

# Assessment of Factors Affecting Utilization of Safe Male Circumcision among Males aged 15 to 49 years Living in Buremba Town Council, Kazo District.

## A Descriptive Cross-Sectional Study.

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### Abstract



#### Introduction:

According to the Ministry of Health 2016, the prevalence of safe male circumcision was 0.43. This study assessed the factors affecting the utilization of safe male circumcision among males aged 15-49 years living in the Buremba Town Council, Kazo District.

#### Methodology:

A descriptive cross-sectional study design involving the quantitative method of data collection was used in the study carried out in Buremba Town Council. The researcher utilized convenience sampling on 120 respondents from December 2021 to March 2022. The data collection process was for 6 days using self-administered questionnaires which were filled, cleaned, and later analyzed using tables.

#### Results:

The study established that 50.83% of the respondents expressed personal fear of pain and the major misconception about SMC was a reduction in sexual performance as reported by 42.5% of respondents. More so, a higher percentage of 94.74% of the circumcised respondents expressed satisfaction with the SMC service provided and 23.33% of the respondents did not recommend SMC to their sons or friends.

#### Conclusion:

The major factors affecting the utilization of SMC among males living in Buremba Town Council were mostly knowledge related factors such as knowing the importance of safe male circumcision, misconceptions such as reduction in sexual performance, and personal fears such as pain whereas social-economic factors like cultural influence had the least effect on the study.

#### Recommendations:

The parents in Buremba Town Council should adopt early childhood SMC to rule out factors like personal fears and misconceptions that increase with age. The health team of Buremba Town Council should continue male circumcision camps targeting specific age groups such as students in schools around to increase the benefits of SMC like reduced HIV/AIDS risks in the area.

#### Conclusion:

There are factors affecting SMC. These need to be considered when offering the services.

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## 1 Background of the study.

Medical Male Circumcision (MMC) is the removal of the penile foreskin (tissue covering the glans of the penis) performed by trained health professionals on infants, children, and adults (Devieux JG R. R.-G., 2015). On one hand, some communities do not traditionally circumcise and see such campaigns to take up MC as an affront to their culture (Miuro, et al., 2017). Male circumcision has several health benefits like reducing the risk of Urinary Tract Infections (UTI), promoting good hygiene, and protecting against penile cancer. The major advantage of circumcision was that it reduces the risk of transmission of HIV infection among heterosexual males by 60% (Weiss, 2010). This was discovered from three different key studies that were carried out in South Africa, Kenya, and Rakai in Uganda.

Similarly, studies done in the Dominican Republic revealed that post circumcision, men felt more masculine, had more potent erections, and reported increased ability to satisfy their partners (Fleming P.J, 2017). However, this procedure may cause adverse health effects such as bleeding, hematoma, or sepsis, especially among adolescents, but these can be treated when undertaken in a clinical setting with experienced providers. In contrast, in a prospective observational study of 274 males at health facilities in Kampala-Uganda, circumcision is undertaken by inexperienced providers with inadequate instruments, or with poor after-care showed that the proportion of males who developed signs of infections was slightly higher (fever 1.35% and pus discharge 3.15%) as compared to what is described in other studies 0.30-1.85% (Matumaini, et al, 2021)

Globally, it is estimated that 37–39% of men are circumcised with approximately half of these procedures being carried out for religious/cultural reasons. It is estimated that MC prevalence rates in Europe vary between 0.1–48%, noting higher figures for countries in which males are circumcised for religious reasons (Morris, et al, 2016) In Poland, where MC is performed mainly to treat adverse medical conditions, the estimated MC prevalence rate is 0.11%, lowest in the EU (Korzen K. H, 2017). MC is high in the United States, Canada, the Middle East, Asian Muslim countries, and some African countries, ranging from 20% to 80%. However, MC is not commonly accepted in China. It is estimated that only 2.7% of Chinese males are cir-

cumcised, excluding the ethnic Muslim minorities of Hui and Uighur, which have higher rates. The protective effect of MC may have a great impact in high prevalence countries where transmission is predominantly heterosexual and male circumcision is not generally practiced (Bo Zhou, 2017).

