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**Knowledge, Attitude, and Practices of Males
10-49 Years attending Ishaka Adventist
Hospital on Safe Male Circumcision**

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ABSTRACT

Uganda Demographic and Health Survey conducted in 2016 asserted that only 26% of adult males in Uganda were circumcised and HIV prevalence among uncircumcised males was higher (6.7%) than in circumcised males (4.5%). Safe male circumcision could reduce the risk of new infections of HIV among males by 60%. A quantitative cross-sectional descriptive study among males involved 44 males aged 10-49 that were selected through a convenient sampling method focused on knowledge, attitudes, and practices towards safe male circumcision among males 10-49 years attending Ishaka Adventist Hospital in Ishaka-bushenyi municipality. Most males were Banyankole single aged 10-19(36.9%), with low formal education (54.4%) primary and (11.3%) none. 100% had heard about SMC, from radios (56.8%) and few from health workers (11.4%). They knew SMC for increasing sexual pleasure and avoiding other STIs but not HIV. 68.2% did not know where they could get SMC services from. Males agreed (65.5%) strongly agreed (31.8%) that Post SMC wounds take long to heal, while 43.3 and 36.6 agreed and strongly agreed that circumcised males perform better sexually. The majority of males were comfortable with local anesthesia (79.5%), whereas stitching and bandaging were opposed (29.5%) and (36.3%). 20.4% of males were circumcised, the Majority of having been circumcised below 10 years (44.4%) by majorly religious leaders (55.5%). Those circumcised receive pain management (66.6%) education on wound care (55.5%) and STIs screening (22.2%) while HIV screening by only 11.1%. There is considerably low knowledge of SMC and those that know about SMC know it for other purposes like sexual pleasure and sexual performance but not HIV prevention, while envy a few that know about SMC do not know where they can access SMC services from. Negative attitudes are basically on wound healing they fear that long and HIV risk reduction that they disagree with. While stitching and bandaging post-SMC wounds were opposed, local anesthesia and pain management had strong support for males. The government move of the SMC campaign for all males has low support from males 10-49 years it targets from the ground. While those that are circumcised do it at younger age < than 10 for other reasons mostly religious than HIV control.

Keywords: Health Survey, Adult males, Safe male circumcision, Health workers, HIV infection.

INTRODUCTION

Male circumcision is the removal of the foreskin from the human penis [1-3]. In the most common procedure, the foreskin is opened, adhesions are removed, and the foreskin is separated from the glans. After that, a circumcision device may be placed then the foreskin is cut off. Globally, approximately, 30% of males are estimated to be circumcised globally, of whom an estimated two-thirds are Muslim [4]. Male circumcision has been shown to reduce the risk of heterosexual transmission of HIV infection in men by up to 60% in three randomized controlled trials [5-7]. The results from three large randomized clinical trials that were already confirmed in Kenya, Uganda, and South Africa in 2007 were published, showing that medically performed circumcision

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is safe and can reduce men's risk of HIV infection by 60% [8]. Based on this evidence, the World Health Organization (WHO) and UNAIDS recommend medical male circumcision as essential to HIV prevention programming [9]. While the majority of men in Uganda are not circumcised—according to the 2011 UDHS, only 24% of men are circumcised [10]. There were already circumcising communities like the Bagisu, sabine who practice circumcision for their cultural reasons, and Muslims who practice male circumcision for religious reasons. Traditional circumcision ceremonies involve many practices that increase the circumcision candidate's risk of acquiring HIV, including the practice of circumcision by untrained circumcisers in unhygienic settings. So, the Ministry of Health, with assistance from HCP and the STAR-E Project, worked with a group of concerned citizens in the Bugisu region to develop an HIV prevention campaign entitled "We are the Pride of our Tribe" [10]. In 2010, the Uganda Ministry of Health adopted the National Safe Male Circumcision Policy, which recommends voluntary safe male circumcision for all men, and makes it available through the public health system.

Aim of the Study

To assess knowledge, attitudes, and practices of males 10-49 years attending Ishaka Adventist Hospital on safe male circumcision.

Specific Objectives

- To assess knowledge of males 10-49 years attending Ishaka Adventists Hospital on SMC.
- To assess attitudes of males 10-49 years attending Ishaka Adventist Hospital towards SMC.
- To assess practices on SMC among males 10-49 years attending Ishaka Adventist Hospital.

Research Questions

- What is the knowledge of males 10-49 years attending Ishaka Adventists Hospital on safe male circumcision?
- What are the attitudes of males 10-49 years attending Ishaka Adventists Hospital towards safe male circumcision?
- What are the circumcision practices among males 10-49 years attending Ishaka Adventists Hospital?

Justification of the Study

Ishaka Adventist Hospital is one of the health units offering safe male circumcision services to males 10-49 years on both outreaches to the community, and facility static service basis for free to all males as to reduce HIV transmission among males. There is no restriction on who should be circumcised as far as age is concerned, but the government of Uganda prioritize males 10-49 years, this being because is a sexually active age bracket of males, hence at a higher risk of contracting the infection through unprotected sexual intercourse. Uganda targets to circumcise 4.6 million males in this age bracket before 2020 (USAID 2016) Hence to meet this target, males have to efficiently utilize safe male circumcision services in facilities where they are provided, Ishaka Adventists Hospital included. This will directly help circumcised men from contracting HIV by 60%, and indirectly reduce the rate of transmission of HIV in the general population of Uganda by 9%. However, the achievement will base greatly on the knowledge and practices of the males targeted that will influence their safe male circumcision practices.

