# Factors Impeding the Acceptance of Medical Circumcision by Male Medical Students at Kampala International University Teaching Hospital in Bushenyi District

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#### ABSTRACT

The study aimed to identify factors preventing the uptake of medical circumcision among male medical students at Kampala International University-Teaching Hospital Bushenyi District. The population included all male medical students at the hospital, with a sample size of 380 respondents interviewed. The results showed that only 36% of the respondents had been circumcised, and the majority (64%) were not. Despite campaigns by the Uganda Ministry of Health to achieve 80% circumcision among males aged 15-49, the uptake of medical male circumcision in KIU-TH is low. Factors hindering the uptake include awareness about safe circumcision, attitude towards the procedure, pain during the procedure, and the belief that circumcision reduces sexual pleasure. The study recommends local district authorities, including LCV Chairmen, DHO, and DEO, collaborate with village Health teams to increase awareness through educational programs, which in the long run will enhance attitudes and the uptake of medical male circumcision.

**Keywords:** Medical circumcision, Male medical students, Safe male circumcision, Lecturers, Uganda Ministry of Health.

### INTRODUCTION

Male circumcision (MC) is where all or part of the foreskin is removed surgically [1]. The most common type of male circumcision is one in which the foreskin of the penis is completely removed, exposing the entire glans of the penis. Male circumcision (MC) is the surgical removal of the foreskin from the head of the penis which is carried out by professionally trained Health Care Workers under local anesthesia to prevent pain [2]. Globally, it's estimated that approximately 30% of the world's male population aged 10 years and above is circumcised with 69% of the circumcised men being Muslims residing mainly in Asia, the Middle East and North Africa, 0.8% are Jewish and 13% are non-Muslim and non-Jewish men living in the USA [2]. In Africa, especially in Northern and Western regions, MC is almost universal. However, it is less common in Southern Africa where the prevalence is 15% Botswana, around in Namibia. Swaziland, Zambia and Zimbabwe (World Health Organization [3]. The report further revealed the prevalence of 21% in Malawi, 35% in South Africa, 48% in Lesotho, 20% in Mozambigue and more than 80% in Angola and Madagascar. Further, the same report also shows the prevalence of uptake of MC in East and Central Africa as varying from almost 15% in Burundi and Rwanda to 70% in Tanzania 84% in Kenya and 93% in Ethiopia [3]. In Uganda, the prevalence of medical male circumcision is at 27% while the prevalence of circumcised males in Bushenyi District is still unknown especially among men whose culture and religion is not in support of male circumcision [1]. [4] recognizes medical male circumcision as a cost-effective HIV prevention intervention. It also acknowledges that it is not 100 per cent effective in preventing new HIV infections. Rolling out voluntary medical male circumcision (MMC)to a full scale would require a simplified disseminated national policy, an expanded infrastructure, human resource capacity and а strategic communication framework to ensure the

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INOSR APPLIED SCIENCES 10(3):146-157, 2023 safe deliverv of the intervention countrywide. In Uganda, the National Strategic Plan (NSP), 2007/08-2011/12 recognizes male circumcision as a costeffective HIV prevention intervention. It is also acknowledged MCis not 100 per cent effective in preventing new HIV infections. As part of the HIV prevention strategy, the Uganda Ministry of Health had a target to circumcise 80% of males aged 15-49 years by the end of 2015 (Uganda National HIV Prevention Strategy, 2011-2015). Between April 2013 and August 2017, 188,512 males were circumcised at the national level although considerable [5]: а geographic variation in MC prevalence exists, ranging from 2% in the Mid Northern region to 53% in the Mid-Eastern Uganda [6]. It is against of this background, that this studyassessed the factors hindering the uptake of medical among circumcision male medical Kampala International students at University- Teaching Hospital Bushenyi District.

# **Statement of Problem**

Male circumcision is believed to be associated with reduced HIV heterosexual transmission. If well embraced and adopted widely, MC can avert new HIV infections by 60% [7]. It is estimated that 20 million MCs are needed to achieve 80% coverage of MC by 2025 [8]. If this coverage is achieved and maintained,

## Study design

This was a descriptive cross-sectional study employing both qualitative and quantitative methods of data collection. The cross-sectional study was used because the study was meant to collect prevalence data and other detailed information that is representative of the whole population in a short period of time. Therefore, it was an established fact that this type of study design would be the most suitable for obtaining this particular information.

