	1.7	0	1.4
Secondary	90.1	91.7	60.8	80.9
Tertiary	1.7	6.7	39.2	15.9
Number	**120**	**120**	**120**	360
Total	**100**	**100**	**100**	100
Religious denomination				
Catholic	31.7	24.2	25.8	27.2
Protestant	44.2	36.7	40	40.3
Pentecostal	20.8	27.5	30	26.1
Islam	0	0	1.7	1.1
Other	3.3	11.7	2.5	5.3
Number	**120**	**120**	**120**	360
Total	**100**	**100**	**100**	100

4.1 Awareness of Male Circumcision

Awareness of male circumcision is very important for individuals who would want to make a decision to get circumcised as well as those who would want to recommend male relatives to get circumcised. Information on awareness of male circumcision was collected by asking respondents to indicate whether or not they (a) had heard about male circumcision, (b) thought the information on male circumcision was readily available in their communities (c) thought the information available in the community was adequate and, (c) had heard about male circumcision as an HIV prevention method. Responses to these questions are presented in Table 4.2.

Table 4.2:Count and Percent distribution of respondents awareness of MC by selected socio-economic and demographic characteristics

Background Characteristic	Ever heard of MC	Have enough information about male circumcision	MC information is readily available	Ever heard of male circumcision as an HIV prevention method
Residence				
Chawama	110 (91.7)	25 (21.6)	75 (64.1)	78 (65.0)
Libala	118 (98.3)	28 (23.3)	52 (45.6)	88 (73.3)
Kalundu	120 (100)	47 (39.2)	79 (67.5)	92 (76.7)
Age				
15 – 19	216 (98.2)	43 (19.5)	119 (54.8)	156 (70.9)
20 – 24	132 (97.1)	57 (41.9)	87 (66.4)	102 (75.0)
Education				
Primary	8 (88.9)	1 (12.5)	3 (33.3)	2 (25.0)
Secondary	287 (97.6)	77 (26.5)	165 (23.5)	207 (71.1)
Tertiary	56 (98.2)	22 (38.5)	38 (64.3)	49 (85.9)
Educational status				
In-School	303 (97.4)	89 (28.7)	175 (58.1)	231 (74.5)
Out-of School	46 (100)	11 (23.9)	31 (65.9)	27 (58.7)
Religious Denomination				
Catholic	96 (100)	21 (20.8)	65 (66.3)	67 (68.4)
Protestant	139 (97.2)	56 (39.2)	91 (62.3)	99 (68.3)
Pentecostal	92 (97.8)	22 (21.8)	40 (42.6)	81 (86.2)
Islam	4 (100)	1 (25.0)	4 (100)	4 (100)
Total	**348 (96.7)**	**100 (27.8)**	**206 (57.2)**	**258 (71.7)**

Findings presented in Table 4.2 clearly show that awareness of male circumcision was universal or almost universal among the youths in all the study sites (100% in Kalundu, 91.7% in Chawama and 98.3% in Libala), among youths belonging to different

religious denominations (100% among both the Catholics and Muslims and 97.2% among the youths who belonged to the protestant denomination. Although comparatively lower (88.9%) among those with primary education, awareness of male circumcision was also almost universal among those with secondary education (97.6%) as well as among those with tertiary education (98.2%) suggesting the possible influence of education on circumcision awareness. Notwithstanding the large proportion of youths who reported having heard about male circumcision, just about 57% indicated that information on male circumcision was easily available in their communities and only about 28% considered themselves to have enough information about the operation.

4.2 Knowledge of Male Circumcision as an HIV prevention Method

Knowledge that male circumcision offers protection against HIV infection is cardinal for people to make an informed decision on whether or not to undergo the operation. An encouraging and important finding from this study (Table 4.2) is that more than 7 out of 10 (71.7%) of the youths in this study had heard that male circumcision was an HIV prevention method. Worth highlighting from the results in Table 4.2 is the fact that knowledge that male circumcision is an HIV prevention method not only varied by educational status (58.7%% among the out-of school youths and 74.5% among the in-school youths but also increased with level of education attained from just 25% among those with primary education to 71.1% and 85.9% among those with secondary and tertiary level of education, respectively.

4.3 Attitudes towards Male Circumcision as an HIV prevention method

Although majority of the youths indicated having heard about male circumcision as an HIV prevention method, relatively very few seem to believe this. This is evident from the responses to two related follow up questions which required respondents to indicate

whether or not they actually believed that male circumcision can prevent HIV and that circumcised men have lesser risk of contracting the HIV virus.

The results, presented in Table 4.3 show that, less than half (44.4%) of the youths interviewed believed that male circumcision can prevent HIV infection. Only slightly more than half (54.2%) believed that men who are circumcised are at lesser risk of contracting HIV.

Table 4.3: Count and Percent distribution of respondents who believe MC can prevent HIV, and those who believe that circumcised men have lesser risk of contracting HIV by selected socio-economic and demographic characteristics

Background Characteristic	Believe MC can prevent HIV transmission	Circumcised men have lesser risk of contracting HIV
Residence		
Chawama	59 (49.2)	46 (47.4)
Libala	52 (43.3)	59 (56.7)
Kalundu	49 (50.8)	58 (58.0)
Age		
15 – 19	112 (51.6)	101 (51.5)
20 – 24	48 (36.6)	62 (59.0)
Education		
Primary	3 (33.3)	3 (37.5)
Secondary	135 (47.5)	131 (52.0)
Tertiary	22 (40.0)	29 (70.7)
Educational status		
In-School	139 (46.2)	146 (55.5)
Out-of School	21 (44.7)	17 (44.7)
Total	**160 (44.4)**	**163 (54.2)**

The findings also reveal that youths in the younger age group 15-19 (51.6%) appear more likely to believe in the HIV prevention effects of circumcision than those in the older age group 20-24 (36.6%). Slightly more of the in-school youths than those out of school (46.2% versus 44.7%) believed that male circumcision can prevent acquisition of HIV in heterosexual men.

Results presented in table 4.3 show that education was a determinant of youths' attitude of male circumcision HIV prevention ability. Analysis of attitude towards male circumcision prevention ability among the youth classified by education reveals that

youths with tertiary education (70.7%) were more knowledgeable that circumcised men have a reduced risk of contracting HIV during sexual intercourse compared to those with secondary and primary education (52%) and (37.5%) respectively.

Similarly, the results indicate that (55.5% versus 44.7%) of in-school youths and out of school youths respectively believed that circumcised men have a lesser risk of contracting HIV. This represents a 10.8 percentage point difference between youths in school and those out of school youths in terms of attitude towards male circumcision.