METHODOLOGY

Study Design

A descriptive cross-sectional study was used involving quantitative methods of data collection. A cross-sectional study is one that is carried out at a point in time or over a short period of time. The study design was selected because it aids in rapid data collection and allows a snap short interaction with a small group of respondents at a certain point in time thus allowing conclusions about phenomena across a wide population to be drawn. This method is also relatively inexpensive for the researcher as it takes a little time to conduct. The study design was used to examine knowledge, attitudes, and practices on safe male circumcision among males 10-49 years attending health care in Ishaka Adventists Hospital. A quantitative method was chosen because of the nature of the research under study requiring numerical data.

Area of Study

The study was conducted at Ishaka Adventist Hospital located in Ishaka-Bushenyi Municipality, Bushenyi District. Bushenyi is a district found in the South Western region of Uganda. It's located approximately 65 km by road from Mbarara town, the largest town in the region, and 360 km from

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Kampala the Capital City of Uganda. The main language spoken in the Bushenyi district is Runyankole as the Banyankole people are the main occupants of this area. Bushenyi is mostly an agricultural district, with adequate well-distributed rains and fertile soils with which it is blessed. Ishaka Adventist Hospital is a non-government health facility under a missionary foundation by the Seventh Day Adventists Union of Uganda but with other surrounding health facilities, serving the Bushenyi district population of 241,500 people as well as the surrounding districts. This area was purposely chosen because of the high youth population density from the mother town Ishaka-Kizinda towns that are largely inhabited by youth who are direct beneficiaries of 6 from risk reduction from contracting HIV among sexually active 10-49 year males.

Study Population

The study was conducted on males 10-49 years attending health care services from Ishaka Adventist Hospital. Ishaka Adventist Hospital has an average of 200 outpatient clients per day from Bushenyi and surrounding districts and about 3500 admissions per year.

Sample Size Determination

The sample was determined using the formula for simple random sampling using a single proportion given by: (Kish Leslie, 1965)

$$\text{Equation 1: Kish and Leslie Formula; } n = \left(\frac{Z^2 p q}{d^2} \right)$$

Where;

Where n = sample size,

Z = value corresponding to a 95% level of significance = 1.96

p = expected proportion of males affected 50% = 0.5

$q = (1-p) = (1-0.5) = 0.5$, d = absolute precision 5% = 0.05,

N = Total number of clients in Ishaka Adventist Hospital at the time of survey = 50

Therefore, from the above formula,

$$n = \left(\frac{1.96^2 * 0.5 * 0.5}{0.05^2} \right)$$

$$n = 384$$

Since my sample population, N was less than 10,000

Equation 2: Target population $< 10,000$;

$$nf = \left(\frac{n}{1 + \frac{n}{N}} \right); \quad nf = \left(\frac{384}{1 + \frac{384}{50}} \right); \quad nf = 44.23 \text{ respondents}$$

Where no is the sample size for N , population less than 10,000

The sample size, therefore, was 44 respondents.

Sampling Procedure

Convenience sampling was employed to select males of age 10-49 years who came to the health facility from services at the time of data collection, this method involves giving all members equal chances to be recruited into the study based on the Member's availability at the time of data collection. This method was preferred because of its simplicity in the limited number of respondents since all males that utilize services in Ishaka Adventist Hospital cannot easily be gathered, the characteristic nature of targeted members, time-saving and the economical nature of the sampling method.

Inclusion and Exclusion Criteria

Inclusion criteria

Males aged 10-49 years attended health services in the Ishaka Hospital outpatient department.

Exclusion criteria

Males below 10 years and those above 49 years were not considered in this study, as they were not in the primary targeted population by the Uganda Ministry of Health for SMC for risk reduction of contracting HIV.

Definition of Variables

Assessment of knowledge, attitudes and practices on safe male circumcision is composed of independent and dependent factors or variables.

Dependent variables

Male circumcision practices among males 10-49 years.

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Independent variables

Knowledge, Attitudes, demographic, and other social cultural, and economic characteristics are Age, Education, marital status, occupation, religion, and others that directly or indirectly affect SMC.

Research Instruments

A semi-structured questionnaire with leading questions was used to gather information from the respondents. Data was collected through the researcher's administered questionnaire to those unable to read and write in order to collect data from them, and self-administered to those able to read and write to reduce bias from the researcher's presence.

Pretesting of the Research Instrument

The questionnaire was pre-tested at Bushenyi health center IV one week before data collection for validity and reliability. Any observed inconsistency in the questions was corrected to meet the intended objectives before data was collected.