## Area of Study

The study was conducted at Kampala international university teaching hospital located in Ishaka Bushenyi Municipality Western Region Uganda. It's privately

about 3.4 million new HIV infections could be averted, reducing the number of people needing HIV treatment and care, as well as saving considerable sums of money in future treatment costs [9]; [10]. As far as Uganda is concerned, the Uganda MOH rolled out a voluntary male circumcision program as an HIV prevention strategy to improve the access of hard-to-reach, high risk and poor populations to MC services at free cost with a target to circumcise 80% of males aged 15-49 years by the end of 2015 (Uganda National HIV Prevention Strategy, 2011-2015). Despite rolling out services both in hospitals and MC community outreaches, the uptake of MC is still low. Between 2013 and 2017, only 188,512 males were reported to have been circumcised at thenational level [5]; while geographic variation in male а circumcision prevalence exists, ranging from 2% in the Mid-Northern region to 53% in the Mid-Eastern region of Uganda [6]. And in some districts such as Bushenvi District, there is no published data regarding the uptake of MC services or the factors that could hinder male circumcision utilization. Therefore, it is against this background that the study wished to investigate the factors hindering the uptake of medical circumcision among male medical students at Kampala International University-Teaching Hospital Bushenyi District.

# METHODOLOGY

owned and operates a teaching hospital-KIU- teaching hospital (KIU-TH). KIU -TH is located in Bushenyi- Ishaka municipality along the Mbarara - Kasese highway, 48km from Mbarara town. It is located on a sloppy hill at the range of 800 to 1200m height above sea level. Its vegetation is wet savannah grassland. Bushenyi district is about 360 km from Kampala city. It is bordered by Mitooma and Ntungamo districts in the south, Sheema in the east, Buwheju in the north and Rubirizi in the west. It was chosen because it was easily accessible for the researcher to collect data from respondents.

## **Study Population**

The study population comprised all male medical students at Kampala International University Teaching Hospital. Key

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INOSR APPLIED SCIENCES 10(3):146-157, 2023 informants such as religious leaders, local leaders and Lecturers were considered.

### Inclusion criteria

- All male medical students at Kampala International University Teaching Hospital andfound residing within the area of study.
- Participants voluntarily were accepted by informed consent to take part in the study. Parents and guardians.

### Exclusion criteria

Male students were excluded from the study if they attained any other course than medicineand surgery and those with hearing and talking disabilities were excluded.

### Sample size determination

The following Slovin's formula was used to determine the sample size because the population of males are less than 10,000 people.

n= Where by n=Sample size, N=Population, e=Level of significance=0.05Therefore,

n=N

1+N (0.05)2

7099/1 + 7099(0.002)

n=380 Respondents

A sample size of 380 respondents was interviewed

### Sampling techniques and rationale.

Simple random sampling is a sampling technique where every individual in the population has an even chance and a likelihood of being selected in the sample, in this method the selection of items completely depends on probability. Pieces of papers written on (YES) and (NO) were given to participants and every person with (YES) was chosen to participate. This method was used because it's easy, rarely biased, time-saving and economical.

### Dependent variables

Uptake of MC among medical male students at KIU-TH

### Independent variables

Socio-demographic factors and personal factors affecting the uptake of MC among medical male students at KIU-TH.

### Data Collection Tool

Data was collected using self-developed

questionnaires. The questionnaires contained both open-ended and closedended questions. Respondents were given a chance to read questions, interpret and write down their answers. The data collection tool (questionnaire) was pretested by administered to male medical students at KIU-TH and their responses were used to revise the questionnaire; removing and adding any relevant sections or questions. The principal researcher interviewed the respondents, filled out the questionnaires and ensured the accuracy of the information. This method was used because it enables the collection of first-hand information and it'ssimple to respondents.

#### Data sources

The researcher used both primary and secondary sources of data. The primary sources included information obtained directly from male medical students at KIU-TH through face-to-face interviews and questionnaires. Secondary data was collected through documentary sources in the area of the study.

### Data analysis

Descriptive summary statistics such as frequencies and percentages were used to describe respondent's demographic characteristics, prevalence of male circumcision and personal factors. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20. The data was presented as simple statements, tables, bar charts and pie charts.