4.4 Initial Sources of information about Male Circumcision

Responses to the question on the first source of information about male circumcision are presented in Table 4.4.

The common sources of information on male circumcision frequently cited by the study participants were friends (26.4%), parents (20.8%), health centers (13.3%) and teachers (12.2%). Interestingly, the most widespread channels (i.e. radio and television) of information communication were mentioned by only 10.6% of the study participants (mostly among Kalundu residents, those with tertiary education and among the in-school youths) as their initial sources of information about male circumcision.

Table 4.4 Count and Percent distribution of respondents by first source of information about male circumcision by selected background characteristics

Background Characteristic	Parents/ Relatives	Teacher	Health centre	Television/ Radio	Friends	Others	Total
Residence							
Chawama	33 (27.5)	10 (8.3)	25 (20.8)	7 (5.8)	30 (25)	15 (12.5)	**120 (100)**
Libala	20 (16.7)	17 (14.2)	10 (8.3)	20 (16.7)	35 (29.5)	18 (15.0)	**120 (100)**
Kalundu	22 (18.3)	17 (14.2)	13 (10.8)	18 (19.5)	30 (25.0)	15 (12.5)	**120 (100)**
Age							
15 – 19	50 (22.3)	30 (13.4)	20 (8.9)	30 (13.4)	62 (27.7)	32 (14.3)	**224 (100)**
20 – 24	25 (18.4)	14 (10.3)	28 (20.6)	20 (14.7)	33 (24.3)	16 (11.8)	**136 (100)**
Education							
Primary	2 (22.2)	3 (33.3)	3 (33.3)	0	1 (11.1)	0	**9 (100)**
Secondary	60 (20.4)	31 (10.5)	38 (12.9)	41 (13.9)	83 (28.2)	41 (13.9)	**294 (100)**
Tertiary	13 (22.8)	10 (17.5)	7 (12.3)	9 (15.8)	11 (19.3)	7 (12.3)	**57 (100)**
Educational status							
In-School	67 (21.5)	35 (11.3)	38 (12.2)	49 (18.7)	81 (26.0)	41 (14.1)	**311 (100)**
Out-of School	8 (16.3)	9 (18.4)	10 (20.4)	1 (2.0)	14 (28.6)	7 (14.3)	**49 (100)**
Total	**75 (20.8)**	**44 (12.2)**	**48 (13.3)**	**38 (10.6)**	**95 (26.4)**	**60 (16.7)**	**360 (100)**

4.5 Exposure to Advocacy messages

Advocacy is one of the means used to influence positive behavioural change in the AIDS response. Some NGOs in Zambia have taken it upon themselves and have been very instrumental in advocating male circumcision as an HIV prevention strategy. Notable among these include; Planned Parenthood Association of Zambia (PPAZ), Society for Family Health (SFH) and Zambia Prevention, Care, Treatment and Control (ZPCTC). Different channels, including the mass media, are used to communicate information about, and advocate male circumcision as a complementary HIV prevention strategy. Information on awareness of or exposure to advocacy messages on male circumcision is presented in Table 4.5.

As is the case with awareness of male circumcision, the proportions of respondents reporting having seen/heard advocacy messages on male circumcision increased with the level of education from just 33.3% among those with primary education to 71.1% and 85.6% among those with secondary and tertiary education, respectively.

Table 4.5: Count and Per cent distribution of respondents awareness of male circumcision advocacy messages by selected socio-economic and demographic characteristics

Background Characteristic	Count	Percent
Residence		
Chawama	58	48.3
Libala	91	75.8
Kalundu	112	93.3
Age		
15 – 19	155	69.2
20 – 24	106	77.9
Education		
Primary	3	33.3
Secondary	209	71.1
Tertiary	49	85.6
Educational status		
In-School	226	72.7
Out-of School	35	71.4
Total	**261**	**72.5**

4.6 Awareness of Advocacy messages

Overall, approximately 72.5% of the youth reported to have ever seen messages advocating male circumcision. Disaggregated by residence, Kalundu had the highest (93.3%) proportion of youths who indicated having ever seen/heard male circumcision advocacy messages, followed by respondents from Libala (75.8%). Respondents from Chawama (48.3%) were the least likely to report having been exposed to advocacy messages on male circumcision.

4.7 Sources of Advocacy messages

Respondents who indicated they had ever seen messages advocating male circumcision were then asked to mention the channels through which such messages were received. The information presented in Table 4.6 indicates that radio and television combined (69.7%), Health centers (61.3%) and Non Governmental Organizations (NGOs), (50.3%) were the most frequently cited sources of advocacy messages. Another source that was cited by close to half (49.4%) of the respondents were magazines. Less than 4 out of 10 (39.1%) reported having seen male circumcision advocacy messages in newspapers. This suggests either that the youth do not frequently read newspaper or that newspapers rarely carry information on male circumcision. Bill boards, which are also an important avenue for promoting circumcision uptake, was cited by only 23% of the respondents.

Table 4.6: Count and Percent distribution of respondents' source of MC advocacy messages by selected socio-economic and demographic characteristics.

Background Characteristic	Billboards	TV/Radio	News papers	Magazines	Health centres	NGOs
Residence						
Chawama	3 (5.2)	33 (56.9)	20 (34.5)	18 (31.0)	38 (65.5)	15 (25.9)
Libala	14 (15.4)	64 (70.3)	35 (38.5)	40 (44.0)	46 (50.5)	34 (37.4)
Kalundu	43 (38.4)	85 (75.9)	47 (42.0)	71 (63.6)	76 (67.9)	82 (73.5)
Age						
15 – 19	35 (22.6)	114 (73.5)	65 (41.9)	68 (43.8)	86 (55.5)	62 (40.1)
20 – 24	25 (23.6)	68 (64.2)	37 (34.9)	52 (57.6)	74 (69.8)	69 (57.0)
Education						
Primary	0	1 (33.3)	2 (66.7)	2 (66.7)	2 (66.7)	2 (66.7)
Secondary	45 (21.5)	146 (69.9)	80 (38.3)	88 (42.1)	118 (56.5)	78 (37.4)
Tertiary	15 (30.6)	35 (71.4)	20 (40.8)	40 (81.6)	40 (81.6)	51 (89.5)
Educational status						
In-School	32 (22.6)	114 (73.5)	65 (41.9)	68 (43.8)	86 (55.5)	62 (40.1)
Out-of School	25 (23.6)	68 (64.2)	37 (34.9)	61 (57.6)	74 (69.8)	69 (65.1)
Total	60 (23.0)	182 (69.7)	102 (39.1)	129 (49.4)	160 (61.3)	131 (50.3)

Further scrutiny of the data in Table 4.6 strongly suggests that exposure to the most widely available channels for information communication (e.g. radio and television)

was closely associated with one's residence and level of education: More youths with tertiary education (71.4%), and those from Kalundu (75.9%) were more likely to cite these as channels through which they were exposed to information advocating male circumcision compared to their counterparts from other study sites (70.3% from Libala and 56.9% from Chawama). The corresponding promotions with regard to level of education attained were 33.3% among those with primary education and 69.9% among those with secondary education. The results do not show any significant differences in relation to education level and citing television or radio as major sources of advocacy messages.