In Africa, male circumcision is prevalent among 92% of the males in North Africa and around 62% in sub-Saharan Africa. Circumcision is mainly performed for religious reasons in Northern Africa whereas in southern Africa it is rarely performed in neonates, owing to cultural reasons. Some African cultures carry out Traditional Male Circumcision (TMC) to act as a rite of passage from childhood to manhood (Kibira SP, 2017)

In Sub-Saharan Africa, The World Health Organization (2007) recommended MMC for 14 countries in the sub-region as a strategy to reduce the prevalence of HIV/AIDS. By 2016, 90% (18.6 million) of the targeted circumcisions (20.8 million) had been carried out, seven countries out of 14 countries that had reached their country target included Ethiopia, Kenya, Mozambique, South Africa, Uganda, Tanzania, and Zambia, they have however experienced a decline in the number of annual circumcisions years after (WHO, 2016)

In Uganda, only 20% of males practice traditional male circumcision for religious and cultural reasons, this is considerably lower than in Kenya (80%) and Tanzania (70%) (Conversation magazine, 2016). Circumcision prevalence among males 15 to 49 years in Uganda was 27% in 2011, but the introduction of a policy on SMC by the MOH in 2010 showed that the prevalence of circumcision among adult men in Uganda has been reported to be as high as 43% in 2016, with 2,114,461 men circumcised under the SMC program between 2010 and 2016 although the initial target from the policy was to have 4.2 million males circumcised by 2016. Only Kenya, Ethiopia, and Tanzania achieved higher coverage (Kibira SP, 2017).

## 2 Scope of the study

The study was carried out in the Buremba Town Council, Kazo District located in Ankole sub-region Western region of Uganda, 273km by road from Kampala City square. The geographical coordinates of Buremba on the map of Uganda are 0°07'59.6" N (0.1332300°) latitude and 30°40'54.8" E (30.6818900°) longitude and took three months

from December 2021 to March, 2022 on the demographic factors like marital status, age, the socio-economic factors like cultural values, religion and knowledge related factors like prevention role affecting utilization of safe male, myths of males aged 15-49 utilizing SMC in Buremba Town Council.

### 3 Methodology

#### Study Design

This was a cross-sectional descriptive study conducted from December 2021 to March 2022 and it employed both qualitative and quantitative methods of data collection. The study design was selected because it was to help the researcher easily convert the data obtained into percentages. Moreover, because of limited resources and limited time frame, the design was the most preferable.

#### Study Area

The study was carried out in the Buremba Town Council, Kazo District located in Ankole sub-region Western region of Uganda, 273km by road from Kampala City square. The geographical coordinates of Buremba on the map are 0°07'59.6" N (0.1332300°) latitude and 30°40'54.8" E (30.6818900°) longitude. The Town Council makes is one of the seven Town Councils of Kazo district with a total population of 20632 people and 10234 males as approximated (UBOS, based on provisional results NPHC, 2014). The Town Council consists of a mixture of tribes with the Banyankole tribe taking a lion's share in the area.

#### Study Population

The study's target population comprised males aged 15 to 49 years who live in Buremba Town Council, Kazo District. The Town Council presents the accessible population in the Kazo district since it is close to Buremba health center III and Kazo Health Center IV. Males aged 15 to 49 years were selected for the study because the majority of males in the age bracket have sound minds about the health care service they seek at the health facility.

### 4 Sample Size Determination

The sample size of respondents in the study was determined using the Kish Leslie's formula given below, (Kish Leslie, 1965).

$$n = \frac{Z^2 PQ}{d^2}$$

Where; n = the desired sample size

Z = the standard normal deviation usually set at 1.96

P = prevalence in the population, according to the MOH of Uganda, 2016. Prevalence of SMC was 43%

Therefore P = 0.43

Q = (1-P)

D = absolute error allowed (5%) = 0.05

Substitution into the above equation

Q = (1-p) = (1-0.43) = 0.57

Thus, n = (1.96)<sup>2</sup> (0.43 X 0.57) (0.05)<sup>2</sup>

N = 376.630

Therefore: n = 376.6 Respondent.

Only 120 male respondents aged 15-49 living in Buremba Town Council, Kazo district were selected for the study due to limited resources and period of research for the research study.

#### Sampling Technique

The researcher utilized the convenience sampling method which is a non-probability sampling technique where the sample is drawn from that part of the population that is close to hand, according to Wright Julius in a book entitled "Research in Health care" published in 2002.

In this case, the researcher involved the participants that whom he was able to come into contact within the study area during the research study time. This technique was chosen due to the limited time and resources.

#### Study Variables

Dependent and independent variables were involved in the study.

#### The Dependent Variable

The dependent variable for this study was: Utilization of safe male circumcision.

#### The independent variables for the study were;

Demographic factors (like level of income, age, level of education attained)

Social-economic factors (like religion, cultural values)

Knowledge related factors (like attitude, myths, prevention role)

#### Data collection tools

Data was collected using an approved self-administered questionnaire developed by the researcher which consisted of both closed and open-ended questions that were set according to the specific objectives of the study and presented in 3

sections from section A to section C. Section A included questions about the demographic factors affecting utilization of SMC, section B included a question about the social-economic factors affecting utilization of SMC while section C included questions about knowledge related factors affecting utilization of SMC among males aged 15-49 years living in Buremba Town Council, Kazo District as shown in Appendix III.

The questions were written in English and translated to the local language during the time of data collection for the willing respondents who were illiterate to take part in the study. This tool was selected because the study involved both literate and illiterate respondents.