Data collection procedure

The questionnaires were administered to all respondents who met the inclusion criteria while at a convenient place. Responses through researcher-administered questionnaires were recorded in the questionnaires following the interviews, while the able-to-read and write respondents were given self-administered questionnaires which they answered secretly to avoid bias from the researcher's presence. Then all questionnaires both researchers administered and self-administered were checked for completeness, and clarity on answers given, and then collectively withdrawn from respondents.

Data Management and quality control

One day of training was given to research assistants on the objectives and procedures of the data collection by the investigators. Data completeness and consistency were checked by the researcher and his research assistants. Data cleaning and editing took place; missed values were statistically handled at the time of data collection to help address concerns caused by incomplete data. The data obtained was kept in safe custody and treated with respect and confidentiality. Coding and sorting at the end of the data collection process were done to ensure the information's adequacy, completeness and correctness.

Data Analysis

Data entry, coding, and analysis were done using the SPSS version 20 software package. To explain the study population in relation to relevant variables, frequencies, percentages, and summary statistics were used. Associations between dependent and independent variables were assessed and presented using tables, graphs, and pie charts.

Ethical Consideration

Informed consent and confidentiality

Authorities of Ishaka Adventist Hospital where the study was conducted were presented with a recommendation letter from the Kampala International University School of Nursing seeking approval to undertake the study. The respondents were also asked to consent before being interviewed. Interviews were conducted in a manner that enabled every respondent to respond freely and openly in the absence of any other tension-raising persons for confidentiality. Names of the respondents were not included in the data to ensure confidentiality.

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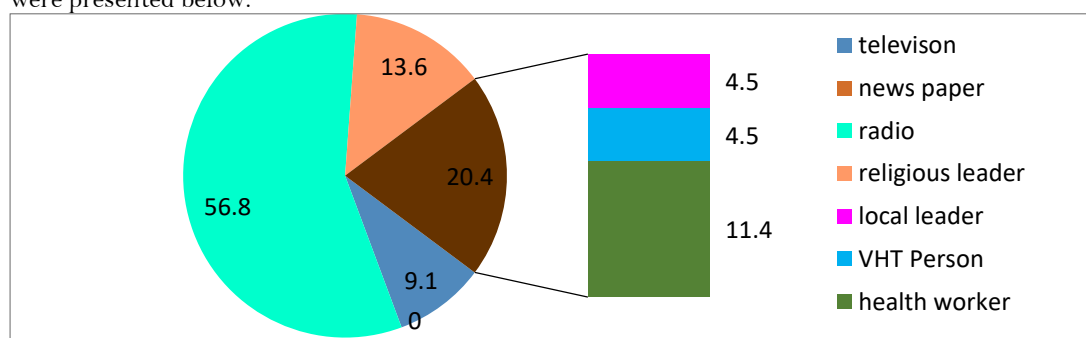
RESULTS
Demographic Characteristics of the Participants.
Table 1: Showing demographic characteristics

demographic parameter	Range	Frequency	percentage
Age	10-19	17	38.6%
	20-29	13	29.5%
	30-39	09	20.4%
	40-49	5	11.3%
level of formal education	None	5	11.3%
	Primary	24	54.5%
	Secondary	13	29.5%
	Tertiary	2	4.5%
Marital Status	Married	10	22.7%
	Single	33	75.0%
	Divorced	1	2.3%
Religion	Protestant	12	27.3%
	Catholic	13	29.5%
	Muslim	4	9.1%
	Pentecostal	9	20.4%
	Others	6	13.6%
Tribe	Muganda	1	2.3%
	Mukiiga	6	13.6%
	Muhima	3	6.8%
	Munyankole	32	72.7%
	Others	2	4.5%

The majority of the participants were aged 10-19 followed by 20-29 with 38.6% and 29.5% respectively, while the least were 10-49 years with 13.3%. There was a significantly low level of education where 11.3% and 54.5% didn't have any formal education and only primary level of formal education, while only 29.5 and 4.5 percentages of participants had had secondary and tertiary levels of formal education respectively. Single men were the majority with 75.0% of participants. Christian faith formed the majority of participants with Catholics, Protestants and Pentecostals having mega percentages of 29.5, 27.3 and 20.4 percentages respectively. Banyankole formed the majority of participants with 72.7%, followed by bakiing with 13.6%, while the rest were other tribes.

Knowledge of Males 10-49 on SMC

The knowledge of participants was assessed based on whether they had heard about SMC, who taught them about SMC, Knowledge on what are the reasons for SMC, and whether they had knowledge of where SMC can be freely accessed within their locality. The results from participants were presented below.



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Figure 1: males that heard about SMC and source of information about SMC

All participants (100%) had heard about safe male circumcision. The majority of the participants had heard about SMC from radios 56.8% and from health workers 11.4%. While the least source of knowledge was VHT with 4.5%.

