

Determinants of Male Uptake of Voluntary Medical Male Circumcision as a Strategy for HIV Prevention in Ruwa Community: Zimbabwe

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Abstract- The purpose of this study was to identify determinants of the uptake of Voluntary Medical Male Circumcision in the community of Ruwa. A descriptive survey was conducted. Structured self-administered questionnaires were distributed among 50 purposively selected males who were reporting to Ruwa Rehabilitation Hospital for Voluntary Medical Male Circumcision (VMMC) services. The researchers considered the respondents who voluntarily agreed to participate. The study findings revealed that 30% of males were aged between 24-25 years. Sixty eight (68%) were not circumcised and 20% were motivated by their wives to undergo circumcision. Twenty-three percent indicated that the best place for circumcision was a hospital/clinic. The study also established that 70% of the sampled population had knowledge that male circumcision could help reduce exposure to HIV. The other stated reasons for VMMC included maintenance of genital hygiene, culture, religion and the enhancement of sexual pleasure. A number of factors which were claimed in previous studies to be obstacles for the uptake of male circumcision, such as surgical complications, peer pressure, stigma, and discrimination, were not found to be major obstacles. This study concluded that having knowledge of the HIV-protection benefits of male circumcision and having knowledge of the risks related to male circumcision were found to be driving forces for males to undergo male circumcision. This study therefore, recommended that male circumcision procedure be done in a safe place, such as a hospital or a clinic, the various health facilities need to equip themselves with the necessary resources for male circumcision.

Key Terms: male circumcision, determinants, surgical complications

I. INTRODUCTION

The World Health Organization (WHO) in 2011, estimated that 30% of all males 15 years and older in the world were circumcised. Of these, about two thirds (70%) are Muslims (resident predominantly in Asia, the Middle East, and North Africa), 13% are non-Muslim and non-Jewish men living in the United States of America. The cumulative number of men circumcised almost doubled in 2012, rising from 1.5 million as of December 2011. In five countries where voluntary medical male circumcision is stated to be a priority (Lesotho, Malawi, Namibia, Rwanda and Zimbabwe), coverage is less than 10% (UNAIDS, 2013).

II. BACKGROUND

Twelve countries in Sub-Saharan Africa adopted voluntary medical male circumcision as a priority. Five countries (Botswana, Malawi, Namibia, the United Republic of Tanzania and Zimbabwe) cited low male circumcision uptake as a challenge in their national response. They have identified a variety of impediments to expedited scale-up, including financial constraints (Namibia), stock-outs of essential circumcision commodities (Uganda) and human resource limitations (Zimbabwe). Swaziland's mid-term report makes no mention of voluntary medical male circumcision, even though the country has been identified as a key priority for scale-up. Zimbabwe aims to provide improved circumcision training for nurses; and Uganda has pledged to intensify circumcision scale-up in the formal health sector and among district health systems UNAIDS (2013).

In Zimbabwe, the government worked with a single implementing partner—PSI (Population Services International)—in the design and implementation of its VMMC programme. By end of 2012, there were approximately 59 VMMC sites across the country's 10 provinces (Bertrand, Rech, Dickens Aduda, Sasha-

Frade, Loolpapit, Michael, Machaku, Mavhu, Onyango, Spyrelis, Perry and Farrell 2013). In Zimbabwe, 10 percent of men are circumcised.

III. PROBLEM STATEMENT

A review of Ruwa Rehabilitation Hospital annual HIV report for 2015 indicated that there was low uptake of Voluntary Medical Male Circumcision in Ruwa community where 2918 males (about 40% of the target) were circumcised against a minimum target of 7200 despite increased demand creation efforts. If such a trend persists Zimbabwe will not realize the targets of circumcising 80% of the targeted populations in order to achieve a reduction in HIV incidences using this intervention. It is therefore necessary to identify determinant of uptake of Voluntary Medical Male Circumcision as an HIV prevention strategy among males aged 20 to 29 years in the community of Ruwa.

IV. PURPOSE OF THE STUDY

The purpose of the study was to identify determinants of Voluntary Medical Male Circumcision uptake as an HIV prevention strategy among males aged between 20 – 29 years in the community of Ruwa.

V. SPECIFIC OBJECTIVES

The objectives of the study were:

- To describe knowledge levels regarding Voluntary Medical Male Circumcision among males aged 20 to 29 years.
- To identify attitudes towards Voluntary Medical Male Circumcision among males aged 20 to 29 years.
- To establish the practices of males aged 20 to 29 years regarding VMMC in Ruwa community.
- To establish barriers to Voluntary Medical Male Circumcision in Ruwa Community.

VI. SIGNIFICANCE OF THE STUDY

The findings of this study can be useful in improving utilization of VMMC services in Ruwa, since the findings can be used in coming up with communication strategies and also in orienting services to cater for barriers which will have been identified by this study. This study is hoped to reduce morbidity and mortality rates associated with HIV since knowledge regarding VMMC would have been improved amongst the males. The benefits of VMMC would be shared amongst both men and women since circumcision has its documented benefits that include reduction of risk of cervical cancer amongst women and reduction in spread of HIV WHO (2013).

VII. THEORETICAL FRAMEWORK

This study was based on the Health Belief Model by Becker (1984), which looks at the concepts outlined below:

Perceived susceptibility refers to a person's perception that a health problem is personally relevant or that they are personally at risk of getting illness if they don't practice precautionary measures. One's beliefs of the chances of getting the condition. Thus men should believe that they can get HIV if they practise unprotected sex without VMMC.

Perceived severity even when one recognizes personal susceptibility, action will not occur unless the individual perceives severity to be high enough to have serious complications. One's belief of how serious HIV infection and its consequences are men's perception that the consequences of getting HIV and HPV is high enough to try and avoid.

Perceived benefits: refers to the person's belief that a given treatment will cure the illness or help prevent it. One's belief in the efficiency of the adjusted action to reduce the risk or seriousness of impact, men perceive personal attributes in engaging in risky behaviour rather than taking precautionary measures to prevent contracting HIV and STIs.

Modifying factors: these include demographic variables which are age, sex, marital status, education, profession, religion, knowledge, attributes, and sexual behaviours.

Cues for action: men are reminded to get circumcised, practice safe sex, and change their health seeking behaviours; read education materials on male reproductive health care centres. Posters and flyers with measures regarding VMMC.

VIII. REVIEW OF RELATED LITERATURE

The clinical trials, conducted in Kenya, South Africa and Uganda, showed that male circumcision reduced the risk of heterosexually acquired HIV infection in men by about 60% (Auvert B et al, 2005). The clinical trial data were consistent with results from observational studies, which found, both at the population and individual levels, lower incidence and prevalence of HIV in circumcised men compared with those not circumcised.

Male circumcision plays in the prevention of genital herpes simplex virus-2 (HSV-2) and human papillomavirus (HPV) infection in men. A meta-analysis of 21 studies, including two randomized controlled trials, found a robust inverse association between male circumcision and genital HPV prevalence in men Albero (2012). One trial, in Orange Farm, South Africa, demonstrated a 36% reduction in the prevalence of high-risk HPV in circumcised men (Auvert, et al., 2011). Another study, from the Uganda male circumcision trials, indicated that circumcised men had a 28% lower risk of HSV-2 acquisition and a 35% lower prevalence of high-risk HPV infection compared with uncircumcised men (Tobian, 2009).

The facilitating factors for MC appear to be multiple. Reviewed literature identified the following factors as facilitators of MC uptake, namely: (1) acceptability of the procedure, (2) culture and religion, (3) disease prevention particularly HIV/STI, (4) maintenance of hygiene, (5) sexual pleasure, (6) peer pressure and (7) knowledge about use are the major ones.