#### **Selection criteria**

This involved inclusion and exclusion criteria aimed at selecting respondents to be included in the study.

#### **Inclusion criteria**

Only males aged 15 to 49 years who accepted to consent to participate in the study and who were present in Buremba Town Council during the data collection days were included in the study.

#### **Exclusion Criteria**

Males aged 15 to 49 years present in Buremba Town Council during the time of data collection who were mentally ill, severely sick and those who were not consented to participate in the study were excluded from the study

#### **Piloting the study**

The researcher pre-tested the questionnaire on 15 males aged 15 to 49 years who were living in Lungujja located in Rubaga Division, Kampala. The place was chosen because it was nearer my school. Piloting was done to ensure; the validity, credibility, and reality of the questions in the questionnaire.

#### **Data Collection Procedure**

After approval of the research proposal by the school's research committee, the administration of the college gave the researcher an introductory letter seeking permission to carry out the study, it was presented to the authorities of Buremba Town Council and in turn, the permission was granted to conduct the study in the area.

The researcher moved around the villages with the help of the Chairmen of Local Council I who introduced him to the residents. The researcher utilized convenience sampling and self-administered questionnaires were used to collect data. Before data collection, the researcher first explained the

purpose of the study to each of the included respondents and then obtained informed consent from them to participate in the study. For illiterate respondents, the researcher interpreted and translated English questions in the questionnaire into their local language. Each filled questionnaire was thoroughly checked for accuracy and completeness by the researcher.

More so, Confidentiality was obtained during data collection due to the sensitivity of the information.

#### **Quality Control**

Quality control measures were put into consideration to ensure the validity and reliability of collected data in the following ways;

The reliability of the tool was achieved by testing and re-testing the method of the questions set in the self-administered questionnaires which gave consistent results from 12 different respondents and were repeated after 3 days.

Depending on the number of questions that were declared valid out of the total questions in the questionnaire, the researcher was able to determine the validity of the data collection tool in that way.

To ensure that there are no mistakes or uncovered areas, data editing was done accurately before leaving the field and mistakes found were corrected before leaving the study area.

Furthermore, ample time covering a third of the period of the research study was allocated for data collection during the study to ensure the accuracy of the data collected.

The questionnaires were written in English, interpreted, and translated into the Runyankole local languages of the tribes in the Buremba Town Council.

The data obtained was stored in notebooks, smartphones, and flash disks as a backup of data which was to avoid risks of data loss during report writing. Filled questionnaires were checked for completeness and then kept in a safety locker under key and lock until data analysis and all this was done by the researcher.

## **5 Data Analysis and Presentation**

The data collected was cleaned and then analyzed manually using pens, pencils, a calculator, and tallying was done. The information was interpreted



into frequency tables and presented using graphs, tables, pie charts, and themes.

### **Ethical Consideration**

After approval of the research proposal by the school's research committee, the administration of Medicare Health Professionals College gave the researcher an introductory letter seeking permission to carry out the research in the study area, it was then taken to the authorities of Buremba Town Council. They in turn granted the researcher permission to conduct the research in the study area.

The researcher explained the objectives and purpose of the study to each of the included respondents and assured them of observation of their rights throughout the study. The researcher then got informed consent from each willing respondent and the study then commenced.

### **The Study Limitation**

Dealing with uncooperative respondents limited the level of responsiveness to the study, especially the married males who feared giving out information about circumcision by not revealing whether they are circumcised or not because of fear of being stigmatized, this was minimized by explaining clearly the purpose and background of the study to all respondents and informed consent was obtained prior the study. This took away the fear they had developed.

Limited time to balance the research study and other demanding coursework was difficult to handle, however, this was managed by drawing a timetable that was followed strictly to overcome the barriers.

Shortages of funds were managed by proper budget allocation and strict use of the designed budget during the study.

## **6 Results:**

### **Demographic factors affecting utilization of SMC**

From table 1 above, out of 120 respondents that participated in the study, the majority 42 (35%) and 33 (27.5%) were in the age group of (15-19) and (20-24) years respectively with the least 15 (12.5%) and 08 (6.67%) being in the age group of (30-34) and (35-49) years respectively.

The majority of the respondents were Anglican/Protestants 54 (45%) followed by the Catholics 40 (33.33%) and the least being from other religions

the Seventh Day Adventists 03 (2.5%). The majority of the respondents attained secondary level and primary level as their highest level of formal education 44 (36.67%) and 48 (40%) respectively with the least 20 (16.67%) and 06 (6.67%) being those who attained a tertiary level of formal education and those who did not attain any level of formal education respectively.

The majority of the respondents were students 58 (48.33%) and the least were civil servants 15 (12.5%) and from other occupations like internship 03 (2.5%). The majority 60 (50%) and 49 (40.83%) of the respondents had never married and married respectively with the least 08 (6.67%) and 03 (2.5%) being divorced and widowed respectively.