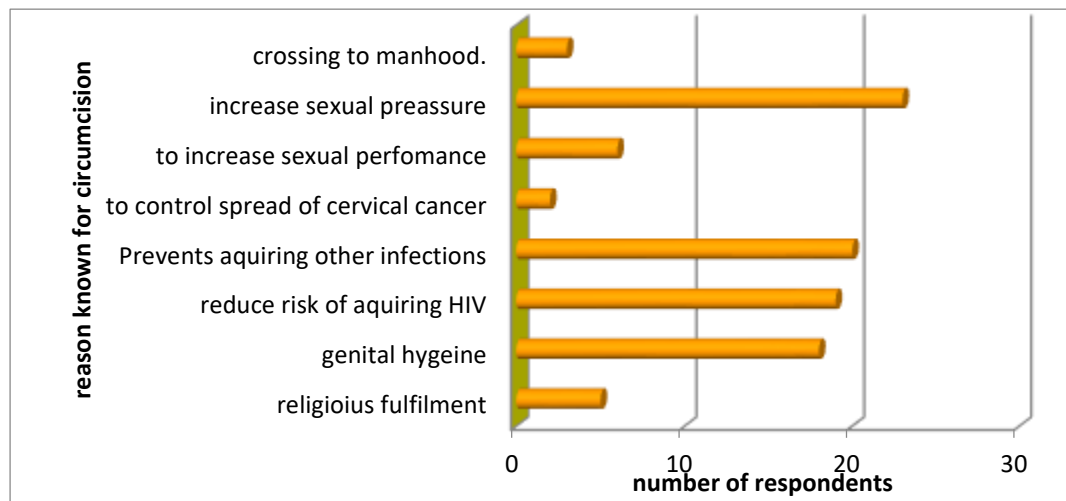


Figure 2: Knowledge of reasons for circumcision.

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Increasing sexual pleasure and avoiding acquiring other infections were the major known reasons for circumcision, while only 43.1% were aware of HIV contraction risk reduction by 60% and the least were those that knew controlling the spread of cervical cancer to females (4.5%) of the study population.

Table 2 Knowledge of where SMC services can be freely accessed.

Heard about SMC?	Frequency	Percentage
YES	14	31.8%
NO	30	68.2%

The majority of participants 68.2% of participants did not know where they can freely access SMC within their locality while only 31.8 knew where they could get the service freely.

Attitudes of Males 10–49 towards SMC

Attitudes of participants were assessed using scale parameters, where various parameters regarding SMC, they either disagreed, agreed or strongly disagreed with whatever is said about each specific parameter. While regarding some common packages and methods used in SMC, the participants perceived them as being not good, good or very good.

Table 3: attitudes towards SMC

scale	Do not agree	Agree	Strongly agree
SMC reduce the risk of acquiring HIV by 60%	50%	38.6%	11.3
SMC improves genital hygiene	9.1%	45.4%	45.4%
Circumcised men perform better sexually	18.2%	43.2%	38.6%
SMC reduces the transmission of cervical cancer	65.9%	22.7%	11.3
circumcised males are liked by most women	22.7%	36.3%	40.9%
On the other hand			
SMC reduces the length of the penis	61.3%	22.7%	15.9%
circumcision reduces glans sensitivity	18.1%	43.1%	38.6%
SMC reduces fertility and sexual pleasure	59.1%	22.7%	18.2%
SMC increases sexual promiscuity	15.9%	63.6%	20.4%
SMC is very painful	4.5%	77.3%	18.2%
post SMC wounds take a long to heal	2.7%	65.9%	31.8%

Only 2.7% disagreed to post SMC wound healing takes longer, while 98.3 agreed (65.5%) or strongly agreed (31.8%) to post SMC wounds take a long to heal. The majority of participants disagreed with the fact that SMC reduces the chances of acquiring HIV (50.0%) While 38.6 and 11.3 percentages agreed or strongly agreed to HIV acquiring risk reduction. 43.3% of males and 38.6% of males agreed and strongly disagreed that circumcised males perform better sexually. While 36.3% of males and 40.9% of the participants agreed and strongly agreed that circumcised males are more liked by women compared to their uncircumcised counterparts. On the other hand, men disagreed that SMC reduces the length of the penis (61.3%), while (15.9%) strongly agreed that SMC reduces the length of the penis. Males (59.1%) disagreed that SMC reduces sexual pleasure, while 63.6 believed that SMC increases sexual promiscuity among circumcised males. 77.3% of participants agreed that SMC is very painful, while only 4.5% disagreed with SMC being very painful.

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Table 4 Attitudes towards some common SMC practices

SMC Practice.	not good	Good	very good
circumcising under local anaesthesia	2.3%	18.2%	79.5%
stitching post SMC wound	29.5%	40.9%	29.5%
bandaging post-SMC wound	36.3%	45.4%	18.2%
post SMC pain management using panadol	2.3%	65.9%	31.8%
post SMC wound by open dressing with saline water	4.5%	88.6%	6.8%

The majority of males (79.5%) said that SMC under local anesthesia is very good, while only 2.3% believed that it is not good. Opposed to stitching and strong support to stitching SMC wound was equal by 29.5% in both. 65.9% of Males said that post-SMC pain control using panadol is good while 2.3% said that it is not good.

Table 5: shows those that would consider being circumcised, and those that support the government policy of circumcising males 10-49.