IX. CULTURE AND RELIGION

The social status accorded to Male Circumcision is of crucial significance in traditionally circumcising communities, because being circumcised is the only possible way of attaining manhood (WHO, 2009). In many African societies and among certain ethnic groups, Male Circumcision is carried out for cultural reasons, as an initiation ritual and a rite of passage from childhood into manhood (Bottoman, Mavundla&Toth, (2009); Grant, Brown, Michen, Manuthu, &Njeru, 2004). In Tanzania a study on the perceptions on male circumcision as a preventive measure against HIV infection and considerations in scaling up of the services: a qualitative study among police officers in Dar es Salaam by Tarimo, Francis, Kakoko, Munseri, Bakari and Sandstrom (2012) found out that individuals' beliefs towards male circumcision were tied to religious rituals. They expressed their obligation to circumcising young boys to maintain these rituals. Christians referred to documentations regarding circumcision in the Holy Scriptures. They emphasized that after eight days Jesus was circumcised, and that it would be good to adhere to this ritual of circumcising boys while they are still young. Similarly, the Muslims emphasized that uncircumcised men cannot participate in mosque services or in burial ceremonies. They added that for the true Muslims, circumcision is compulsory.

In another study by Wilcken, Miir-Nakayim, Hizaamu, Keil and Balaba-Byansi (2010) on Male circumcision for HIV prevention a cross-sectional study on awareness among young people and adults in rural Uganda found out that religious reasons and cultural reasons were the major reasons to become circumcised for adults and young people. A study by MacLaren, Tommbe, Mafile, Manineng, Fregonese, Redman-MacLaren, Wood, Browne, Muller, Kaldor & McBride (2013) on foreskin cutting beliefs and practices and the acceptability of male circumcision for HIV prevention in Papua New Guinea found out that a quarter of men agreed that allowing the blood to flow when the foreskin is cut is important in their culture/custom. In addition Pan, Zhang, Shen & Wang (2012) on acceptability of Early Infant Male Circumcision (EIMC) among Chinese parents: strategy implications of HIV prevention for China found out that religion was regarded as the major reasons for EIMC in 1.1% of the parents, respectively

A study by Lissouba, Taljaard, Rech, Dermaux-Msimang, Legeai, Lewis, Singh, Puren & Auvert (2011) on adult male circumcision as an intervention against HIV: An operational study of MC uptake in a South African community found out that self reported uncircumcised men were more often from the Zulu (traditionally non-circumcising) than Sotho (traditionally circumcising) ethnicity (aOR = 1.84; 95%CI: 1.22 to 2.77), Furthermore the intention to undergo AMC was associated with ethnic group, believing that medical Adult Male Circumcision was safe and partner and family support of Adult Male Circumcision. Among men reporting intention to undergo Adult Male Circumcision, 72.4% (506/699) were circumcised through the study. Uptake of AMC was 58.8% (506/861; 95%CI: 55.4% to 62.0%).

X. ACCEPTABILITY OF MALE CIRCUMCISION

Acceptability of MC has been studied among men and women in different parts of SSA countries (Botswana, Zimbabwe, South Africa, Tanzania, Kenya) and they showed result ranging from 45% to 81%

(Halperin, Fritz, McFarland and Woelk (2005); Mattson, Bailey, Muga, Poulussen and Onyango (2005); Scott, Weiss and Viljoen (2005); Nnko, Washija, Urassa&Boerma,. (2001). A cross-sectional study conducted by Kebaabetswe et al (2003) to determine the acceptability of MC in Botswana revealed that MC appears to be highly acceptable. Among 238 uncircumcised men surveyed 145 (61%) stated that they would definitely or probably get circumcised themselves if it were offered free of charge and in a hospital setting; the response increased to 192 (81%) after five minutes informational session. A similar cluster design survey conducted on acceptability of adolescent MC and their parents in two large villages of Botswana, showed high acceptability rate 75%

Another study by Wambura, Mwanga, Mshana, Mosha&Changalucha (2011) on acceptability of medical male circumcision in the traditionally circumcising communities in Northern Tanzania found out that preference for pre-pubertal circumcision in the medical setting was significantly associated with above primary school education, non- Kurya ethnic tribe, urban residence and uptake of medical male circumcision in the crude analysis. In New Guinea a study by Maclaren et al (2013) found out that the vast majority would prefer the procedure done in a formal health facility by a health worker. Almost two thirds (64%) of uncut men and half (51%) of longitudinal cut men stated they were planning to have their foreskin removed at some time in the future.

XI. HEALTH EDUCATION

Knowing benefits and challenges of any new innovation will have a long term positive influence. The acceptability of male circumcision was high among the general population in China. A study conducted by Yang, Abdullah, Wei, Jiang, Deng, Qin, Yan, Wang, Xu,.. Liang (2012) elucidates that more health education campaigns about positive health effects are necessary to increase MC rate in China. Dushoff, Patocs and Shi (2011) similarly emphasised that MC programme should be paired with education in order to sustain both short and long term effects. A significant increase in acceptability of Male Circumcision in Botswana has been shown after short brief informational sessions on the advantages of circumcision (Kebaabetswe et al, 2003) indicating health education programme could have major influence in uptake of Male Circumcision. Furthermore a study by Pan et al (2012) found out that Health and doctor's advice were regarded as the major reasons for Early Infant Male Circumcision in 54.8% and 31.2% of the parents, respectively.

XII. PREVENTION OF HIV and STI

There is strong scientific evidence suggesting the association between ulcerative Sexually Transmitted Infections particularly chancroid and syphilis and lack of circumcision. The first systematic review of Male Circumcision and ulcerative STI strongly indicates that circumcised men are at lower risk of chancroid and syphilis (Weiss, Thomas, Munabi, and Hayes, 2005). Male Circumcision also offers protection against other sexually transmitted infections (STIs), further reducing the risk of HIV acquisition and transmission (Tobian et al, 2009). In Uganda, a study by Wilcken et al (2010) found out that prevention of HIV was considered a reason to circumcise by 13.1% of all participants, almost twice as often as protection against other STDs.

However, young people mentioned the protective effect of MC regarding HIV and other STDs significantly more often than adults. In another study by MacLaren et al (2013) on foreskin cutting beliefs and practices and the acceptability of male circumcision for HIV prevention in Papua New Guinea, the researchers found out that almost all men and three-quarters of women (74%) stated they would remove the foreskin of their male child if it reduced the risk of HIV infection. Most uncut men stated they would remove their foreskin or its remnant part, if it reduced the risk of HIV infection (71% and 76%) or if it had an overall health benefit (84% and 88%).

A study by Daniel, Halperin, Fritz, McFarland &Woelk (2005) on Acceptability of Adult Male Circumcision for Sexually Transmitted Disease and HIV Prevention in Zimbabwe found out that circumcised men were more likely to state positive health benefits of being circumcised ($P = 0.001$). In response to the question "If you are uncircumcised, would you like to be circumcised if this practice is confirmed to reduce the risk of contracting HIV or STIs and if it is performed safely and affordably, forty five percent answered "yes."

XIII. PEER PRESSURE

Peer mobilises are one of the promoters of MC. According to Lagarde et al (2003), approximately half of the non-circumcised men agreed that MC proves manhood and earns respect from peers. Peer pressure was

one of the most influential factors when deciding upon circumcision. According to Oh, Kim, Lim and Choi (2004) in Korea, 60.8% believed that they might be ridiculed by their peer group unless circumcised, and the younger the age of the respondent, the more frequently this opinion was held ($p < 0.05$). The social pressure posed is a very common facilitator of MC uptake especially among young men, according to Herman-Roloff et al (2011), in Kenya study many participants remarked that if a man from non-Luo ethnic groups chose to be circumcised, he might be able to mix more freely with women and men, in politics, professional and personal settings. On a similar study conducted in South Africa by Mavundla, Netswera, Toth, Bottoman and Tenge (2010) revealed that uninitiated men experienced great pressure by families, friends and community to get circumcised. They faced rejection, lack of respect and stigmatisation. The problem is it is difficult and unethical too to use this social pressure as a strategy to raise uptake of MC.