With regard to age more younger youths 73.5% (15-19) compared to 64.2% of the older youth (20-24) reported radio and television as their sources advocacy messages. However, the percentage differences were not significant ($p>0.05$). A closer examination of age and source of advocacy messages indicate that older youth 20-24 (69.8%) were more likely to report health centres as sources of advocacy messages than their younger counterparts (15-19) (55.5%) $p<0.05$).

Other avenues through which respondents reportedly received advocacy messages about male circumcision are reflected in the following extracts from focus group discussions:

a. *"I have attended a workshop on benefits of male circumcision; we were given materials to read which I have been reading to understand how male circumcision can reduce chances of HIV transmission in heterosexual men".*

b. *"I have been exposed to so much literature about male circumcision related issues during training for peer education which I have attended".*

c. *"I have researched on male circumcision information on internet so that I can understand more".*

c. *"I do attend health talks on MC at the nearest clinic and also listen to PPAZ health radio programmes which are aired on radio stations".*

d. *"I was a member of PPAZ youth club at secondary school where we were taught about the possibility of MC in reducing HIV and STI transmission in circumcised men".*

e. *"I have visited health centres to collect brochure about male circumcision information and also listen to talks by health workers on advocacy for male circumcision in the fight against HIV pandemic. After receiving the information I decided to undergo circumcision".*

4.8 Attitudes towards advocacy messages

The findings in Table 4.7 show that less than half (45.6%) of respondents who indicated having been exposed to advocacy messages on male circumcision indicated that they were satisfied with the messages they had been exposed to.

Most of the youths who reported to have been satisfied with advocacy messages, 52.8% were in the age group 20-24 while 46.4% were in-school youths and half (50.%) where from Kalundu.

Table 4.7: Count and Percent distribution of respondents awareness and attitude towards male circumcision advocacy by selected socio-economic and demographic characteristics

Background Characteristic	Were satisfied with advocacy message	Prompted by advocacy message to undergo circumcision	Set up appointment for MC
Residence			
Chawama	25 (43.1)	22 (37.9)	10 (15.2)
Libala	37 (40.7)	28 (30.8)	3 (3.3)
Kalundu	57 (50.9)	41 (36.6)	3 (2.9)
Age			
15 – 19	63 (40.6)	44 (28.4)	8 (5.2)
20 – 24	56 (52.8)	47 (44.3)	8 (7.8)
Education			
Primary	2 (66.6)	2 (66.7)	0
Secondary	93 (44.5)	72 (34.4)	15 (7.6)
Tertiary	24 (48.9)	17 (34.7)	1 (2.0)
Educational status			
In-School	105 (46.4)	81 (35.8)	15 (6.8)
Out-of School	14 (40.0)	10 (28.6)	1 (2.8)
Total	**119 (45.6)**	**91 (34.9)**	**16 (4.4)**

The findings indicate that more of the older youths those aged 20-24 (44.3%) than those in the age range 15-19 (28.4%) were likely to report being prompted by undergo circumcision after receiving advocacy messages ($p<0.05$). It must be well noted, however, that were no significant differences in the proportions of in-school youths and out-of school youths who indicated to have been prompted to undergo circumcision by advocacy messages ($p>0.05$).

Probably as a result of the low satisfaction with advocacy messages, only about 35% (34.9%) were prompted to undergo the operation and consequently only 4.4% of them set up an appointment for the operation. This clearly shows that male circumcision

advocacy messages have not been persuasive to convince a greater proportion of the youth to access the service.

4.9 Circumcision status (uptake)

Given the high numbers of respondents who had heard about male circumcision both as a medical operation and a method of HIV prevention as well as those who had been exposed to advocacy messages, it was expected that equally high numbers were going to report having been circumcised. However, this was not the case as shown in Table 4.8.

Of the total sample, only 16.5% (n=59) indicated that they had been circumcised. Muslims, those aged 20-24, and those with tertiary education as well as those from Chawama were more likely to report having been circumcised. The proportion of respondents reporting having been circumcised increased with the level of education from 11.1% to14.3% and 28.1% among those with primary, secondary and tertiary level of education, respectively.

Table 4.8: Count and Percent distribution of respondents who have been reported circumcised by selected socio-economic and demographic characteristics

Background Characteristic	Count	Percent
Residence		
Chawama	23	19.2
Libala	16	13.3
Kalundu	20	16.7
Age		
15 – 19	28	12.5
20 – 24	31	22.8
Education		

Primary	1	11.1
Secondary	42	14.3
Tertiary	16	28.1
Educational status		
In-School	48	15.4
Out-of School	11	22.4
Religious Denomination		
Catholic	21	21.9
Protestant	22	15.4
Pentecostal	12	12.8
Islam	4	100
Total	**59**	**16.4**

4.10 Reasons for undergoing circumcision

Youth who reported to have been circumcised were asked to indicate the main reason for their decision to get circumcised (Table 4.9).