Parameter	frequency	%	parameter	percentage	%
would be circumcised	31	56.8	It's good	31	43.4
would not be circumcised	36	43.2	Not good	36	56.8

The majority of males (56.8%) said that they would not accept to be circumcised if a chance availed itself provided that they were not circumcised, while only 43.2% still said that they would take the chance and be circumcised. The majority of males said that implementing SMC for all males 10-49 as an HIV control strategy is not a good idea, while only 43.4% were in support of mass mobilization for SMC of males 10-49 years nationwide as an HIV control strategy.

Circumcision practices among males 10-49.

Practices were assessed based on whether the participant was circumcised, the age at which he was circumcised and the circumcision practitioner that circumcised the individual participant.

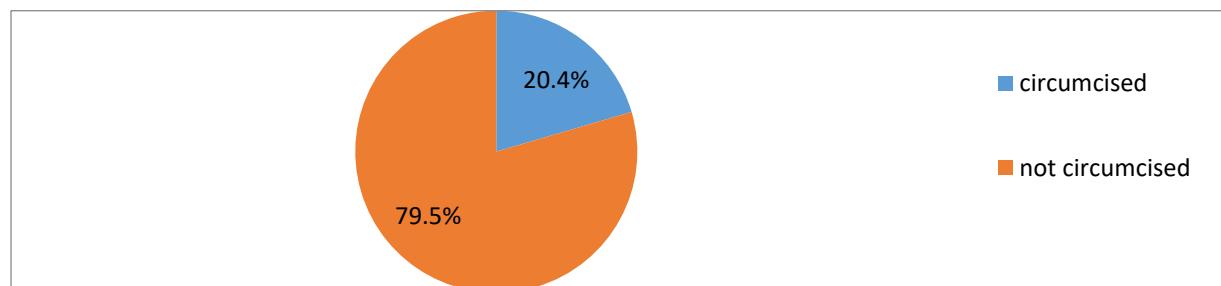


Figure 3: Prevalence of SMC

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The majority of males were not circumcised (79.5%) while only 20.4% of males were circumcised.

Table 6 Age and person that circumcised. n=9

Parameter	Range	Frequency	Percentage
age when circumcised	below 10	4	44.4%
	10-19	2	22.2%
	20-29	3	33.3%
	30-39	0	00.0%
	40-49	0	00.0%
who circumcised	health worker	3	33.3%
	cultural leader	0	00.0%
	religious leader	5	55.5%
	parent/relative	0	00.0%
	don't know	1	11.1%

The majority of participants (44.4%) were circumcised when they were below 10 years. Males circumcised by religious leaders were the majority (55.5%) followed by 33.3% circumcised by health workers, while parents/relatives and cultural leaders were not involved in circumcising any member in their study population as studied.

Table 7: Table showing package received on SMC by circumcised members.

s/n	SMC Package	frequency	Percentage
1	TT immunization	1	11.1%
2	screening of STIs	0	0.0%
3	jigger screening	0	0.0%
4	HIV counselling and test	1	11.1%
5	supportive care on STIs infection prevention	2	22.2%
6	pain management with Pain killer	6	66.6%
7	health education on post-SMC wound care	5	55.5%
8	health support in the form of follow-up and adverse event management	1	11.1%

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11.1% of all circumcised clients had received TT immunization, follow-up and adverse event management, and HIV screening and testing on SMC, while screening of other STIs and jiggers was not received on SMC at all. However, pain management using painkillers and education on post-SMC wound care were the most accessed packages on SMC by most clients with 66.6 and 55.5 percentages respectively.

DISCUSSION

The findings from the research study titled “Knowledge, attitudes, and practices of males 10-49 years attending Ishaka Adventist Hospital on SMC” is discussed following the demographic characteristics of the study population and objectives. The findings are discussed in bi-directional view that is, researchers’ view on the finding, and finding in relation to previous studies from other areas by other researchers.