XIV. HYGIENE

Improved genital hygiene is something that is almost universally equated with MC in both traditionally circumcising and non-circumcising communities in Africa (Westercamp & Bailey, 2007; Rain-Taljaard et al, 2003). Circumcised males find it easy to maintain penile hygiene (Bailey et al, 2002; Ngalande et al, 2006). Ease of maintaining proper penile hygiene proved a major factor in women's acceptability of circumcision (Bailey et al, 2002). A study by Wilcken et al (2010) found out that adults mentioned improved hygiene as a reason for Male Circumcision, significantly more often than youths who thought that cultural reasons were less important. This was also in agreement with a study by Daniel et al (2005) who found out that twenty-three (12%) men spoke more generally about circumcision promoting hygiene/sexual cleanliness. Men willing to be circumcised were younger ($P = 0.035$) and never married ($P = 0.010$).

XV. FACTORS WHICH HINDER UPTAKE OF MALE CIRCUMCISION

According to Brooks, Etzel, Klosinski, Leibowitz, Sawires, Szekeres, Weston, and Coates (2010), establishing the barriers to circumcision for individuals in different communities is a vital first step in designing communication and education campaigns to promote its benefits. The researcher identified the following factors as barriers for circumcision (1) Cultural and religious reasons; (2) the cost of the procedure; (3) false sense of security; (4) a number of surgical complications like pain, bleeding, delayed wound healing, infections, penile amputation and death; (5) improper communications; (6) lack of health service accessibility.

XVI. CULTURE AND RELIGION

Lack of circumcision was mentioned as an element of the ethnic identity of those who do not circumcise traditionally. However, remaining with one's foreskin is not considered crucial to one's own ethnic identity. It serves as an ethnic marker primarily used by others. In rural Uganda a study by Wilcken et al (2010) on Malecircumcision for HIV prevention a cross-sectional study on awareness among young people and adults found out that two thirds of the uncircumcised male participants reported reasons for not being circumcised ($N = 93$): cultural reasons (adults 30.4% vs. youths 12.8%; $p = 0.038$). Furthermore a study by study by Lissouba et al (2011) on Adult male circumcision as an intervention against HIV found out that there reasons for not being circumcised as Adult Male Circumcision not being part of one's culture (12.6%; 95%CI: 10.3% to 15.2%). Religion is a major determinant of circumcision acceptability. Male Circumcision is universally associated with Islam. It is also considered fundamental to some minority Christian and animist sects, religious reasons (19.6% vs. 40.4%; $p = 0.028$) was also cited as reasons for not being circumcised (Lissouba et al, 2011).

XVII. GENDER

Gender was also reported as the barrier to Medical Male circumcision. In Botswana a study by Sabone, Magowe, Busang, Moalosi, Binagwa & Mwambona (2013) on impediments for the Uptake of the Botswana Government's Male Circumcision Initiative for HIV Prevention found out that gender issues were reported in Borolong, Kgalagadi South, Mahalapye & Selibe-Phikwe (2012) and were concerned with male adolescents being uncomfortable with female community mobilizers and men's discomfort in being attended by female surgeons. Men viewed female surgeons who approached male circumcision in a matter of- fact way as disrespectful. However, some argued that it was just a mentality that men needed to wean themselves from and be as comfortable with female circumcisers as women were with male midwives. In a similar vein, older men

were not comfortable being addressed by the youth on circumcision. The uncomfortable environment often denied sharing and asking, whereby people could learn more about male circumcision, and whereby some misconceptions could be dispelled.

XVIII. COST

The cost of the procedure was a significant barrier to Male Circumcision acceptability by participants in many studies. In another study by Tynan, Hill, Kelly, Kupul, Aeno, Naketrumb, Siba, Kaldor and Valley (2013) on Listening to diverse community voices: the tensions of responding to community expectations in developing a male circumcision program for HIV prevention in Papua New Guinea found that participants raised concerns about cost as a potential barrier to service uptake if not considered thoughtfully.

IXX. COMPLICATIONS AND ADVERSE EFFECTS

If men and parents believe that circumcision leads to high rates of complications, then uptake of Male Circumcision is likely to be slow. Concerns for safety were universal in the studies examined. In another study by Wilcken et al (2010) on Male circumcision for HIV prevention a cross-sectional study on awareness among young people and adults in rural Uganda found out that fear of complications (23.9% vs. 29.8%; $p = 0.523$) as a barrier to Male circumcision.

XX. DELAYED WOUND HEALING

There is a possibility that wound healing might be delayed during MC especially when there is an infection. Westercamp et al (2012) in a study conducted in Kisumu, Kenya identified the perception of long healing period following circumcision procedure as barriers to circumcision. As a result, Herman-Roloff et al (2011) revealed that delayed wound healing and prolonged time away from work are common barriers of MC uptake among men.

XXI. DECISION MAKING

Decision-making power plays a vital pivotal role in the uptake of MC uptake. According to UNAIDS (2008) decisions on whether or not to be circumcised occur within a complex social and political context and are influenced by numerous interacting factors including the attitudes of men, their sexual partners, their families and the cultural and religious environment.

XXII. METHODOLOGY

The researchers used the descriptive survey design. According to Kothari (2004) a descriptive survey design is that study which is concerned with describing the characteristics of a particular individual or of a group. Ben (2011) defines survey research as a mode of inquiry that relies heavily upon validity of verbal reports. This design was considered for this study because it considers both the qualitative and quantitative methods of data gathering and analysing data collected by use of interview guide.

XXIII. STUDY SETTING

This study was carried out at Ruwa Rehabilitation Hospital situated in Ruwa about 30km east of the City of Harare. This hospital offers both curative and rehabilitative services to the town of Ruwa and is the national referral centre for rehabilitation.

XXIV. POPULATION

The population was made up of men aged 20-29 years who reported to Ruwa VMMC centre at Ruwa Rehabilitation Centre. According to Watson (2005) "population is any set of persons or objects that possesses at least one common characteristic". For example men aged 20-29 years who were reporting to Ruwa Rehabilitation Hospital for VMMC services.

XXV. SAMPLING PROCEDURE

According to Waltz, Strickland and Lenz, (2005), "a sample is the subset of cases drawn from the target population. The researchers used purposive sampling. According to Tashakkori and Teddlie (2003) purposive samples are sometimes called judgment samples.

XXVI. SAMPLE SIZE

The appropriate sample size is considered by determining the level of accuracy, the level of confidence or risk, and the degree of variability in the attributes being measured (Israel, 2013). The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample (Korthari, 2004). He further argued that in practice, the sample size used in a study is determined based on the expense of data collection, and the need to have sufficient statistical power. In this research, since it was quantitative in nature, a slightly bigger size was the ideal to ensure the relevant data is collected as opposed to qualitative where a smaller sample size usually is used and data saturation tool was equally considered. The study sample was 50.

XXVII. ETHICAL CONSIDERATIONS

The researchers considered the rights of the participants to self-determination and the right to refuse participation. Participants who consented themselves to participate in this research were given an opportunity to learn about life saving skills in order to equip them with necessary skills and attitudes to enhance them to make informed decision related to VMMC choices. The researchers utilized a face-to-face interview which helped clarify unclear questions. Permission to carry out the research study was sought from the authorities of the institution and Medical Research Council of Zimbabwe (MRCZ). Participants were interviewed in a private room. No names of participants were asked or even written on the instrument in order to offer confidentiality. Interview schedules were coded, as no name was included to ensure anonymity. All responses of the study were considered sensitive and confidential and were kept under lock and key. Also the Medical Superintendent was approached to approve the data collection at Ruwa Rehabilitation Hospital.