### **Description of the respondents' tribe by percentages. n = 120**

The majority 71 (59.17%) of the respondents were the Banyankole by tribe and the least being the Baganda 10 (8.33%) and from other tribes of Banyarwanda 03 (2.5%) and Basonga 01 (0.83%) as shown in figure 2 above.

### **Social economic factors affecting utilization of SMC.**

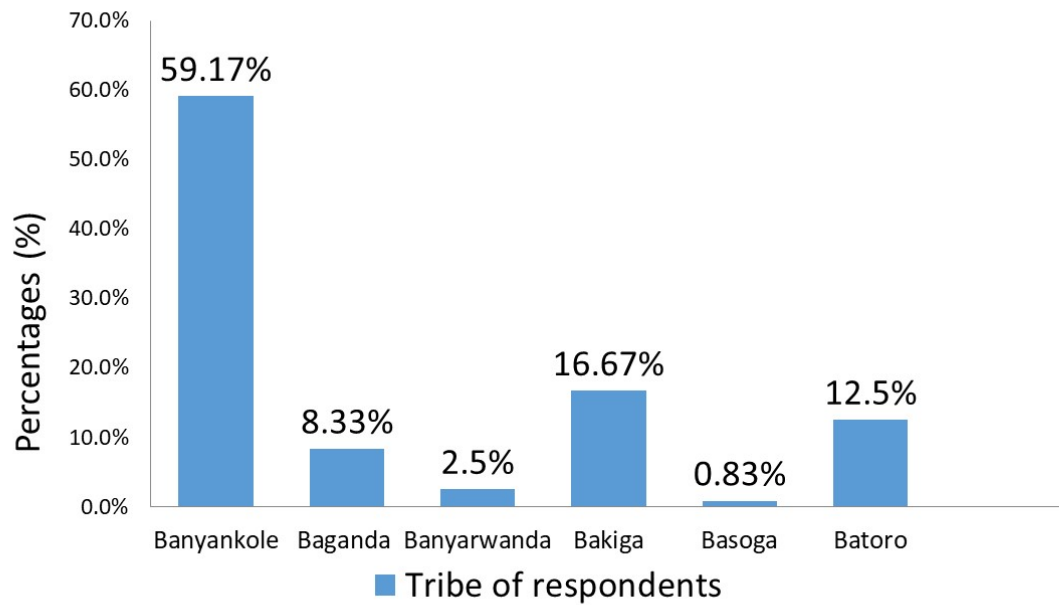
The majority of the respondents, 116 (96.67%) reported that had heard a message about safe male circumcision and only 04 (3.33%) of the respondent revealed that they had never heard of any message about safe male circumcision.

The majority 43 (37.07%) of the respondents who heard the message about safe male circumcision got the information from Radio sources followed by 27 (23.38%) who heard the information from family and friends, the least number of respondents who heard the message about safe male circumcision got the information from Newspapers 06 (5.17%), Posters 05 (4.31%) and other sources of the health facility 06 (5.17%).

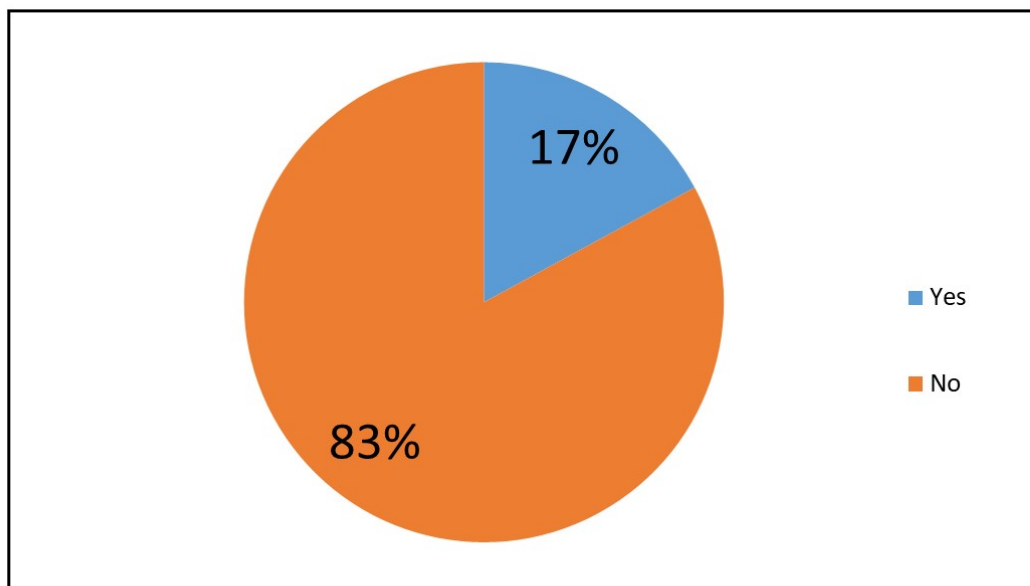
The majority 82 (68.33%) of the respondents were not circumcised, out of the 38 (31.67%) respondents who were circumcised, 31 (81.58%) respondents revealed that they were not charged money to get circumcised. The majority of the circumcised respondents reported that they were triggered by peer influence 14 (36.84%) followed by partner's influence 12 (31.58%) and the least number of respondents were triggered by cultural influence 01(2.63%) and cosmetic purposes 01 (2.63%).