### Ethical considerations.

Permission to conduct research was sought from the office of the administrator, School of Allied Health Sciences, KIU-WC, confidentiality was ensured whereby the names of the respondents were not included and information given by the respondent was disclosed to anyone. Informed consent forms were availed and respondents were not forced to participate. The respondents were informed that the interview was in private and confidentiality was therefore ensured. The benefits of the research were explained torespondents.

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# RESULTS

# Socio-demographic information of the study participants

A total of 380 respondents who met the The results are presented in a t figures that follow. study. The demographic factors Table 1: Socio-demographic information of the study participants

considered were age, religion, education attainment, marital status and occupation. The results are presented in a table and the figures that follow.

Socio-demographic factors		Frequency (n)	Percentage
1. Age group	18-25	205	53.9%
	26-35	100	26.40%
	36 Above	75	19.70%
2. Marital status	Single	250	65.8%
	Married	106	27.9%
	Separated/divorced	24	6.3%
	Others	0	0
3. Religion	Anglican	110	28.90%
	Catholic	172	45.30%
	Muslim	41	10.80%
	Others	57	15.00%
4. Level of education	Certificate	200	52.6%
	Diploma	125	32.9%
	Degree	55	14.50%
5. Occupation	Student	215	56.60%
	Religious leaders	88	23.10%
	Lecturers	18	4.70%
	Business	59	15.50%
Does your culture	Yes	35	9.20%
support male circumcision?			
	No	345	90.8%

The majority of the respondents (53.9%) were in the age range of 18-25 years and at least 75(19.70%) were above 36 years. The majority of respondents were single (65.8%) and the least 6.3% divorced Christians (45.3%) and a few (10.8%) were Muslims; (56.6%) were students. Many respondents (90.8%) noted that their cultures don't support medical male circumcisionand only (9%) revealed that their cultures supported medical male

circumcision.

Prevalence of uptake of medical male circumcision among males at KIU-TH Bushenyi District

A total of 380 respondents were asked questions about their circumcision status in order to determine the prevalence of circumcised male medical students at KIU-TH Bushenyi District and the results are presented below.

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#### Figure 1: showing the Prevalence of circumcised males (n=380)

The study findings in Figure 2 show that only 138 (36%) of the respondents who were involved in the study were circumcised and the majority (64%) of them were not circumcised. In an interview, some of the students argued that many of them found circumcised at their age of maturity and this was mostly found among male nursing Muslim students as their culture supports male circumcision. The respondents were asked about the place where they were circumcised. The results are presented below.

Table 2: Respondent involved in circumcision					
Where were you circumcised?	Frequency	Percentage			
Hospital	305	80.3			
Religious circumcision at a mosque	75	19.7			
TOTAL	380	100			

### The place of circumcision

The majority of (80.3%) respondents were circumcised at the hospital. This

showed that KIU-TH also influenced its students to engage in the male circumcision program.

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Table 3: Personal factors hindering the uptake of Medical Male Circumcisionamongst male medical students at KIU-TH (n=380)

Personal factors	Responses	Frequency	Percentage
Awareness of Medical male circumcision	Yes	183	48.20
	No	197	51.80
	Very good	58	15.3
Your opinion about male circumcision	Good	212	29.5
	Poor	110	55.3
Willingness to get	Yes	180	47.7
Circumcised	No	200	52.3
The main reason you decided	Everybody was circumcised	11	2.9
To get/be circumcised were;	Improve penis hygiene	81	21.3
	My partner encouraged	13	3.4
	Tradition	24	6.3
	Religion	41	10.8
	Not applicable	10	55.3

The study findings in Table 4, indicated that 183 respondents (48.20%) revealed that they were aware of male circumcision while most of them (51.8%) were not aware of male circumcision. Only 180 (47.70%) were willing to get circumcised and (52.3%)

were not willing. The majority of respondents were not willing to circumcise only that it was painful. On the opinion about male circumcision majority (52.3%) revealed that it was poor.



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# Figure 2: showing the proportion of respondents' belief that male circumcision reduces sexual pleasure (n=380)

In Figure 3, a good number (75.5%) pointed out that circumcision reduces sexual pleasure and only 93 (24.5%) did not believe that circumcision reduces sexual pleasure. This was because, in the period of circumcision, they tended to lose interest in sexual desires, thus their lovers tended to discourage them from having medical male circumcision.