XXVIII. DATA ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS

The researchers present the results of the analysed data which were collected from 50 respondents in order to identify the determinants of uptake of VMMC amongst males aged 20-29 years who were reporting to Ruwa Rehabilitation Hospital. Data obtained from respondents were entered on the excel spread sheet and imported into SPSS version 22 for analysis. Descriptive summary statistics in the form of frequency tables and percentiles are presented. Chi-square tests was used as a statistical measure of association to assess dependence or relationships among potential factors

IXXX. DEMOGRAPHIC DATA OF RESPONDENTS

In this section, findings on demographic variables of the respondents, such as age group, education level, occupation, marital status religion, and ethnicity are presented.

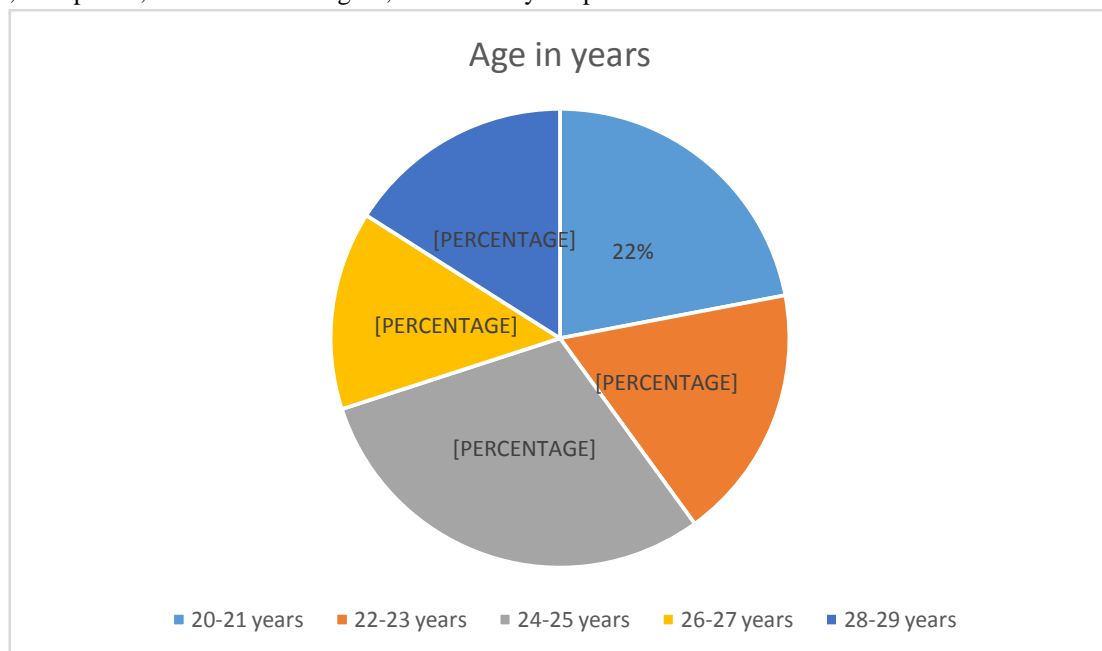


Fig 1: Age in years N=50

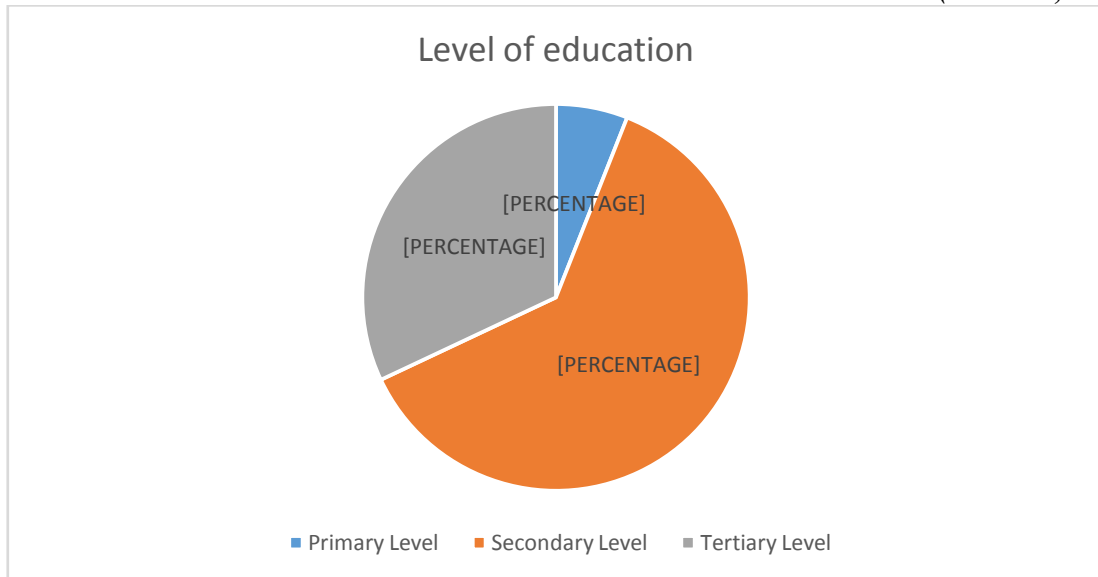


Fig 2: Level of education N=50

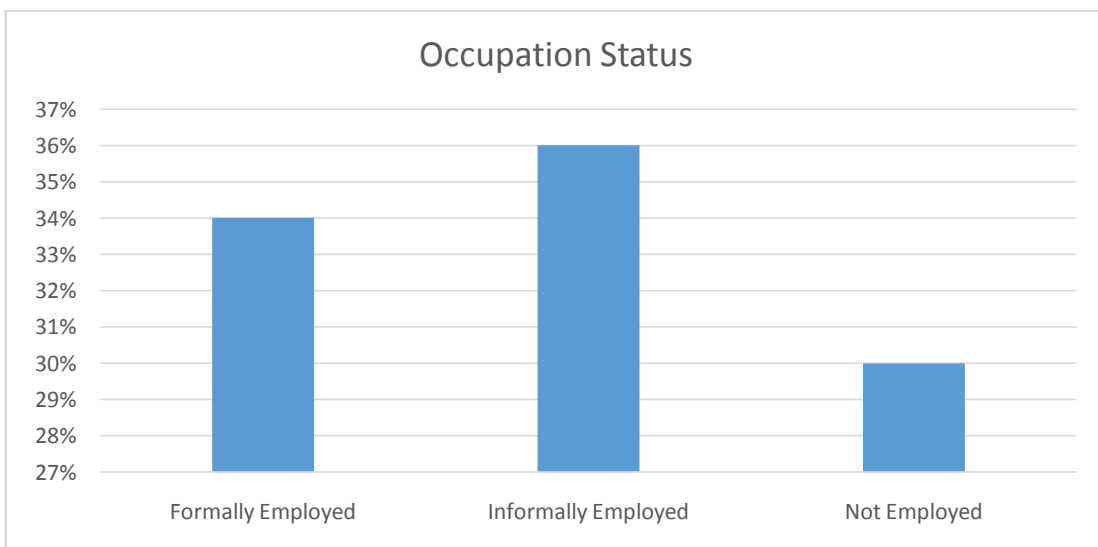


Fig 3: Occupational status N=50

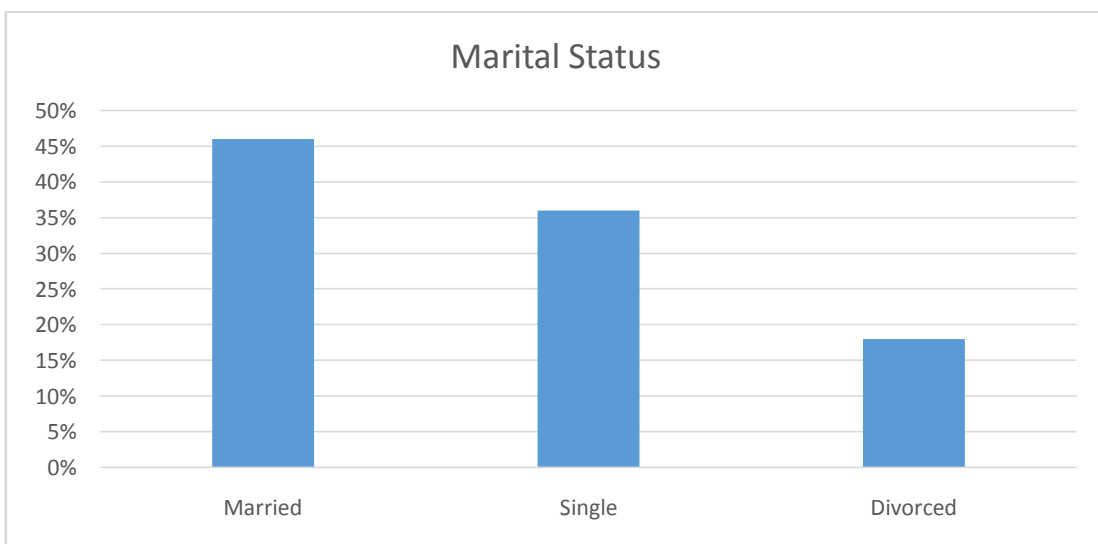


Fig 4: Marital status N=50

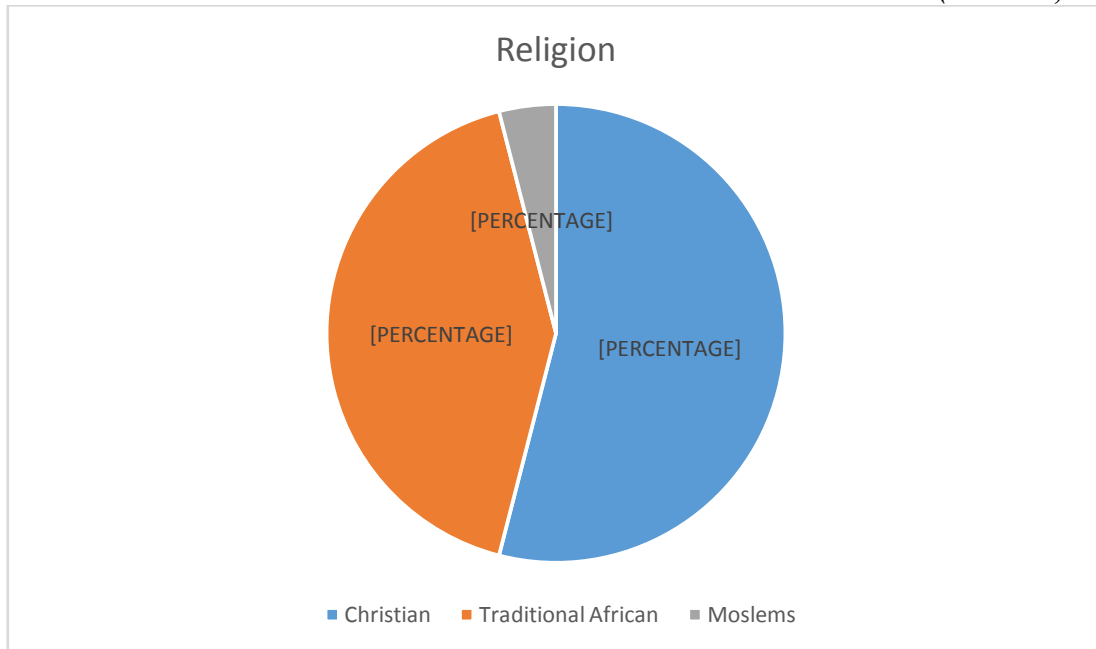


Fig 5: Religion N=50

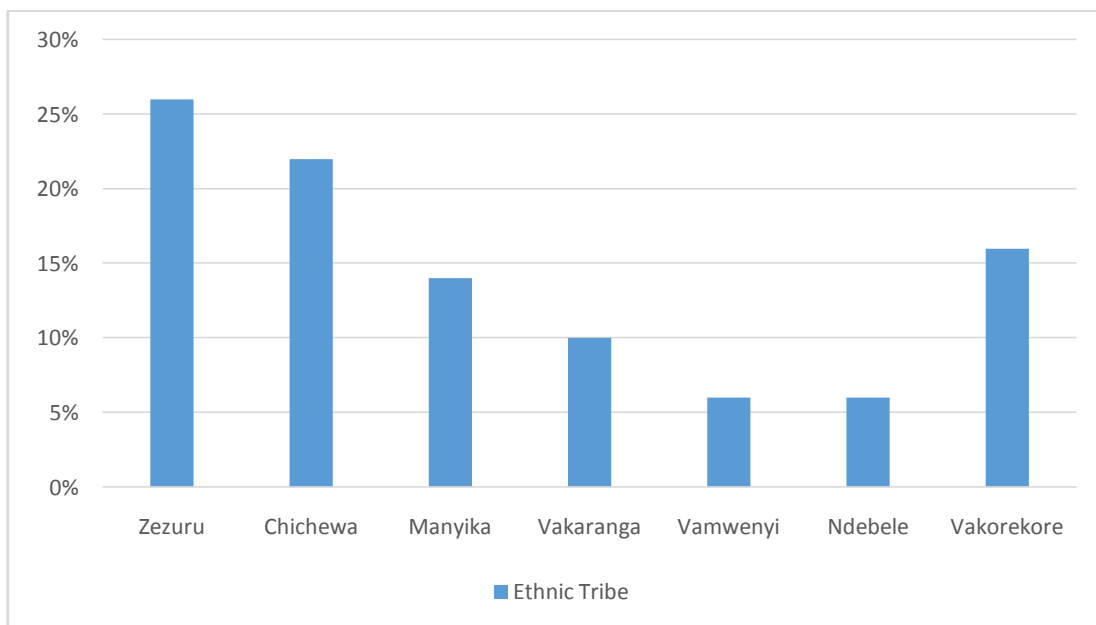


Fig 6: Ethnic group N=50

The age of the respondents ranged from 20 to 29 years. 11 respondents (22%) were aged between 20-21 years, 9 respondents (18%) were aged 22-23 years, 15 respondents (30%) were aged 24-25 years, 7 respondents (14%) were aged 26-27 years and 8 respondents (16%) were aged 28-29 years.