Table 4.9: Count and Percent distribution of respondents main reason for being circumcised by selected socio-economic and demographic characteristics

Background Characteristic	Health/ Hygiene	Sexual satisfaction	Protection from HIV	Protection from STIs	Traditional/ cultural values	Religious beliefs
Residence						
Chawama	8 (34.8)	0	4 (17.4)	1 (4.3)	7 (30.4)	3 (13.1)
Libala	9 (56.3)	1 (6.3)	1 (6.3)	2 (12.5)	1 (6.3)	2 (12.5)
Kalundu	9 (45.0)	2 (10.0)	4 (20.0)	2 (10.0)	2 (10.0)	1 (5.0)
Age						
15 – 19	10 (35.7)	0	3 (10.7)	3 (10.7)	7 (25)	5 (17.9)
20 – 24	16 (51.6)	3 (9.7)	6 (19.4)	2 (6.4)	3 (9.7)	1 (3.2)
Education						
Primary	1 (100)	0	0	0	0	0
Secondary	18 (42.9)	2 (4.8)	6 (14.3)	3 (7.1)	8 (19.0)	5 (11.9)
Tertiary	7 (43.8)	1 (6.3)	3 (18.8)	2 (12.5)	2 (12.5)	1 (6.3)
Educational status						
In-School	21(43.8)	2 (4.2)	8 (16.7)	4 (8.3)	9 (18.8)	4 (8.3)
Out-of School	5 (45.5)	1 (9.0)	1 (9.0)	1 (9.0)	1 (9.0)	2 (18.2)
Total	**26 (44.1)**	**3 (5.1)**	**9 (15.3)**	**5 (8.5)**	**10 (16.9)**	**6 (10.2)**

Most of the youths (61%) got circumcised either for health/hygiene reasons (44.1%) or for traditional or cultural reasons (16.9%). Protection against sexually transmitted infections (8.5%) including HIV (15.3%) were cited by only 23.8%) of the respondents.

These figures suggest that protection against HIV is not the main factor determining circumcision uptake among the youth in Zambia.

4.11 Factors inhibiting Circumcision uptake

Respondents who had not been circumcised at the time of the study were asked to give the main reasons for not having done so. The main reasons given (Table 4.10) included the belief that the procedure reduces sexual pleasure (48.8%), can lead to bleeding that can cause health problems (47.8%) and that the procedure was painful (46.5%). A small proportion of the respondents (21.3%) believed that the procedure was costly.

Table 4.10: Count and Percent distribution of respondents' reasons for not undergoing MC by selected socio-economic and demographic characteristics.

Background Characteristic	Reduces sexual pleasure	Procedure is costly	Bleeding can cause health problems	MC procedure is painful
Residence				
Chawama	41 (42.3)	22 (22.7)	46 (47.4)	49 (50.5)
Libala	52 (50.0)	22 (20.0)	53 (51.0)	47 (44.8)
Kalundu	54 (54.0)	20 (21.2)	45 (45.0)	45 (44.6)
Age				
15 – 19	111 (56.6)	34 (17.3)	96 (49.0)	86 (43.9)
20 – 24	36 (34.3)	30 (28.6)	48 (54.3)	54 (51.4)
Education				
Primary	3 (75.0)	2 (25.0)	3 (75.0)	6 (75.0)
Secondary	126 (50.2)	51 (20.9)	123 (48.6)	108 (25.2)
Tertiary	18 (42.9)	10 (23.8)	20 (47.6)	27 (19.5)
Educational status				
In-School	131 (49.6)	59 (22.3)	128 (48.7)	126 (47.9)
Out-of School	16 (41.0)	5 (12.8)	16 (42.1)	14 (36.8)
Total	**147 (48.8)**	**64 (21.3)**	**144 (47.8)**	**140 (46.5)**

The results presented in table 4.10 indicates that more youths in the younger age group 15-19 (56.6%) and those with primary education (75%) were highly likely to report reduction in sexual pleasure as the main reasons for not undergoing circumcision ($p<0.05$). A similar pattern is observed in terms of the proportion of youths who reported that male circumcision procedure was painful. The findings suggest a

significant relationship between education level and attitude towards male circumcision ($p<0.05$).

Most of the reasons respondents cited for not undergoing circumcision were echoed in focus group discussions as illustrated in the following excerpts.

f. *"I have heard that the procedure involved is so painful. This is the reason why I have not yet decided to get circumcised" (Chawama youth)*

g. *"I think the procedure for circumcision is painful. The operation takes about an hour to be completed. During the process, a lot of blood is lost and sometimes the anaesthesia which helps to reduce the pain may not be effective thereby worsening the pain" (Libala youth)*

The findings further reveal that three-quarters of the youths with primary education compared to about 48% with tertiary education indicated that they were not willing to undergo circumcision because of health problems that can arise from bleeding.

h.. *"My friends say that male circumcision can make someone to become impotent. This is because the penis can be deformed during the operation" (Kalundu youth).*

All the above suggest that messages on male circumcision are not well articulated to the intended audiences. This conclusion is supported by sentiments expressed by some participants in focus group discussions.

i. "*Information about male circumcision is not very clear. For example, side effects of circumcision are not fully explained" (Kalundu youth).*

j. *"The information contained in advocacy messages is usually not enough to convince someone to make a decision to accept circumcision as an HIV prevention strategy" (Libala)*

k. "We need more information on whether a circumcised person can get HIV or not" and whether an HIV positive man can still undergo circumcision" (Chawama respondent)

4.12 Willingness to get circumcised

Youths who reported not having been circumcised at the time of the survey were asked to mention the factors that would influence them to undergo the operation. The responses are presented in Table 4.11.

Table 4.11**: Count and Percent distribution of respondents' attitude towards MC selected socio-economic and demographic characteristics**.

Background Characteristic	Would undergo MC if knew it was an effective HIV prevention method	Would be willing to undergo MC if service is free	Would undergo MC if it has no health complications
Residence			
Chawama	66 (68.0)	47 (48.5)	68 (60.7)
Libala	72 (68.6)	59 (56.2)	66 (55.0)
Kalundu	76 (75.2)	56 (55.4)	68 (56.7)
Age			
15 – 19	133 (67.5)	112 (56.9)	125 (56.8)
20 – 24	81 (76.4)	50 (47.2)	77 (58.3)
Education			

Primary	5 (62.5)	3 (37.5)	6 (66.7)
Secondary	177 (69.9)	139 (54.9)	161 (56.3)
Tertiary	32 (76.2)	20 (47.6)	35 (61.4)
Educational status			
In-School	191 (72.3)	150 (56.8)	173 (56.5)
Out-of School	23 (58.9)	12 (30.8)	29 (63.0)
Total	**214 (70.6)**	**140 (46.2)**	**202 (57.4)**

The main reason cited by most (70.6%) of the respondents was that they would be willing to go for circumcision if they knew that the operation was an effective HIV prevention method. A larger proportion of these youths were in age group 20-24 (76.4%) and those with tertiary education (76.2%). This is consistent with an earlier finding that showed that, although most youths were aware that male circumcision protects against HIV infection with less than half (44.4%) believed this. Probably as a consequence of this, just slightly more than half (54.2%) indicated being convinced that men who are circumcised are at lesser risk of HIV infection. More than half (57.6%) of the respondents indicated that they would undergo circumcision if there were no health complications. This is consistent with and confirms our earlier finding on how these unfounded fears have prevented many young people from getting circumcised. Worth highlighting also from Table 4.11 is the large proportion (46.2%) of respondents indicating that they would be willing to undergo circumcision if the operation was free. This suggests that many young people may not be aware that the operation is offered free in public institutions that carry out male circumcision.