Figure 3: Barriers hindering the uptake of male circumcision

Many 49.7% revealed that pain was the main barrier that hindered male circumcision while about 86 of them (22.60%) noted that the male circumcision was against their traditions/religion and

#### Prevalence of uptake of medical male circumcision among male medical students at KIU-TH

In this study, only 36% of the respondents reported having been circumcised and the majority (64%) were not circumcised. Despite massive campaigns by the Uganda Ministry of Health to achieve a target of 80% circumcised males aged 15-49 years, the current study indicates that uptake of medical male circumcision in KIU-TH is low. This may be attributed to strong cultural influence among Different ethnic groups of people at KIU-TH since these are traditionally non-circumcising communities abandoned who male circumcision for many various reasons. The finding is contrary to [5] the 69 (18.20%) discovered that male circumcision may affect their sexual performance unlike few of 3.4% showed that male circumcision interferes with work as the wound takes long to heal.

## DISCUSSION

prevalence of male circumcision tends to vary due to ethnic and religious differences in the different geographical settings. Within North African and West African countries which are majorly Islamic, MC is almost universal. In some West African countries such as Burkina Faso and Ghana, the prevalence of circumcision is lower among the traditionalists and highest among the Muslims and Christians. In Cameroon, circumcision is almost universal among all religions except the Animists, among whom there is one particular ethnic group, the Mboum who embrace circumcision as part of their culture [5]. The uptake of MC in Mutare in Zimbabwe is guite low and was estimated to be at 17% while 83% were

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# INOSR APPLIED SCIENCES 10(3):146-157, 2023 not circumcised [11].

Socio-demographic factors hindering the uptake of Medical Male Circumcision In the study, the uptake of male circumcision was influenced by age, level of education of respondent, marital status, religion and cultural support. KIU-TH is largely a Muslimcommunity. For this, male circumcision is known to be embraced by some religions suchas Muslims and Jews, while Christians are silent about it [12]; [13]. Also, the strong cultural belief surrounding male circumcision hasa great influence on community uptake of the procedure in line with what is reported in many of the previous studies. For example, being uncircumcised in Kenya was regarded as an identity for the Luo culture [14]; while among the Iringa community in Tanzania, many participants also noted that circumcision was never a part of their traditional practice since their ancestors were not circumcised too [15]. The present results are also in line with a study that was done in Rakai, Uganda in which culture was shown to negatively influence the uptake of medical male circumcision [16]. This is because circumcision is not traditionally practised in majority cultures in Uganda. Regarding the level of education. 52.6 % of the respondents had at least attained a certificate of education while 14.5% had attained a degree. Generally, peoples' attitudes may change with education. Individuals' decision to circumcise is more influenced by culture or health, and the key persons involved are parents if male circumcision was done in childhood or by doctors, individuals and sexual partners. this, Based on the current study discovered that almost half of the study participants were aware of male circumcision but had less knowledge of HIV and male circumcision. This agrees with the findings of [17] in a nationwide survey that was carried out in Australia which found that a bigger proportion of circumcised men were associated with higher levels of education. The fact that the level of education was at least high among respondents suggests that male circumcision implementers should utilize this advantage and focus on health

educational campaigns to promote Male uptake. 27.9% Circumcision of the respondents were married. Studies carried out in different countries indicate that traditional groups practising male circumcision revealed that uncircumcised men experienced premature ejaculation. decreased penile hygiene and were unfit for marriage [18]. Male circumcision was believed to be a developmental milestone fora man. It was also perceived to protect one from sexual diseases. This is not consistent with the results from the [19], which indicated that the proportion of married and single men in regards to circumcision was comparable with 48.6% of the married men and 41.1% of single males circumcised. Therefore, there is a need for awareness of comprehensive HIV prevention strategies particularly safe male medical circumcision. This would facilitate the adoption of positive attitudes towards male circumcision as the study demonstrated findings have that awareness changes negative attitudes into positive attitudes. The age has also been noted to influence acceptance to circumcision for instance in Tanzania. the males prefer to be circumcised when they are younger than 25 years. This is similar to most African countries including Uganda [18].