A total of 50 males participated in the study. Thirty-one respondents (62%) had attained a secondary level of education, 3 respondents (6%) had a primary level of education and 16 respondents (32%) had a tertiary level of education. Seventeen (34%) were formally employed whereas 18 (36%) were informally employed. Fifteen respondents (30%) were not employed.

Twenty-three respondents (46%) were married, 18 respondents (36%) were single and 9 (18%) were divorced. Majority 27 respondents (54%) were Christians, 21 respondents (42%) were Traditional African and only 2 respondents (4%) belonged to Moslem religion.

Thirteen respondents (26%) belonged to the Zezuru ethnic tribe, 11 respondents (22%) were of the Chichewa tribe, 7 respondents (14%) were of the Manyika tribe, 5 respondents (10%) were Vakaranga tribe, 3

respondents (6%) were of the Vakorekore tribe, 8 respondents (16%) were of the Vamwenyi tribe and those that belonged to the Ndebele ethnic tribe were 3 (6%) respondents.

XXX. CIRCUMCISION STATUS AND PERSONAL VIEWS

In this section, the researcher first presents the circumcision status of the respondents, followed by the findings concerning who the primary decision maker is in the respondent's family, and the respondents' personal views regarding the best age at which circumcision should be performed, as well as their views regarding what the best place is for performing the circumcision procedure.