A substantial proportion of in-school youths 72.3% compared to those out of school 58.9% indicated that they would be willing to undergo circumcision if they knew it was an effective HIV prevention strategy. However, the percentage differences are not significant ($p>0.05$).

The finding that most youths would be willing to undergo circumcision if they were aware that doing so would offer them some protection against HIV infection tends to confirm findings from most acceptability studies among male adults which have shown that the factor which men considered most to influence their decision to undergo circumcision was its possibility to prevent sexually transmitted infections and HIV.

CHAPTER FIVE:

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Discussion

The main objective of this study was to investigate awareness, knowledge, attitudes as well as uptake of male circumcision among the youth in three selected residential areas in Lusaka district of Zambia. To our knowledge, this was one of the few studies to be conducted in Zambia that has focussed on the youths in relation to uptake of male circumcision.

Among the major findings of the study is that, notwithstanding the high levels of awareness of male circumcision and exposure to advocacy messages, circumcision uptake is lamentably low among the youths who participated in this study. Only about 16.4% of those interviewed indicated that they had been circumcised. Although this figure is comparatively higher than the 11.4% that was reported in a nationally representative sample (Zambia Demographic and Health Survey, 2007), it is still not large enough given the sheer number of young people, who, theoretically, should offer themselves for circumcision.

According to the findings of this study, one of the main obstacles to circumcision uptake among the youth is ignorance about the fact that male circumcision can and does significantly reduce chances of HIV infection**.** This is surprising given the abundant scientific evidence from both observational and interventional studies demonstrating that male circumcision significantly reduces men's risk of becoming infected with HIV through heterosexual sex. Only about 4 out of 10 youths in our study reported being aware of this.

Coupled with ignorance of the efficacy of male circumcision in HIV infection prevention, was fear of pain and consequences of the operation. A great number of respondents believed not only that circumcision is painful but also that the operation can lead to negative reproductive health consequences such as reduction in sexual pleasure during intercourse, impotence as well severe bleeding. These results confirm an earlier but nationally representative survey (i.e. 2009 Zambia Sexual Behaviour Survey) whose results showed that among adolescents aged 15-19, more than a third indicated that they did not want to get circumcised because they thought that the procedure was painful while 16% feared complications (Central Statistical Office (CSO), Ministry of Health (MOH), University of Zambia, and MEASURE Evaluation, 2010). Such fears have been reported in other studies. In Kenya, for example, a study of the acceptability of male circumcision to reduce HIV infections among a traditionally non-circumcising ethnic group, found that the primary barriers to acceptance of male circumcision were, apart from cultural identification, fear of pain and excessive bleeding. Similar findings were reported in a Male Circumcision Prevention Survey conducted in Lesotho by the Ministry of Health and Social Welfare in 2008. In addition to lack of knowledge about its benefits, fear of loss of sensitivity

and penis deformity, fear of pain and excessive bleeding were reported as some of a variety of reasons why men tended to shun male circumcision.

It is important to point out that currently there is no scientific evidence linking circumcision to any long term adverse effects on sexual, psychological, or emotional health of those who undergo the procedure (Moses et al: 1998). A longitudinal study which began in 1946 in Britain and followed more than 5000 individuals from birth to age 27 found no difference between uncircumcised and circumcised males in relation to a number of developmental and behavioural indices such as sexual pleasure and satisfaction. Laumann et al 2000, in a survey of more than 1400 American men, found that circumcised men reported a more highly elaborated set of sexual practices, and were slightly less likely than uncircumcised men to experience various sexual difficulties. Also, a recent study involving several thousand men in Uganda who were circumcised as adults found that circumcision did not impact on sexual satisfaction or pain during or after intercourse. In fact, in the only national probability sample in the United States to examine circumcision and sex, researchers found that circumcised men were less likely to experience sexual dysfunction than uncircumcised men (Cory Silverberg, 2009). It is important to mention also that, while it is a fact that traditionally, circumcision was, and is still, done without the use of pain relief, the use of anaesthesia is now widely being used to control pain during circumcision. The use of anaesthesia during medical circumcision has adopted several techniques that are being implemented for pain control before a circumcision is performed. Research has shown that the pain of circumcision can be minimized or completely eliminated by the use of anaesthesia as well as by the choice of circumcision instrument (BMJ, 2005). Modern circumcision is not painful if anaesthesia is used and several options exist: local anaesthetic cream (EMLA cream) can be applied to the end of the penis 60–90 minutes

prior to the procedure; local anaesthesia can be injected at the base of the penis to block the dorsal penile nerve; local anaesthesia can be injected in a ring around the middle of the penis in what is called a subcutaneous ring block (Journal of the Formosan Medical Association, March 1999).

The findings revealed that seven out of ten youths were willing to undergo circumcision if they had accurate information about the operation. This finding that most youths would be willing to undergo circumcision if they were aware that doing so would offer them some protection against HIV, tends to confirm findings from most acceptability studies among male adults which have shown that the factor which men considered most to influence their decision to undergo circumcision, was its possibility to prevent sexually transmitted infections and HIV. This has been reported in other African countries (Caldwell and Caldwell, 1996; Bailey et al, 1999; Bailey et al, 2002). In Botswana, for example, 84% of the participants responded that they would definitely or probably circumcise a male child to protect them from sexually transmitted diseases or HIV (Kebaabetswe et al, 2003). In South Africa, 72% responded that they would want to be circumcised if they knew that male circumcision was found to protect against HIV and STI's (Lagarde et al, 2003). Another study conducted in a South African town with a high HIV prevalence reported that 59% of respondents said that they would be circumcised if it reduced their chances of getting HIV and STI (Rain-Taljaard et al, 2003). These studies have reported among others knowledge levels as major predictors of male circumcision uptake as an HIV prevention strategy.

Despite the cultural and traditional attachment to male circumcision, there are some indications that male circumcision is becoming widespread in Zambia particularly in the younger generation as an HIV prevention option. This study has shown that religious denomination is not a determinant of uptake of male circumcision among the

youth in the survey sites (77% of uncircumcised youth indicated that religious denomination would not in any way influence their decision to undergo circumcision).