### **The description of non-circumcised respondents' opinion towards getting circumcised.**

**n = 82**



**Chart 1.** A bar graph showing description of the respondents' tribe by percentages.



**Chart 2.** A pie chart showing the description non circumcised respondents' opinion towards getting circumcised.

**Table 1.** Showing Demographic factors affecting utilization of SMC in Buremba Town Council, Kazo District. n = 120

<b>Respondent's characteristics</b>	<b>Variables</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Age of the respondent	15-19	42	35
	20-24	33	27.5
	25-29	22	18.33
	30-34	15	12.5
	35-49	8	6.67
<b>Total</b>		<b>120</b>	<b>100</b>
Religion of the respondent	Anglican/Protestant	54	45
	Catholic	40	33.33
	Muslim	9	7.5
	Pentecostal	14	11.67
	Seventh Day Adventists	3	2.5
<b>Total</b>		<b>120</b>	<b>100</b>
Level of formal education attained	None	8	6.67
	Primary	48	40
	Secondary	44	36.67
	Tertiary	20	16.67
<b>Total</b>		<b>120</b>	<b>100</b>
Marital status of the respondent	Never married	60	50
	Married	49	40.83
	Divorced	8	6.67
	Widower	3	2.5
<b>Total</b>		<b>120</b>	<b>100</b>
Occupation of the respondent	None	11	9.17
	Student	58	48.33
	Civil servants	15	12.5
	Peasant/Self-employed/Businessman	33	27.5
	Internship	3	2.5
<b>Total</b>		<b>120</b>	<b>100</b>

Source:Primary data

Findings from the study showed that, only 14 (11.67%) of the non-circumcised respondents would wish to get circumcised as shown in Figure 3 above.

## **7 Knowledge related factors affecting utilization of SMC.**

From table 3 above, out of 120 respondents in the study, majority 69 (57.5%) of the respondents revealed that reduction of HIV transmission risk is the major importance of safe male circumcision, 26 (21.67%) of the respondents reported improvement in hygiene as the importance of safe male circumcision whereas 14 (11.67%) of the respondents reported that safe male circumcision reduces HPV transmission risk.

The majority of the respondents, 51 (42.5%) and 24 (20%) reported a reduction in sexual performance and excessive bleeding respectively as major misconceptions about safe male circumcision whereas 13 (10.83%) and 15 (12.5%) revealed that the foreskin is taken away for spiritual rituals and delay of the wound heal completely respectively.

The finding showed that 61 (50.83%) of the respondents reported pain as the most personal fear about safe male circumcision. The majority of the total respondents, 92 (76.67%) said that they would recommend safe male circumcision to their sons or friends while 28 (23.33%) of the total respondents said that they would not recommend safe male circumcision to their sons or friends.

**The description of the circumcised respondents' satisfaction opinion towards the services provided.**

**Table 2.** Showing Social-economic factors affecting utilization of SMC in Buremba Town Council, Kazo District. n = 120

Respondent's characteristics	Variables	Frequency (f)	Percentage (%)
Heard information about SMC	Yes	116	96.67
	No	4	3.33
<b>Total</b>		<b>120</b>	<b>100</b>
Source of informational about SMC	Radio	43	37.07
	Family and Friends	27	23.3
	Newspapers	6	5.17
	Television	14	12.07
	Posters	5	4.31
	Health facility	6	5.17
	Internet	15	12.93
<b>Total</b>		<b>120</b>	<b>100</b>
Circumcised	Yes	38	31.67
	No	82	68.33
<b>Total</b>		<b>120</b>	<b>100</b>
Charged money for the service	Yes	31	81.58
	NO	7	18.42
<b>Total</b>		<b>38</b>	<b>100</b>
Major reason for circumcision	Peer influence	14	36.84
	Medical influence	2	5.26
	Religion influence	8	21.05
	Partner's influence	12	31.58
	Cultural influence	1	2.63
	Cosmetic purpose	1	2.63
<b>Total</b>		<b>38</b>	<b>100</b>

Source: Primary Data

**n = 38**

Findings established that out of 38 (31.67%) who were circumcised, 36 (94.74%) circumcised respondents reported that they were satisfied with the safe male circumcision service provided as shown in figure 4 above.