Table 4.1 Distribution of the respondents' status and personal view regarding circumcision N=50

Variable	Frequency	Percentage (%)
Circumcision Status		
Circumcised	16	32
Not Circumcised	34	68
Primary decision maker		
Self	29	58
Wife	10	20
Eldest member of the family	11	22
Best age of Circumcision		
Childhood age	13	26
Adolescent age	12	24
Adulthood age	9	18
Circumcision is not acceptable	16	32
Best place for circumcision		
Clinic/hospital	23	46
At Home	0	0
Traditional setting	11	22
Circumcision is not acceptable	16	32

Of the 50 respondents, 34 (68%) respondents reported that they were not circumcised, and 16(32%) respondents reported to be circumcised. Twenty-nine (58%) respondents said that decision regarding circumcision was solely their responsibility whereas, 10(20%) respondents said that decision was made by their wives and 11(22%) respondents said that the decision was made by the eldest member of the family.

Sixteen (32%) respondents were of the opinion that circumcision was not acceptable and 13(26%) respondents said that circumcision was best done at childhood age. Twelve (24%) respondents said that circumcision was best done at an adolescent age and 9(18%) respondents were of an opinion that circumcision was best done at an adulthood age. Twenty-three (46%) respondents believed that the best place for circumcision was a clinic or hospital, 11(22%) respondents said the best place for circumcision was traditional setting and 16(32%) respondents thought circumcision was not acceptable at all. There were no respondents who indicated that the best place for circumcision was at the home setting.

XXXI. KNOWLEDGE AND ATTITUDE REGARDING MALE CIRCUMCISION

In addition to personal views with regard to circumcision status, knowledge of and attitude towards MC were also explored in this study. As a result, this section presented the findings and explains the knowledge that males aged 20-29 years possess regarding the benefits and the risks of MC, as well as their attitude towards MC. For analysis purposes, similar responses from the Likert scale responses were merged together, that is, the "strongly agree" and "agree" responses were taken as agreement, and the "strongly disagree" and "disagree" responses were taken as disagreement.