# Individual-related factors affecting the uptake of Medical Male Circumcision

Among the individual factors that had a significant influence on medical male circumcision were awareness about medical male circumcision. opinion about circumcision, willingness to get circumcised and the belief that circumcision reduces sexual pleasure. The study findings discovered that only a third of the respondents revealed that they were aware of male circumcision. Although there is scientificevidence that clearly shows that male circumcision reduces the risk of HIV infection- by partial protection providing among heterosexual men from contracting HIV by atleast 60%. People are less knowl edgeable about be nefits of male medical circumcision due to the fact that the majority have little access to health facilities due tolong distances. This is

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INOSR APPLIED SCIENCES 10(3):146-157, 2023 consistent with the results of the study conducted in Nairobi among the Luo communities by [20] which indicated that theparticipants were less knowledgeable about male circumcision. There is a comprehensive need to raise awareness about HIV prevention as it plays a vital role in the risk reduction of new HIV infections, also sufficient knowledge may bring aboutlong-lasting behaviour change. This would facilitate the adoption of a attitude towards positive male circumcision. The majority (90.8%) of the study participants noted that their culture does support male medical not circumcision. These results are in line with the results of another study by [21], which discovered that amongst the Turkana of Kenya and Bahima of Uganda who don't practice Circumcision, older men consider circumcision as disregarding tradition and assimilating to other cultures and since the older men are the keepers of culture, they are expected to uphold Turkana traditions and keep to it. Therefore, there is a need for the stakeholders such as the ministry, and the district health team in collaboration with traditional leaders to harmonize on the about circumcision. beliefs Only. 18(47.7%) of the participants at KIU-TH were willing to get circumcised, while greater than half of the respondents expressed limited interest in the Male Circumcision because of beliefs that women preferred uncircumcised men. A number of barriers were indicated to hinder the uptake of medical male circumcision including pain following circumcision, safety of the procedure, traditions/religious beliefs and spousal refusal. Some even expressed the concern that men would engage in more sex if they perceived themselves to be fully protected by circumcision. This means that there is a

Socio-demographic factors that are hindering the uptake of medical male circumcision at KIU-TH were age, level of education. marital status. tradition/culture and religion. The study also found that awareness about safe male attitude circumcision, to getting circumcised, pains during the procedure,

need for male circumcision implementers educate men about the benefits to associated with the procedure. With an understanding that the benefits of male circumcision are great and outweigh the perceived barriers, one would likely overlook the perceived disadvantages of being circumcised, thereby leading to improved uptake of the procedure. This is with other studies in line which highlighted bleeding pain, and cultural/traditional beliefs as some of the barriers to Male Circumcision acceptability [22]-[26] Partners never supported the procedure affects as it sexual performance. This implies that most men are likely not to take up the procedure because of the assumption that women dislike circumcised men. However according to the observations from a study conducted in Kenya to check the perceptions of female partners of recently circumcised men, it was found that all females were satisfied with their partner's decisions take to up circumcision and a high number of women (91%) reported more sexual satisfaction than before circumcision [23]. Therefore, community mobilization and education about the benefits of medical male circumcision in the Bushenvi district is needed, considering that a great number the males) believed (3/4)of that circumcision reduces sexual pleasure implying that men who have not vet been circumcised are unlikely to accept the intervention as they fear to lose their sexual power and virility. These findings however contradict a report from [24],[27]which discovered that [33] some participants believed that circumcision would increase their sexual power and virility which may be explained by the differences in traditional beliefs about circumcision [34].

## CONCLUSION

refusal of partners, and the belief that circumcision reduces sexual pleasure were the individual factors that hindering the uptake of medical male circumcision at KIU-TH Bushenyi District.

### Recommendations

Local district authorities including LCV Chairmen, DHO and the DEO of Bushenyi

INOSR APPLIED SCIENCES 10(3):146-157, 2023 district should collaborate with other relevant stakeholders at grass root levels like village Health teams to increase awareness through various educational programs whichin the long run will further enhance attitude and probably uptake of MC. Intensive health education campaigns on the benefits of male circumcision, inclusion in the curricula, and a multi-

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sectoral approach with community leaders and the private sector to improve acceptability are required. In this approach, women need to be included in the health education talks about the benefits of MC since these have an upper hand in influencing their partner's decisions regarding the uptake of MC services.

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