## 8 Discussion, Conclusion, and Recommendations.

Demographic factors affecting the utilization of SMC in Buremba Town Council.

The researcher established that the rate utilization of safe male circumcision was strongly affected by age, the highest level of formal education attained, marital status, and religion.

A study established that almost 80% of respondents aged 15-19 years and 20-24 years were more likely to utilize safe male circumcision while the least of the respondents aged 30-34 years and 35-49 years were not likely to utilize safe male circumcision. This is probably because the males in the age

group of 15-19 years and 20-24 years are students thus highly influenced by their peer pressure and parents whereas the age groups of 30-34 years and 35-49 years are working hence fear to interruption on their working days and more so, most of them are married which puts them in a state of missing sexual intercourse for a while with their partners during the healing time. This study is in line with a study conducted by Odoyo, et al., (2019) on the Prevalence of male circumcision in four culturally non-circumcising counties in Western Kenya after 10 years of program implementation from 2008 to 2019 in which the results revealed that out of 3569 respondents, male circumcision prevalence for 15-29 years old men was above 75% in all four counties; Homa Bay 75.6%, Kisumu 77.9%, Siaya 80.3% and Migori 85.3% whereas in the other group the observed prevalence was lower.

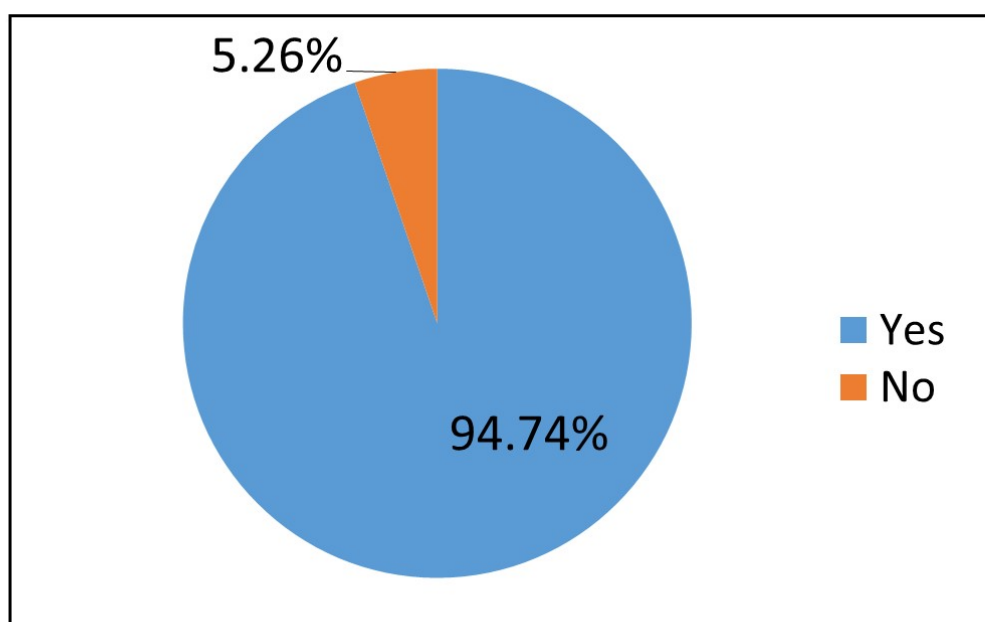
The finding indicated that respondents' marital status was a significantly associated factor in the utilization of safe male circumcision among males.



**Table 3.** Showing knowledge related factors affecting utilization of safe male circumcision in Buremba Town Council, Kazo District. n =120

Respondents' characteristics	Variables	Frequency (f)	Percentage (%)
Importance of SMC	Reduction of HIV transmission risk	69	57.5
	Improving hygiene	26	21.67
	Reduction of HPV transmission risk	14	11.67
	Religious reasons	9	7.5
	Cultural reasons	1	0.83
	Cosmetic purpose	1	0.83
<b>Total</b>		<b>120</b>	<b>100</b>
Personal misconception and myths	Reduction of sexual performance	51	42.5
	Foreskin being taken away for spiritual rituals	13	10.83
	Delay of the wound to heal completely	24	20
	Excessive bleeding	15	12.5
	Applies for only the young youth and children	17	14.17
<b>Total</b>		<b>120</b>	<b>100</b>
Personal fears	Pain	61	50.83
	Taking too long at home nursing the wound	23	19.17
	Taking too long at home without working	19	15.83
	Standings risks of getting complications like sepsis	14	11.67
	Unknown outcomes of SMC	3	2.5
<b>Total</b>		<b>120</b>	<b>100</b>
Recommends SMC to a son or friend	Yes	92	76.67
	No	28	23.33
<b>Total</b>		<b>120</b>	<b>100</b>

Source: Primary data



**Chart 3.** A pie chart showing the description of the circumcised respondents' satisfaction opinion towards the services provided.