Social Demographic Characteristics of the Study Population

Most of the respondents were aged 10-19 years followed by those 20-29 years. This could be simply because these are composed of youth that make up the largest percentage of Uganda’s population utilizing health services. Hence if SMC services can be offered at Ishaka Adventist Hospital, these may benefit more than other age groups. Uganda has since times registered new infections of HIV among the youth; whereby newly acquired infections among the youth have doubled by 50%. Hence, their knowledge, attitudes, and practices directly affect the government’s target of reducing new infections. Most, respondents had a level of formal education, including primary level (54.5%), secondary (29.5%), and tertiary (4.5%). This implies that they are able to retrieve knowledge from various sources like newspapers, magazines, and others, hence expected to have adequate knowledge and negative attitudes towards SMC as was also found out by Wilken *et al.* [11] in youths, who found a borderline statistically significant decrease of awareness of MC for HIV prevention with higher educational level, but not with any other socio-demographic factors. Single men were the majority with 75.0% of participants. This could be possible because the study involved adolescents of 10-19 and young youth in their twenties. These being school and early post-school ages are not yet married. Cultural and social pressure has been proven to have a positive influence on male circumcision. According to Layer *et al.* [12] in a study to assess women’s perceptions of male circumcision, women in this study had strong preferences for circumcised men because of the low-risk perception of HIV with circumcised men, social norms favoring circumcised men, and perceived increased sexual desirability of circumcised men. Hence these are expected to have good circumcision practices to increase desirability from the opposite sex thereby affecting 60% HIV risk reduction in these age groups. Christian faith formed the majority of participants with Catholics, Protestants, and Pentecostals having mega percentages of 29.5, 27.3, and 20.4 percentages respectively. Religious affiliation has a direct impact on SMC practices, and teachings on SMC have a great impact on followers’ attitudes towards SMC. Of recent, circumcision has not been mandatory in most of the Christian faith, however, it has not been illegal either thereby leaving the decision of whether to be circumcised or not to an individual however, circumcision had previously stood out as being more prevalent in some religions than others. For example, WHO [4] found out that of 30% global circumcised male population, two-thirds are Muslim. Banyankole formed the majority of participants with 72.7%, followed by Bakiga with 13.6%, while the rest were other tribes. Ishaka Adventist Hospital is located in Ankole where most of the population is Banyankole hence a reason for dominance. Culture and ethnicity have an impact on circumcision practices, Ankole culture has not had circumcision as its core cultural value, and hence circumcision in this community is expected to be low as found by Kripke *et al.* [13] that There is considerable geographic variation in MC (male circumcision) prevalence, ranging from 2% in western, and the Mid Northern region to 53% in the Mid-Eastern region.

Knowledge of Males 10-49 Years on SMC

All participants (100%) had heard about SMC, hence with positive reactions, are expected to have good knowledge and attitudes towards safe male circumcision. Knowledge of SMC is higher compared to Mndzebel and Tegegn *et al.* [14] findings in their study on knowledge and attitudes of males at the University of Botswana where only 95.4% of males had heard about SMC. Participants that had heard about SMC had majorly heard from radios (56.8%). religious leaders and health workers were other sources of information to bigger numbers by 13.6% and 11.4% respectively. This could be basically because radios are affordable to most members of the community, both literate and illiterate. Hence these could be having good knowledge of SMC however with no clarity on some puzzling issues regarding SMC since this source gives less interpersonal interaction during announcements and advertisements. Unfortunately, only 11.4% of the population heard about SMC from health workers similar to the finding by Galukande *et al.* [15] in their study on Knowledge of SMC in other parts of Uganda. Another study conducted in IHK Kampala in 2012 indicated that there was sufficient knowledge and demand for SMC despite minimal mobilization effort by health teams [16]. This implies that health education on SMC has not been thorough on the

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ground; hence the members are likely to have a gap in knowledge on health-related reasons for circumcision. Increasing sexual pleasure and avoiding acquiring other infections were the major known reasons for circumcision by 52.2% and 45.45 respectively, while only 43.1% were aware of HIV contraction risk reduction by 60% and controlling the spread of cervical cancer to females was known by only 4.5% of the participants. This is similar to a finding from the University of Botswana by Mndzebel and Tegegn *et al.* [14] where 55.4% of males knew SMC for reduction of risks for infections, 43.5 for reduction of risk for other STIs, while 21.1% knew VMMC for improving genital hygiene. There is a gap in knowledge for reasons of carrying out SMC. Participants that knew about SMC knew it for sexual reasons than disease prevention purposes. This implies that, given the availability of the service, its realizability may be high, however, may be accompanied by compensatory risk behaviors in more than 50% of the study population that does not know about disease prevention in SMC. This may be similar to findings in Swaziland that confirmed the existence of risk compensation behaviors like indulgence in unprotected sexual intercourse following circumcision; however, this study adds important contextual insight about precisely when and why such risk-taking occurs. Nevertheless, this study suggests that male circumcision scale-up as an HIV prevention strategy is likely to foster protective behavior change among men [8]. The majority (68.2%) of participants did not know where they can freely access SMC within their locality while only 31.8% knew where they could get the service freely. This could be because of non-interactive sources of knowledge on SMC as seen above that radios were major sources of knowledge. This implies that even with good knowledge of SMC, members did not know where to access SMC services hence directly negatively affecting SMC practice among participants as opposed to findings by Westercamp *et al.* [17] in Kenya where participants indicated exposure to sensitization efforts and reported knowledge of the existence of SMC services in the community.