The survey results have also indicated that advocacy campaigns to promote male circumcision as an HIV prevention have not been effective. The campaigns have failed to communicate factual information about male circumcision operation. This is evidenced by a much lower proportion of youths who indicated having been prompted by advocacy messages to undergo the operation. This tends to somehow confirm the claim by proponents of social acceptance theory that an individual's attitude towards something is based on the credibility and value of the messages received. In line with theory, youths' negative attitude towards adoption of male circumcision could be due to lack of accurate and credible information about the operation. This can be attributed to lack of appropriate advocacy messages to address myths surrounding male circumcision.

As the national male circumcision programme rolls out, there is need for government and NGOs advocating for male circumcision to provide accurate information on health benefits and risk reduction related to male circumcision, especially to the young people who are the most affected by the HIV pandemic.

5.1 Conclusions

Zambia has recognised the significant (although partial) HIV protection from male circumcision, based on data from randomised control trials. The Ministry of Health (MOH) in partnership with and/or support from the University Teaching Hospital (UTH), PSI, JHPIEGO, MSI, Population Council and CIDRZ is the leading institution in the country's effort to promote and scale up male circumcision. A National Policy

and Regulatory Framework has been developed through which a National Task Force on Male Circumcision has been put in place and a dedicated National Male Circumcision Coordinator has been appointed. It cannot be denied that some progress has been made including completion of a situational analysis including acceptability and health facility readiness assessment, approval of a cabinet memo as part of comprehensive HIV policy, dissemination of the National Male Circumcision Strategy and Implementation plan 2010-2020, and finalization of training manuals. In addition, as at 2010, 350 circumcision personnel had been trained and the training is on-going. Available official statistics indicate that by January 2010, a total of 20,779 circumcisions (though not disaggregated by age) had been performed (10,476 in public institutions, 9,566 by NGOs and 737 by private institutions) (http://www.who.int/hiv/pub/malecircumcision/op-guidance/en/index.htm/.

Evidently, a lot of commendable work has gone into laying the necessary ground for male circumcision uptake among the general population in Zambia. However, the success of what has been, and, may be done in future, will largely depend on the number of people, especially among the youth, who have accurate and factual information about male circumcision and how it can reduce chances of HIV infection. Providing such information, especially to the young people who are the most affected by the HIV pandemic, has abundant potential, not only to dispel fears and misinformation that currently seem to prevent most of them from being circumcised, but will, in the long run lead to mass uptake of male circumcision and ultimately to a significant reduction of HIV infection especially among the young people who are at most risk of infection. The present study findings have clearly demonstrated that the major obstacle to male circumcision uptake among the young people are low levels of knowledge, not only about the operation itself, but also about the HIV risk-reduction

benefits of male circumcision. As the national male circumcision programme rolls out, there is need to increase awareness and knowledge among youths, of the risk-reduction benefits of male circumcision It is hoped that this study's recommendations, if taken seriously, will go a long way in communicating appropriate, accurate and factual information to the young people thereby eliminating or significantly reducing the main inhibitor (inadequate knowledge) to male circumcision uptake.

5.2 Recommendations

The following recommendations are made in the hope that, if implemented, they can go a long way in increasing the proportion of young people willing to undergo circumcision and ultimately reduce the rate of HIV infection among the young people in the country.

- There is need to find ways of involving schools, parents and communities at large in communicating factual information about male circumcision and its benefits to both the in-school and out of school youths. This can done by incorporation of relevant information on HIV/AIDS and circumcision in school curriculum, promotion of drama in communities focussing on the same issue can go a long way in communicating factual and relevant information to reach, not only the in- and out-of school youths but also parents and communities at large.

- There is need to utilize both print and electronic media to disseminate factual information that should strive to break the barriers of misconceptions and myths around male circumcision. Media has a wide courage and can easily reach the beneficiaries of intended information.

- Health centre staff should design outreach programmes specifically on male circumcision. As the study findings have demonstrated, health centers are the most trusted source of information among the youth.

- Given that most of the youths are literate, it is important to come up with newsletters, fliers and magazines highlighting the benefits of male circumcision. These can be distributed freely in communities or be sold at a minimal charge that youths can afford. Community-based organizations can play an instrumental and leading role in this.

- Youth organizations can play a key role through use of peer education campaigns to disseminate information regarding benefits and health related risks surrounding male circumcision.

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ANNEX A: QUESTIONNAIRES

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF SOCIAL DEVELOPMENT STUDIES

DEMOGRAPHY DIVISION

Community Youth Questionnaire

Male circumcision uptake survey

Questionnaire Identification Number |___|___|___|___|___|

Country_____

Province Name_____

District Name _____

Name of Township_____

Introduction: "My name is……. I am a Postgraduate student at the University of Zambia. I am currently gathering information relating to Male Circumcision uptake among youths in Lusaka as an HIV prevention strategy. The information that you will provide to me is very important and it will help me prepare a thesis which is a requirement my Master programme of study. The information you provide with be treated with strict confidence and your name will not be published.

DATE OF INTERVIEW: _____\ ____ \ _____

NAME OF INTERVIEWER_____ :

SECTION A: RESPONDENT'S BACKGROUND INFORMATION

Qs #	Question Description	Response Categories	Codes	Skip to
01.	How old were you on your last birthday?	_____ *Enter age in completed years)*	☐	
02.	What is your current marital status?	Single/ Never been married Married Divorced Separated Widowed	1 2 3 4 5	
03.	What is your religious denomination?	Catholic Protestant Pentecostal Islam Others specify_____	1 2 3 4	
04.	Highest Level of Education Attained	Primary Secondary Tertiary No Education	1 2 3 4	
05.	Are you currently in school?	Yes No	1 2	
06.	Are you able to read and write?	Read only Write only Read and write None	1 2 3 4	
07.	Are you in employment?	Unemployed In formal employment	1 2	

		In informal employment	3	
08.	What is your tribe?	_____		

SECTION B: KNOWLEGDE LEVELS ABOUT HIV/AIDS AND MALE CIRCUMCISION

QS#	Questions and Filters	Coding Categories	Skip to
09.	Have you ever heard of HIV and AIDS?	YES 1 NO 2 Not sure 3	
10.	How does a person get infected with HIV? (MULTIPLE RESPONSE)	Y N a. Through Mosquito bites ☐☐ b. Through Handshakes with the infected ☐☐ c. Through blood transfusion ☐☐ d. Through having sex with the infected ☐☐ e. I Don't Know ☐☐	
11.	How can you protect yourself from HIV infection?	Y N ☐☐	