Results indicated that 60/120 (50%) of respondents who had never married were more likely to utilize safe male circumcision as compared to those who were married. This is probably because most married males feared missing out on sexual intercourse with their wives during the time of wound healing and this may also attempt their wives to commit adultery. This agrees with results from a study conducted by Asiimwe, et al., (2018) on Knowledge and practices of male circumcision as an HIV/AIDs prevention measure among males in Mbarara municipality, the study established that out of 150 respondents, 54.5% of the respondents had never married and more so, 56.7% were Banyankole speaking people.

The study established that the majority of the respondents who had attained a low level of formal education of primary (40%) were more likely to utilize safe male circumcision. This is probably because the place is characterized by a low level of formal education with the majority of people dropping out of school at the primary level. This correlates to the study conducted by Kaddu, (2017) on the Knowledge, attitude, and practices of males aged 10-49 years attending Ishaka Adventist Hospital on safe male circumcision, the results revealed that out of the 44 respondents in the study, 36% were Banyankole single males with the low level of formal education of primary (54.4%) and (11.3%) none.

Findings indicated that respondents' religion was significantly associated with the utilization of safe male circumcision among males living in the Buremba Town Council, Kazo District. Findings revealed that all Muslims contributing 7.5% of the total respondents who were interviewed in the study were already circumcised while the number of circumcised respondents who belonged to other religions varied that is; Anglican/Protestants (45%), Catholics (33.33%), Pentecostal church (11.67%) and Seventh Day Adventists (2.5%). This agrees with results from a study conducted in Swaziland on the influence of religion on the uptake of male circumcision, the findings revealed that religion has both negative and positive influences on individual perception and hence the decision to get circumcised C. Maibvise, (2015). This is probably because for Muslims it's mandatory for every individual in the religion to get circumcised to be regarded as a true Muslim and other religions do not take it as a very serious issue, however, the study area is ma-

ajorly composed of Anglican/Protestants followed by catholic religion.

Social-economic factors affecting utilization of SMC in Buremba Town Council

The study revealed that most of the respondents, 96.67% had heard the message about safe male circumcision with the majority, 37.07% getting the information via the Radio sources. This is probably because most people in the area own radios and thus easily access information about SMC via them although the information given is not very convincing to give adequate information that is meant to explore the importance of SMC and to take off personal fears, myths and misconceptions about safe male circumcision. This agrees with the results of a study conducted by P. Nzamwita, (2021) on Factors associated with low uptake of Voluntary Medical Male Circumcision as an HIV-Prevention strategy among men aged 18-49 years from Nyanza District, Rwanda, results indicated that out of 438 respondents in the research, a large majority 95.7% reported that they had heard about circumcision in different settings, circumcision uptake was 35.8% and varied based on social demographic status.

Furthermore, finding from the study indicated that peer influence was the major reason for circumcision among the circumcised respondent with 36.84%, followed by partner's influence at 31.58%, religious influence at 21.05%, medical influence at 5.26%, cultural influence at 2.63%, and cosmetic purpose 2.63%. This is probably because of the other factors such as age-associated with being a student. This agrees with a study conducted by Sgaier SK, (2015) where it was established that VMMC was majorly acceptable to males due to the influence of peers, family, or female partners, and this influence varied with age.

Findings also showed that only 81.58% of the circumcised respondents were not charged money for the service. This is probably because of the free safe male services organized by the Buremba Town Council health Team and NGOs which make SMC services available and accessible to people at zero cost. This correlates to a cross-sectional study conducted on Factors associated with male circumcision among college youth in Ndola, Zambia in which the findings indicated that out of 136 students in the study, 79 responded to a question about whether they were charged for the circumcision service and 87% of them reported that services provided were free of charge (Kateule, *et al.*, 2019).

Knowledge related factors affecting utilization of SMC in Buremba Town Council

The study revealed that the majority of respondents, 57.5% reported that safe male circumcision reduces the risk of transmission of HIV, and 21.67% reported that safe male circumcision improves hygiene. This is probably because of the many constant adverts on media about SMC reducing the risk of transmission of HIV thus many people know about it. This correlates to the study conducted on Barriers and motivators to voluntary medical male circumcision uptake among different age groups of men in Zimbabwe by K. Hatzold, *et al.*, (2014) in which findings revealed that out of 2350 respondents in the research, 44% reported about VMMC for prevention of HIV/STI, 26% reported about improving hygiene and 6% reported about prevention of cervical cancer to their partner. Furthermore, only 11.3% of the respondents were circumcised and 49% reported a willingness to undergo VMMC.