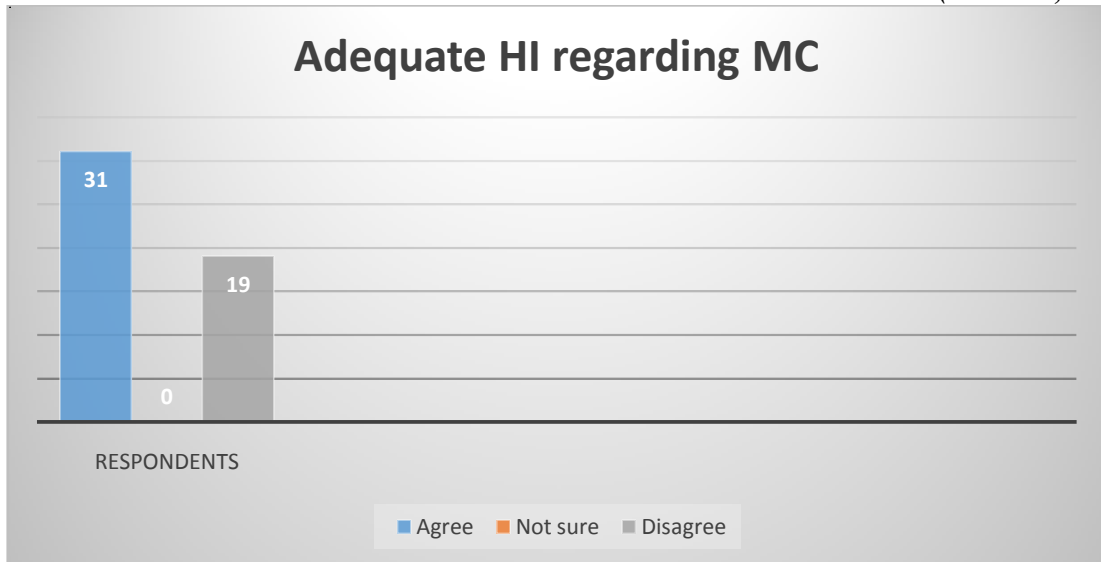


Fig 7: Adequate HI regarding MC



Fig 8: MC Centre within 15km from home

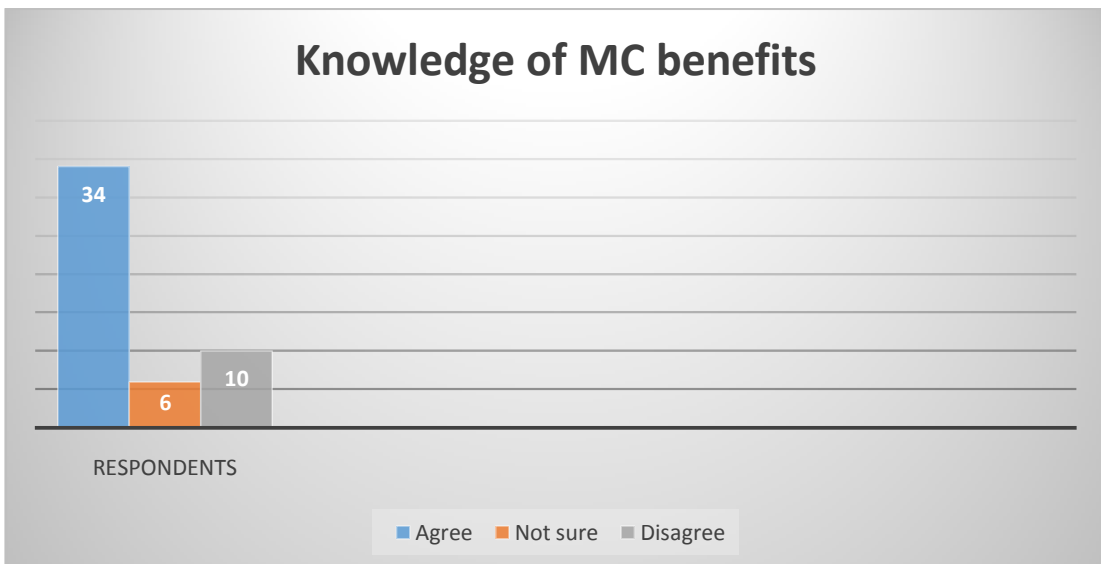


Fig 9: Knowledge of MC benefits



Fig 10: Knowledge of the risks related to MC

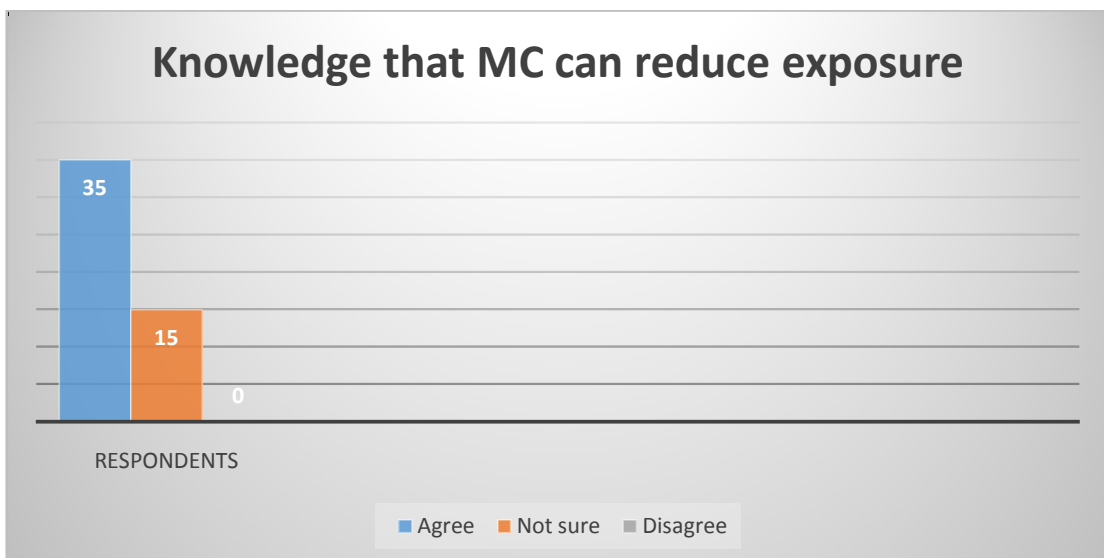


Fig 11: Knowledge that MC could reduce exposure to HIV

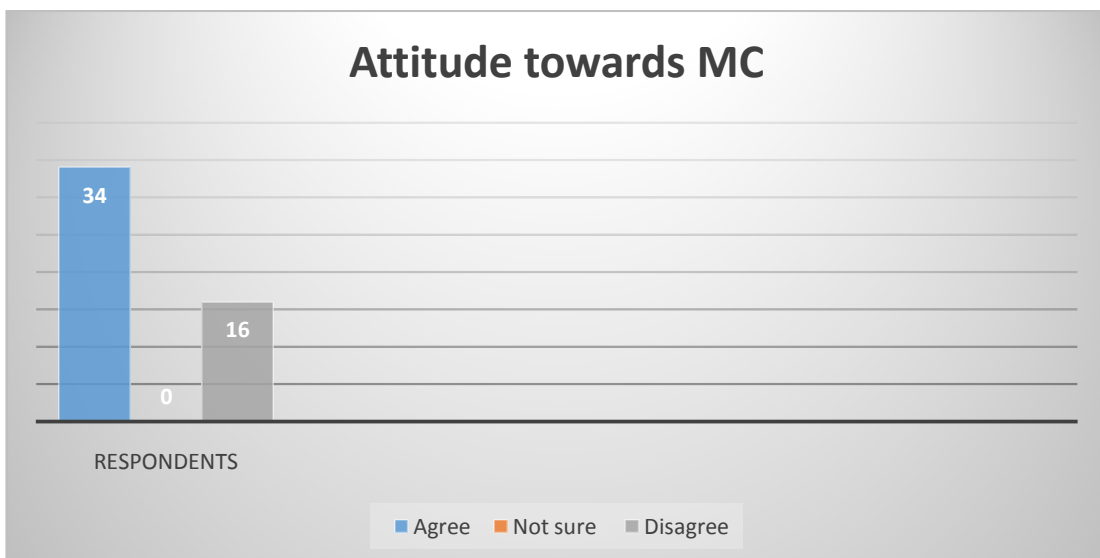


Fig 12: Positive attitude towards MC

Of the 50 respondents, 31(62%) revealed that they obtained sufficient information regarding male circumcision from different sources, while 19(38%) did not agree that they obtained sufficient health information.

Thirty-four (68%) respondents claimed that they have sufficient knowledge of the benefits of male circumcision, 10(20%) respondents claimed not to have knowledge of the benefits of male circumcision and 6(12%) respondents claimed to be unsure of the benefits of male circumcision.

Concerning the risks of male circumcision, 20(40%) respondents indicated that they had knowledge of the risks related to male circumcision. 15(30%) respondents indicated that they did not have knowledge of the risks and 15(30%) respondents indicated that they were unsure of the risks related to male circumcision.

Thirty-five (70%) respondents indicated that they had knowledge that male circumcision could help reduce the men's exposure to HIV infection and 15(30%) respondents indicated that they did not know that male circumcision could reduce the men's exposure to HIV infection. All 50(100%) respondents who reported to Ruwa Rehabilitation Hospital were within 15kms radius of their home in relation to male circumcision centre. Thirty-four (68%) respondents had a positive attitude towards male circumcision and 16(32%) respondents did not have a positive attitude towards VMCC centre.

XXXII. FACILITATORS OF MALE CIRCUMCISION UPTAKE

Besides knowledge of and attitude towards male circumcision, the researcher also examined the facilitators of male circumcision uptake. This section presented findings concerning the factors that facilitated the uptake of male circumcision namely: protection from diseases, maintaining genital hygiene, culture and religion, cosmetic reasons and enhancing sexual pleasure.

XXXIII. PROTECTION FROM DISEASE

Twenty-one (42%) respondents believed that male circumcision could protect from STIs and HIV infection, 12(24%) respondents were not sure that male circumcision could prevent against STIs and HIV infection and 19(38%) respondents did not agree that male circumcision could protect one from STIs and HIV infection.

XXXIV. GENITAL HYGIENE

Thirty (60%) respondents cited that male circumcision uptake was due to the fact that it could maintain genital hygiene while 10(20%) respondents were unsure and 10(20%) respondents disagreed that this was a facilitator of MC uptake.

XXXV. CULTURE AND RELIGION

Of the 16 (32%) respondents who were already circumcised, 11(22%) respondents cited that circumcision was done for cultural and religious reasons and the other 4(8%) and the other rest of 34(68%) respondents did not agree that circumcision should be undergone for cultural and religious reasons.

XXXVI. SEXUAL PLEASURE

Thirty-three (66%) respondents agreed that male circumcision was done to enhance sexual pleasure whereas, 10(20%) respondents did not agree that male circumcision enhances sexual pleasure and 7(14%) respondents were unsure that male circumcision could enhance sexual pleasure.

XXXVII. BARRIERS TO MC UPTAKE

A number of factors were found to be obstacles to the uptake of male circumcision. The following section presents the findings concerning the barriers to male circumcision uptake, primarily fear of surgical complications, fear of long wound healing time, peer pressure, and fear of stigma and discrimination. Seventeen (34%) respondents feared surgical complications, such as pain, bleeding, and infection as a reason for failure of uptake of male circumcision, while 33(66%) respondents had no fear of surgical complications that prevented them from undergoing circumcision.

Eighteen (36%) reported fear of long wound healing time as a reason for not undergoing MC, while 32(64%) respondents did not regard long healing time as an obstacle to circumcision.

The study found that 12(24%) respondents responded that they did not want to be circumcised because of peer pressure, while 38(76%) respondents were not influenced by peer pressure.

Thirty (60%) respondents reported that stigma and discrimination would not influence them to undergo male circumcision, while 20(40%) respondents had a fear of stigma and discrimination, and they claimed that this fear would prevent them from undergoing voluntary medical male circumcision.

Eleven (22%) respondents said they would not have circumcision done because their culture could not allow them to do so whereas, 39(78%) respondents said their culture could not affect their uptake of voluntary medical male circumcision.

On being asked whether their religion could not accept circumcision, 9(18%) respondents agreed while majority 41(82%) respondents indicated that their religion could influence their uptake of VMMC.

All 50(100%) respondents indicated that they had time of coming to the VMMC centre for circumcision. However, 13(26%) respondents did not want circumcision done because they had heard that circumcision could reduce the size of the penis whereas, 37(74%) respondents did not agree to having their penis reduced because of circumcision. Others, 19(38%) did not agree to circumcision done because they had heard that it would reduce sexual feelings. Those who did not think that circumcision would reduce sexual feelings were 31(62%) respondents.