QS#	Questions and Filters	Coding Categories	Skip to
	(give more than one answer) (MULTIPLE RESPONSE)	a. Do Not Have Sex At All ☐☐ b. Use a Condom During Sex ☐☐ c. Don't Have Sex With Prostitutes ☐☐ d. Get Circumcised ☐☐ e. Do Not Share Needles, Razors ☐☐ f. Avoid Mosquito Bites ☐☐ g. Have One Faithful Partner ☐☐ h. Avoid Blood Transfusion ☐☐ i. Other Specify…….	
12.	Which of the following methods are you using to protect yourself from getting infected with HIV? (MULTIPLE RESPONSE)	Y N a. Do Not Have Sex At All ☐☐ b. Use a Condom During Sex ☐☐ c. Don't Have Sex With Prostitutes ☐☐ d. Got Circumcised ☐☐ e. Have One Faithful Partner ☐☐	
13.	Have you ever heard of male circumcision?	YES 1 NO 2 →GO TO END INTERVIEW	
14.	From which source did you **first** learn about male circumcision?	Parent/Relative 1 Teacher 2 Clinic/Health Worker 3 Religious Leaders 4 TV 5 Radio 6 Newspapers/Books 7 Friends 8 Others_____	
15.	Which one source of information do you trust the most about MC?	Parent/Relative 1 Teacher 2 Clinic/Health Worker 3 Religious Leaders 4 TV 5 Radio 6 Newspapers/Books 7 Friends 8 Others_____	

QS#	Questions and Filters	Coding Categories	Skip to
16.	Do you think that male circumcision can prevent HIV, STI transmission?	YES 1 NO 2 NOT SURE 3	
17.	Have you ever heard of male circumcision as an HIV prevention method?	YES 1 NO 2	
18.	Men who are circumcised can never get HIV and AIDS,STIs	Strongly agree 1 Agree 2 Strongly disagree 3 Disagree 4 I Don't Know 5	
19.	Men who are circumcised are at lesser risk of getting HIV and other STIs?	Strongly agree 1 Agree 2 Strongly disagree 3 Disagree 4 I Don't Know 5	

SECTION C: Access to utilization of male circumcision information and services

QS#	Questions and Filters	Coding Categories	Skip to
20.	Is information on male circumcision readily available in your area?	YES 1 NO 2	
21.	Do you think you have enough information about MC?	YES 1 NO 2	
22.	If yes give reasons?	_____ _____ _____	

23.	Do you know a place where male circumcision is offered?	YES 1 NO 2	
24.	Where is that place? (MULTIPLE RESPONSE)	Health facility A Traditional healers place B Initiation ceremony C	
25.	How accessible is the place to you?	Near 1 Far 2 Very far 3	
26.	What do you think are the benefits of male circumcision? (give more than one answer) (MULTIPLE RESPONSE)	Sexual pleasure A Reduces risk of HIV/STI transmission B Hygienic C Improves ones health status D Reduce risks of penial cancer E Reduce risks of cervical cancer F Others specify_____	
27.	At what age do you think a man should be circumcised?	Infant/child <13 years 1 Youth/adolescent 13-19 years 2 Adult 20+ years 3 Any age 4	
28.	When should a just circumcised man start having sex?	Immediately after circumcision 1 After a week 2 After one month 3 After six weeks 4 Don't know 5	

SECTION D: ATTITUDE AND PRACTICES ABOUT MALE CIRCUMCISION

QS#	Questions and Filters	Coding Categories	Skip to
29.	Some Men have been circumcised. Have you been circumcised?	YES 1 NO 2 →GO TO Q40	
30.	Have you received any of the following services in the past 3 months? (Tick all that apply) (MULTIPLE RESPONSE)	a. Pre-procedure counselling about the male circumcision procedure: b. Pre-procedure counselling about risks and benefits of male circumcision: c. Counselling about HIV and STI prevention: d. Post-procedure counselling about postoperative care: e. Post-procedure counselling about HIV risk reduction: f. Post-procedure counselling about resumption of sexual activity: g. Counselling about other male reproductive health topics:	

QS#	Questions and Filters	Coding Categories	Skip to
31.	Where did you receive the services mentioned above? (MULTIPLE RESPONSE)	Parent/Relative A School B Clinic/Hospital C Religious Leaders D Friends E NGO F Others specify_____	
32.	Were you satisfied with the services you received?	YES 1 NO 2	
33.	At what age were you circumcised?	Infant/child <13 years 1 Youth/adolescent 13-19 years 2 Adult 20+ years 3 I Don't Know 4	
34.	What was the **main** reason for you to be circumcised?	Health/hygiene 1 Sexual satisfaction 2 Protection from HIV 3 Protection from STIs 4 Traditional/culture values 5 Religious belief 6 Other specify_____	
35.	Was your circumcision done traditionally or Medically?	Traditionally 1 Medically 2	
36.	Who decided that you undergo circumcision?	Self 1 Parents 2 Relatives 3 Doctors 4 Religious leader 5 Traditional leaders 6 Wife/partner 7 Others specify_____	
37.	Is Male Circumcision practiced in your tribe?	YES 1	

QS#	Questions and Filters	Coding Categories	Skip to
		NO 2	
38.	Who makes decision for youths to be circumcised in this community? (MULTIPLE RESPONSE)	Traditional leaders A Religious leaders B Community leaders C Parents/guardians D Personal Decision E Others _____	
39.	If No to Q 30, give reasons? (TICK ALL THAT APPLY) (MULTIPLE RESPONSE)	Our Cultural doesn't allow A It is against my religion denomination B Reduces sexual pressure C Bleeding can lead to health problems D It can be a source of HIV transmission E The procedure is painful F The procedure is costly G Others specify_____	

(UNCIRCUMCISED MALE YOUTHS ONLY)

QS#	Questions and filters	Coding Categories	Skip to
40.	Have you ever received information about MC?	YES 1	