Data analysis and interpretation revealed that reduction of sexual performance was the major misconception among respondents with 42.5%, followed by excessive bleeding with 20%. This is probably because there is a possibility that individual beliefs negatively impact their partake in SMC and also they may be lacking enough information on the outcomes of safe male circumcision. This study contradicts with the findings of a study conducted by Okumu, *et al.*, (2018) on Personal factors affecting the uptake of voluntary medical male circumcision among the sexually active male population in Busia County, Kenya, out of 249 males that participated in the research more than half of the respondents at 51.8% agreed that sexual performance was affected if one undertook VMMC with 43.4% strongly agreeing and 8.4% simply agreeing.

The study established that out of 38 respondents who were circumcised, almost 95% reported satisfaction with the services provided. This is so probably because the health providers were well trained and knew how to observe the rights of the patients when handling them with adequate resources to use. This study is in line with a study conducted by Kipkosgei, (2018) on Factors associated with postoperative adverse events following voluntary medical male circumcision among clients in Migori County Hospital in which results indicated that almost 99% of the 138 respondents were highly satisfied with the circumcision procedure and the post-operative care services received.

Another significantly associated factor was personal fear of pain after circumcision among the majority of respondents with 50.83%, 19.17% feared delay to healing completely, 15.83% feared getting interrupted in their day to day activities during the healing process, 11.67% feared complications of SMC like sepsis and 2.5% feared unknown outcomes of SMC. This is so probably because many people lack extensive knowledge about the entire process of SMC hence developing such fears towards it. This agrees with the findings in the article written by Ruhangariyo, (2016) published by New Vision he reported that fear and myths about VMMC have kept men in Western Uganda from going for SMC. He added that rumors of exaggerated pain and worries about spending many weeks redundant from work and not having sexual intercourse have stopped many males, especially those who are old from going for SMC.

Furthermore, this correlates to another study conducted on Overcoming Barriers of Voluntary Medical Male Circumcision in a Traditionally Circumcising Community in Machinga District, Malawi which established that out of 262 respondents in the research, 63% reported fear of pain and 31% reported fear of bleeding. Participants' fear was attributed to an injection given before the procedure, cutting the foreskin, and post-operative healing (Masese, *et al.*, 2017).

The study indicated that the majority of the respondents, 76.67% reported that they would recommend safe male circumcision to their sons or friends whereas only 23.33% of the respondents reported they would not recommend safe male circumcision to another. This is probably the respondents wanted their sons or friends to benefit from the importance of SMC such as reduction of risk of transmission of HIV, improving hygiene to mention but a few. This study is in line with a cross-sectional survey study conducted by Mpho Keetile, (2016) on Factors associated with the acceptability of child circumcision in Botswana, the findings indicated that of the 7984 respondents in the research, 84% of them said they would circumcise their male children aged 18 years and below.

## **9 Conclusion**

This study established males in the younger age groups who had never married were more likely to utilize safe male circumcision. Also, the study

established that almost all the respondents in Buremba Town Council had heard a message about safe male circumcision majorly via Radio sources and from friends and members. A bigger proportion of respondents indicated safe male circumcision to reduce the risk of transmission of HIV.

The proportion of circumcised males in Buremba Town Council was 31.67% and still very low below the required 80% male circumcision coverage for herd immunity and this is due to the knowledge related factors affecting the utilization of safe male circumcision in the study area, such as little information about the importance of safe male circumcision, misconceptions like reduction of sexual performance and excessive bleeding, personal fears like pain and delayed wound healing whereas some social-economic factors like charging some amount of money from respondents for the services provided had least effect on the study since most services provided in the study area were by free voluntary circumcision medical Camps organized by Town Council health team and some NGOs.

#### **Recommendations:**

To the males of Buremba Town Council

The male should adopt early childhood safe male circumcision as this will eliminate personal fears like fear pain and misconceptions that mainly increase with the age of the person. This also improves wound healing when circumcised in the childhood stage.

More so, males should always seek health care from trained health care providers, this will provide them with adequate knowledge about safe male circumcision and rule out misconceptions about SMC.

#### **To the health workers**

The health workers should always follow the right protocols after safe male circumcision procedures to eliminate dissatisfaction with the services provided through continued training.

Further still, Health workers should always do a complete follow-up of the circumcised patients to ensure good results.

#### **To Buremba Town Council Administration**

The Town Council health team should continue organizing and conducting Medical safe male circumcision Camps, especially targeting specific groups such as students in schools around to increase the number of circumcised males with increased benefits of safe male circumcision like reduced HIV/AIDS risks in the area.

Also, they act as while blowers in encouraging males in the study area to always seek and utilize safe male circumcision services from the available and accessible authorized designated areas. This eliminates private clinic charges for safe male circumcision services and ensures aseptic procedures with minimal complications.

#### **To the Ministry of Health**

The ministry of health should carry out more sensitization of males in the study area through media channels like Radios to promote and improve positive perception and utilization of safe male circumcision services.

Furthermore, the ministry of health should do an extension of such safe male circumcision services to all health care facilities to increase the availability and accessibility of the service to people in the study area.

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