Attitudes of Males towards SMC

Only 11.3% of participants strongly agreed that SMC reduces the risk of acquiring HIV by 60%, while 50% disagreed on SMC reduces the risk of acquiring HIV. This implies that the role of SMC in HIV spreading control is undermined contrary to the finding by Grund and Hennink [8] through randomized clinical trials in Kenya, Uganda, and South Africa and the WHO report that male circumcision has been shown to reduce the risk of heterosexual transmission of HIV infection in men by up to 60% [1]. This implies that compensatory risk behaviors are less likely since there are negative attitudes on risk reduction on the spread of HIV. However, the majority of participants agreed (45.4%) and strongly agreed (45.4%) that SMC improves genital hygiene. Hence to improve SMC practices in this particular community, hygiene should be incorporated into the talk package since people have strong confidence in SMC to improve hygiene. This is contrary to the finding in Botswana by Mndzebel and Tegegn *et al.* [14] where only 21.1% of males knew circumcision was for hygiene, the rest being for disease prevention. There is a belief that circumcised males perform better sexually (agree 43.2% + strongly agree 38.6%) than those uncircumcised. Hence males in this community are likely to practice SMC for sexual reasons since every man would like to be sexually strong. However, there is no scientific proof on this that circumcised males are more sexually active than those uncircumcised. However, a study in Tanzania by Layer *et al.* [12] in her study on female perception of SMC that they proffered circumcised males than their uncircumcised counterparts due to better sexual performance, where they described uncircumcised men were described as being dirty, uneducated, and “out of fashion. The majority of Males (65.9%) disagreed with SMC reducing transmission of cervical cancer while only 22.7% agreed and 11.3% strongly agreed that SMC reduces the risk of transmission of cervical cancer. This is contrary to findings in Tanzania by Layer *et al.* [12] where the health benefits of male circumcision were generally overstated and many respondents falsely believed that women are also directly protected against HIV and that the risk of all STIs like cervical cancer is greatly reduced or eliminated in circumcised men. This implies that cervical cancer is either not understood by the majority of this population, or the role of the prepuce in harboring the Herpes virus is greatly undermined. To improve SMC practices, more awareness of HERPES virus transmission should be emphasized. Much as it is not good for the undermined role of SMC on disease prevention, compensatory risk behaviors are less likely since the majority believes not in complete protection against STIs. However, there is a belief that SMC reduces the sensitivity of the glans penis among 43.1 and 38.6 percent of males who agreed or strongly agreed respectively that SMC reduces the glans sensitivity. This is contrary to Layer *et al.* [12] finding in their study on community perception of male circumcision where social pressure was piled on uncircumcised males, and females sexually proffering circumcised than uncircumcised which implies that they functioned better and normally without any impairment. There is no scientific and health-related proof of this as a fact though it's believed in by the majority. Hence it can act as a hindrance to SMC among men in fear that their sensitivity during sex will reduce. While, other men agreed (22.7%) or strongly agreed that SMC reduces fertility and sexual pleasure, the majority (59.1%) disagreed that SMC reduces fertility and sexual pleasure. This implies that though some men may boycott being circumcised due to

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fearing losing fertility or sexual pleasure, these fears have less effect on this community because the majority disagrees with this misconception on SMC. Only 4.5% of males 10-49 disagreed with SMC being very painful while the rest 77.3% and 18.2% agreed or strongly agreed that SMC is very painful. This is similar to Tynan *et al.* [18] findings that despite the solidity of evidence on its benefits, opposition to MC by groups or individuals in non-circumcising societies remains. Since their claims are not supported by quality research and fail to withstand scrutiny by academic and medical experts, the opposition appears motivated by ideological fears of pain, discomfort following circumcision, or other reasons. Pain has no measure to call it “Very painful”; it depends on only what each individual person perceives as very painful. There is no man that would like to be subjected to the pain he considers to be very, hence with this intense fear of pain that may have to be endured to undergo SMC, most males are likely to shun voluntary medical male circumcision due to this unknown pain anticipation. However, with good education on the procedure of medical male circumcision under local anesthesia and post-SMC pain management using paracetamol, has no so-called very much pain as perceived by the majority. Adding on fear of pain, still, the majority agreed (65.9%) or strongly agreed (31.8%) that post-SMC wound takes a long to heal. This is potentially dangerous as it can cause indulgence into risky behaviors following circumcision as was found by Nevin *et al.* [19] about reported misconceptions and community-held cultural beliefs including the fear that the first sexual partner after the procedure should not be his spouse and the belief that vaginal fluids aid circumcision wound healing hence likely to lead to promiscuity, and early sex that can lead to bleeding following circumcision [19]. Under normal circumstances, however, this wound heals between 1-2 weeks, and up to 6 weeks for even a formed scar to heal. This doesn't necessarily sound long period to nurse a wound in good condition compared to the lifelong benefits of the practice thereafter. To assess attitudes towards some common practices during SMC, on the use of anesthesia, 79.5% of males said that it's good, while only 2.3% said that it is not. In the USA, 45% of circumcisers use anesthesia for pain control [20]. Since this is a routine method used in SMC, if emphasized in mobilization for SMC, may attract more men to circumcision as it was found out in Tanzania by Nevin [19] that worry of pain and wound healing were among major hindrances to circumcision in Tanzania. Stitching is not greatly opposed as only 29.5% of males were opposed to stitching post-SMC wounds opposed to 40.9 +29.5% who believe that it is good and very good to stitch post-SMC wounds. This being done reduces the risk of wound infection and reduces the time of healing thereby making SMC more convenient. The majority (56.8%) said that they could not be circumcised while only 43.2% of males could. This implies that though males knew about circumcision, had not incorporated its practice into their minds and still see it as unnecessary. This could be due to a knowledge deficit on the role of circumcision in HIV prevention as a study in South Africa on factors that may promote circumcision found that 59% of males 10-49 said that they would be circumcised if circumcision reduced the chances of getting HIV and STDs [21]. Also, most males (56.8%) say that it's not a good policy by the government of Uganda to massive SMC to all males 10-49 years contrary to Uganda's targets to circumcise 4.6 million males in this age bracket before 2020 [22]. Hence to meet this target, males have to efficiently utilize safe male circumcision services in facilities where they are provided, Ishaka Adventists Hospital included. There is no evidence as to why most males think that it's not a good move by the government to emphasize SMC, however, it may be due to knowledge gaps on reasons for this emphasis. Hence for males to embrace this program gracefully there is a need to emphasize on reasons for the practice of SMC. This will in turn improve SMC service utilization.