		NO 2 →GO TO Q43	
41.	How did you receive the information about MC? (MULTIPLE RESPONSE)	Friends A Community Discussion forum B Relatives C Community leaders D Radio E Others _____	
42.	Is Male Circumcision practiced in your tribe?	YES 1 NO 2	
43.	Are the health care providers in your area helpful in providing information on Male Circumcision?	YES 1 NO 2	
44.	What are the benefits of male circumcision that you are aware of?	Health/hygiene A Sexual satisfaction B Protection from HIV C Protection from STIs D Traditional/culture values E Religious belief F Other specify_____	
45.	Do you think that lack of accurate information about benefits of MC among youths influences their access to the service?	Strongly agree 1 Agree 2 Strongly disagree 3 Disagree 4	
46.	Are the youths required to pay for MC services at your nearest Health facilities?	YES 1 NO 2	
47.	If you knew that male circumcision were an effective partial HIV prevention, would you be willing to undertake MC?	YES 1 NO 2 NOT sure 3	
48.	I would not be willing to undergo MC if HIV test is made mandatory?	YES 1 NO 2	

		Not sure 3	
49.	If the MC service was offered free, would you be willing to undergo MC?	YES 1 NO 2 Not Sure 3	
50.	Would you recommend a male relative to get circumcised?	YES 1 NO 2	
51.	Men who are circumcised are at lesser risk of getting HIV and AIDS and other STIs	Strongly agree 1 Agree 2 Strongly disagree 3 Disagree 4 I Don't Know 5	

SECTION E: AWARENESS AND ATTITUDE TOWARDS ADVOCACY CAMPAIGNS TOWARDS MALE CIRCUMCISION

QS#	Questions and Filters	Coding Categories	Skip to
52.	Have you ever come across messages advocating for medical Male circumcision?	YES 1 NO 2 GO TO Q55	
53.	Where did you come across such messages? (TICK ALL THAT APPLY) (MULTIPLE RESPONSE)	Bill boards A Radio/Television B Newspapers C Magazine D Newsletters E Clinic/Hospital F Workshops/seminars G NGOs H Others specify_____ F	
54.	If NGO is TICKED above mention the name of that NGO?	_____	
55.	How often do you read messages about MC?	None 1 Rarely 2 Often 3 Frequently 4	

QS#	Questions and Filters	Coding Categories	Skip to
56.	What information was contained in the MC advocacy messages? (TICK ALL THAT APPLY) (MULTIPLE RESPONSE)	Benefits of MC A Risks of MC B Places were access MC service C Types of MC D Myths and belief about MC E Procedure involved when undergoing MC F Other specify_____	
57.	Were you satisfied with information contained in advocacy messages?	YES 1 NO 2	
58.	Probe for reason?	_____ _____	
59.	Did the advocacy messages prompt you to undergo male circumcision?	YES 1 NO 2	
60.	Probe for action taken?	_____ _____	
61.	Does your parents/guardian encourage you to get circumcised?	YES 1 NO 2	
62.	Probe for reason?	_____ _____	
63.	What would you consider to influence your decision to undergo undergoing MC?	If Our Cultural does allow A If the operation was not painful? B If It can prevent HIV transmission? C	

QS#	Questions and Filters	Coding Categories	Skip to
	(MULTIPLE RESPONSE)	If my religion denomination allowed D If it doesn't Reduces sexual pressure E If there is no Bleeding which can lead to health problems F It cannot be a source of HIV transmission G If it is done medically H If I have correct information about MC benefits? I Others specify_____	
64.	In the past 3 months, have you ever done any of the following regarding MC? Read out options (MULTIPLE RESPONSE)	i) Talked to someone went for MC about procedure and related issues? ii) Talked to a doctor/nurse service provider about MC benefits iii) Talked to someone in the family about possibility MC? iv) Talked to partner/girl friend about possibility MC v) Visited Health/MC centre to collect information about MC? vi) Have already set up appointment for MC? ☐	
65.	Indicate if the following statements are true or false? True=1, false=2	i) My partner/girl friend has encouraged me to go for MC ii) My partner has talked to me where to get MC services ☐ iii) My partner has talked to me where to get MC information ☐ iv) My partner has given information about M ☐ v) My partner has shown me approval of my decision to go for M ☐ vi) My friends say negative about M ☐ vii) My friends have told me where to get MC servic ☐ viii) My friends have given information about M ☐ ix) My partner would leave me if I go for M ☐ x) MC is only for traditionally circumcising cultures ☐	

The END, Thank you for Participating

THE UNIVEERSITY OD ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEMOGRAPHY DIVISION

Male Circumcision Uptake Survey

FOCUS GROUP DISCUSSION SCHEDULE WITH MALE YOUTHS

KNOWLEDGE, ATTITUDES AND PERCPTIONS TOWARDS MEDICAL MALE CIRCUMCISION AS A METHOD OF HIV PREVENTION

Themes for discussion

Basic Knowledge about HIV and AIDS

- Do you know about HIV and AIDS?
- How is HIV transmitted?
- How can people protect themselves from HIV and AIDS?
- What methods are you using to protect yourself from HIV infection?

Knowledge, attitudes and perception about Male Circumcision

- Have you heard of male circumcision?
- Where did you hear about male circumcision?
- What do you know about the procedure of male circumcision?
- Why do you think people practice male circumcision?
- What do you know about male circumcision and HIV/STIs transmission from women to men? Probe for specific types of STIs
- Do you think you have adequate information about male circumcision?

- Would you get circumcised given an opportunity?
- If No, probe for reasons
- If yes, probe for type of circumcision method, medical or traditional?
- Who is supposed to make a decision if you were to undergo male circumcision? Probe for reasons
- Would you like to have your son circumcised?
- What are your reasons for preferring your son getting circumcised?
- If no, probe for reasons
- It has been argued by some people that men who are circumcised can never get HIV and STIs? What is your view?
- What are the benefits of male circumcision?
- What do you consider as disadvantages of MC?

Access to utilization of male circumcision information and services

- Where would you go to get information about male circumcision?
- Are you able to access information on male circumcision?
- Are you able to get information when you need it?
- Is circumcision offered at the local clinic/ health facility?
- Are the health care providers helpful in providing information about male circumcision
- What information do you receive about male circumcision?
- How often do you visit the health centre to access MC information?
- What information do you think is inadequate about male circumcision from the available sources?
- What information do you think should be disseminated about male circumcision
- How should this information be communicated?

Awareness and Attitude towards advocacy messages towards MC

- Have you ever seen messages advocating for medical Male circumcision?
- Where did you come across such messages? Probe for all possible sources
- What information was contained in the MC advocacy messages?
- Were you satisfied with information contained in advocacy messages? Probe for reasons
- Were the advocacy messages adequate enough for some to prompt you to undergo male circumcision? Probe for action taken
- Do your parents/guardians encourage you to get circumcised? Probe for reasons

- If you were to undergo male circumcision what would be your main reason for making such a decision?
- If were to receive adequate information about male circumcision, would you thought of undergoing MC?