XXXIII. SUMMARY, DISCUSSION, LIMITATIONS, CONCLUSION, RECOMMENDATIONS

The purpose of this study was to identify determinants of voluntary medical male circumcision uptake as an HIV prevention strategy among males aged between 20-29 years in the community of Ruwa. The objectives of the study were to describe knowledge levels regarding Voluntary Medical Male circumcision among males aged 20 to 29 years, to identify attitudes towards Voluntary Medical Male circumcision among males aged 20 to 29 years, to establish the practices of males aged 20 to 29 years regarding VMMC and to establish barriers to Voluntary Medical Male Circumcision in the Ruwa Community. The research design for this study was a descriptive survey design and made use of 50 research participants who were selected using purposive sampling approach. Data was collected using a structured questionnaire

IXXXX. DISCUSSION

Majority 15(30%) of the respondents were those that were aged 24-25 years who participated in this study that sought to identify determinants of uptake of VMMC as an HIV prevention strategy among males aged 20-29 years in the community of Ruwa. Also the study showed that those aged between 20-21 years were more compared to those that were aged 26-27 years. This concurred with a study carried out in South Africa by Lissouba, Taljaard, Rech, Dermaux-Msimang, Legeai, Lewis, Singh, Puren and Auvert (2011) which revealed that uncircumcised men were more likely to be aged 27 or older. However, the VMMC amongst males in Zimbabwe is a relatively new practice as most of those who were being circumcised were doing it as a cultural norm or religious reasons

Majority of the respondents 31(62%) had attained a secondary level of education and only a few of the respondents 3 (6%) had primary level of education. This only helped show the culture of education in Zimbabwe values that the child attain at least a secondary level of education. Majority of those that were coming to Ruwa Rehabilitation Hospital amongst these males who participated in this study that sought to identify the determinants of uptake of VMMC as an HIV prevention strategy were 33(66%) married. This could be a reason for their wish to prevent spread of HIV as they were seeking to have VMMC done. Those that were of a Christianity background were also majority as shown by 27(54%) respondents who participated in this study.

However also those that belonged to the Traditional African religion amongst these men were second majority 21(42%) respondents and only 2(4%) respondents were Moslems. All of the Moslems were already circumcised and were coming for the review. Amongst the males who belonged to the Christianity and Tradition African groups, this is were some 16(32%) did not want circumcision done. This is especially true as cited by Lissouba et al. (2011) who showed that religion is a major determinant of circumcision acceptability. Male Circumcision was universally associated with Islam. It is also considered fundamental to some minority Christian and animist sects, religious reasons (19.6% vs. 40.4%; $p = 0.028$) was also cited as reasons for not being circumcised (Lissouba, et al., 2011).

The ethnic tribes helped show the tribes in the country of Zimbabwe. Most 13(26%) of the respondents who reported to Ruwa Rehabilitation Hospital were the Zezurus and these were followed by 11(22%) respondents who belonged to the Chichewa tribe. However, other groups of other ethnic tribes contributed to the numbers of those that were coming to Ruwa Rehabilitation Hospital. Ethnic tribe in case of this study it had an effect on the uptake of VMMC as an HIV prevention strategy. This concurred with an operational study of male circumcision uptake in South Africa which found out that self-reported Sotho ethnic tribe reported circumcision than the Zulu tribe which had more uncircumcised men Lissouba, et al. (2011). Lissouba et al., (2011) furthermore stated that the intention to undergo adult male circumcision was associated with ethnic group, believing that medical adult male circumcision was safe and partner and family support of adult male circumcision.

Majority 34(68%) respondents were not circumcised and these were coming to the VMMC centre. However amongst these males, 16(32%) respondents did not want circumcision done for fear on complications associated with male circumcision which included pain and fear of going through HIV testing before circumcision. It was interesting to note that there were some males 11(22%) who wanted circumcision done for the sake of their wives. This concurred with a study by Bailey et al (2002) who said the ease of maintaining proper penile hygiene proved a major factor in women's acceptability of circumcision. For those 29(58%) respondents who said decision was solely theirs only helped show that adults are autonomous and are capable of making decisions that they see as good to them.

Those 13(26%) males who said that circumcision was best performed at childhood age concurred with Pan et al. (2012) who showed that about 7% of the parents thought the best time for the circumcision was during neonatal period. However, 16(32%) respondents indicated that circumcision was not acceptable indicated that this could raise a false sense of security to them, hence they would not be able to take preventive measures after circumcision.

The majority of respondents 31 (62%) revealed that they had sufficient information regarding male circumcision and they found information regarding male circumcision from different sources, such as the radio, newspapers, and television. Information is power. Thirty-four (68%) of respondents claimed that they knew the benefits of male circumcision, 35 (70%) of respondents had knowledge about the HIV protection benefits of male circumcision, and 20 (40%) respondents knew about the risks related to male circumcision. Having knowledge of the risks related to male circumcision was a greater predictor of male circumcision uptake among males who reported to Ruwa Rehabilitation Hospital. It is believed that health information about the benefits and the risks of male circumcision could significantly influence males' uptake of the procedure. A study conducted by Jayeoba et al (2012) showed that after a brief informational session covering the risks and the benefits of male circumcision, three-quarters of the uncircumcised boys in the study reported that they definitely wanted to be circumcised. This suggests that the implementation of frequent health campaigns educating about the benefits and disadvantages of male circumcision could have a long-term positive impact on male circumcision uptake.

During data analysis it became clear that medical circumcision is favoured over traditional forms of circumcision. Majority 23(46%) respondents considered the clinic or the hospital as the best place to have VMMC performed on one. Traditional settings were regarded by 11(22%) as the best place to be circumcised. Similar responses were reported in previous studies conducted in Botswana, where 98% of the adolescent study participants and their parents felt that the hospital was the most appropriate place for circumcision (Jayeoba et al, 2012)..

Protection from STIs and HIV infection and maintaining genital hygiene were cited by the majority of male respondents 21 (42%) and these cited genital hygiene issues were the main reasons for them to undergo circumcision. Having knowledge of the HIV protection benefits of VMMC was found to have a positive attitude towards VMMC. These are the most important grounds for implementation of the UNAIDS/WHO recommendations to implement VMMC an additional strategy to reduce HIV transmission(WHO/UNAIDS 2007) throughout in Zimbabwe.

XXXX. LIMITATIONS

Ruwa Community is an urban community with access to information from various forms such as media and internet, and this may have had a significant bearing on the level of knowledge that males had on VMMC.

The questionnaire might have affected the outcome, but every effort was made to iron out any ambiguities through the pilot study.

XXXXI. CONCLUSION

The findings revealed that having knowledge of the HIV-protection benefits of male circumcision and having knowledge of the risks related to male circumcision were found to be driving forces for males to undergo male circumcision. Reasons such as culture and religion and the desire to enhance sexual pleasure were found to be facilitators for males to undergo male circumcision. Policy makers need to plan ahead to provide continual education, capitalising on these facilitating factors to raise male circumcision uptake.

The findings of this study underscore the fact that continual health education, the use of proper communication channels, and some policy modifications are urgently needed to address matters relating to the health of males, in particular as pertains to male circumcision.

XXXXII. RECOMMENDATIONS

In order to make appropriate recommendations, the researchers grouped the recommendations in terms of practice, communication and education, and further research in the health disciplines, and policy reform. The following recommendations were put forward.

XXXXIII. RECOMMENDATIONS REGARDING THE PRACTICE OF HEALTH PROFESSIONALS

There is need to equip health facilities with the necessary resources for male circumcision. Government and development partners should pull resources together and equip health institutions with the necessary infrastructure for male circumcision.

XXXXIV. RECOMMENDATIONS REGARDING COMMUNICATION AND HEALTH EDUCATION

- Continual awareness raising with regard to male circumcision, where various different forums are used, is required to increase males' motivation to undergo male circumcision.
- Use of proper communication channels, such as the distribution of educational pamphlets and flyers and health campaigns conducted in the Ruwa
- Policy makers could also work towards implementing policies that encourage the uptake of male circumcision among male counterparts.
- The media and other communication channels can also be used as campaign instruments by development partners and the relevant Ministry, to educate the general public about male circumcision.

XXXXV. FUTURE RESEARCH AND POLICY REFORMS

- The researchers recommend that a further study, preferably a qualitative study or a mixed methods study, be undertaken, which will enable males to express their opinions, so that more insightful suggestions can be proposed.

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