Practices of Males 10-49 on SMC.

Only 20.4% of males were circumcised, while the rest 79.6% were not circumcised. This is abnormally low compared to the average circumcision prevalence of approximately 30% of males estimated to be circumcised globally [4] and 24% of men are circumcised in Uganda according to the UDHS [10]. There are no clear reasons for this low prevalence among these males, but being located in Ankole where male circumcision has not been part of native culture, hence circumcision in this area may entirely be motivated by health and religious reasons only. To assess the kind of male circumcision, the age at which the client was circumcised and the person that circumcised a person was considered. The majority of males (44.4%) were circumcised while they were below 10 years, followed by those circumcised when 20-29 years. This implies that most males are circumcised while still young, hence motivated by parents' knowledge of SMC or Religion, culture, and religion that medical and health reasons. As found out that of East Africa's circumcised population, thirty-six (36.3%) of the circumcised males had their procedure done in medical settings while 107 (63.7%) were circumcised in traditional and religious setting settings. The age at circumcision varied significantly with the provider of the procedure [20]. Of the circumcised, majority (55.5%) of males were circumcised by religious leaders, followed by 33.3% circumcised by health workers. health workers played a low role in community male circumcision compared to 36.3% of East Africa's circumcised male population in medical settings. This could be motivated by other factors like cost as also found out by Kripke *et al.* [20] that the cost of circumcision

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procedures done in the medical setting was higher compared to the cost of procedures done in the traditional and religious setting [20]. Parents/relatives and cultural leaders had not circumcised any of the circumcised males. This could be because the majority of males have been circumcised at a young age than 10. Could have been circumcised for religious purposes that fulfil purity, then the culture that considers circumcising in puberty to crossing to manhood or health reasons that focuses on sexually active ages 10-49 that are considered most at-risk ages and therefore a priority for disease prevention and health promotion. To assess the package during SMC practices by males, screening of STIs and Jigger screening were least involved in MC packages by circumcised males. This sounds normal since most clients were circumcised at young age hence STIs are least expected. However, for adults, it's very important practice to screen other STIs among males. This is because, in sexually active males, compensatory risk behaviors are likely since less awareness prevails regarding other STIs. This is similar to what was found in a qualitative study of sexual behavior change and risk compensation following adult male circumcision in urban Swaziland [8]. However, this study adds important contextual insight into precisely when and why such risk-taking occurs. Nevertheless, this study suggests that male circumcision scale-up as an HIV prevention strategy is likely to foster protective behavior change among men [23-27]. Other practices like HIV testing and STI infection prevention supportive care were also least involved during client circumcision. Pain management and wound care which seem to be immediately affecting the client are the most availed at 66.6% and 55.5% respectively during SMC to achieve pain control and wound healing similar to findings by Altas *et al.* [24] who recommend the use of anesthesia for circumcision.

CONCLUSION

The study population is composed of mostly natives of Ankole the Banyankole from the study area, with the majority being Christians, who are single men, adolescents, and youth 10-19 and 20-28 years; with at least a level of formal education, hence their circumcision practices valid in HIV control strategy. Participants had heard about SMC and hence had good knowledge, most sources of knowledge on SMC being radios, religious leaders, and health workers respectively. Males knew SMC for increasing sexual pleasure and preventing other STIs but not HIV and cervical cancer spreading. SMC was known for hygiene reasons, and religious reasons but not health promotion reasons Like 60% risk reduction for acquiring HIV, Males mostly did not know where they can freely acquire SMC services within their locality. There low positive attitude in SMC toward reducing HIV acquisition risk by 60%. While there was a strong positive attitude that SMC increases genital hygiene and sexual pleasure, circumcised males performed better than uncircumcised. Negative attitudes were basically on SMC reducing the spread of cervical cancer and controlling HIV. Others were on SMC being painful, and wound healing took a very long time. Positive attitudes were on the use of anesthesia during circumcision, and pain control using panadol following SMC. Males also were proposed to stitching than leaving the wound unstitched following SMC. However, males still would not consider being circumcised given that an opportunity was availed to them and still remain adamant towards government policy on SMC for HIV control saying that it's not a good move implying no support to the policy. Circumcision prevalence is very low compared to global and national statistics. Of the few circumcised, most males are circumcised when below 10 years, by religious leaders than by health workers, while parents and cultural leaders did not play a part directly in circumcising. There is an increasing trend with a decrease in age in SMC. Those elderly by 30 and above showed little involvement in SMC than those young 10-19, and 20-29 implying that the trend of utilization of circumcision services is increasing at an accelerating phase.

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