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Barriers to Voluntary Medical Male Circumcision Uptake to Prevent HIV Transmission: A Qualitative Study among Married Men

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Abstract

Background: Voluntary medical male circumcision (VMMC) is a relatively new intervention that has been found to reduce sexual transmission of HIV among heterosexual partners by 60% when properly practiced. However, the poor acceptance of VMMC makes it difficult to accomplish the objectives of health policy to boost uptake. The purpose of this study was to explore the barriers to VMMC Uptake among married men in Kitgum municipality.

Methods: The qualitative descriptive design was employed in this study. The purposive sampling method was used to recruit 30 married men who lived within any of the three divisions of the municipality and had been married for at least one year. Data collection was done using an in-depth interview method. Inductive content analysis was used to generate the themes and categories.

Results: The study findings revealed that fear, financial uncertainty, involvement of female health workers, cultural beliefs, religious belief, sexual dissatisfaction and advanced age were barriers to voluntary medical male circumcision uptake among the married men in Kitgum municipality.

Conclusion: In Kitgum municipality, VMMC Uptake is still low, but the majority of the males had sufficient knowledge about it. We found the low uptake was primarily attributed to anxiety, involvement of female health workers, financial instability, sexual unhappiness, and advanced age. There is a need for proper re-packaging of the health education messages during mobilisations to address the anticipated side effects and to clearly state the reasons for the VMMC program. There is a need for proper re-packaging of the health education messages during mobilisations to address the communication gaps and to clearly state the reasons for VMMC program. Adequate psychological preparation of the men to expect any sex of staffs working in these clinics.

Keywords: HIV Transmission, Medical Male Circumcision, HIV Transmission, Sexual Performance, Cultural Beliefs, HIV Prevention

Background

To half the AIDS epidemic by 2030, HIV prevention will continue to be crucial. One of the five UNAIDS (Joint United Nations Program on HIV and AIDS) pillars of HIV prevention is male circumcision (Masese et al., 2021). In countries in Eastern and Southern Africa where there are generalized epidemics of HIV, voluntary male medical circumcision (VMMC) programs are a critical part of the HIV prevention strategy because male circumcision has been shown to reduce the risk of men contracting HIV from heterosexual sex by about 60% (Cork et al., 2020). However, there were substantial declines in VMMC achievements in Uganda, especially in the rural setting (Murphy et al., 2021)

VMMC is a surgical procedure that involves the removal of the foreskin by a trained medical professional and is effective in the prevention of HIV transmission (Byaruhanga et al., 2022). Donors support free VMMC services for men in 15 sub-Saharan African countries.(Marukutira et al., 2022). VMMC has been scaled up gradually in the past decade, with more than 26 million circumcisions performed between 2008 and 2019 in the priority countries. However, this uptake has been unevenly distributed across countries, with some lagging, including Uganda. Uganda had only achieved 45 % of its target by June 2020 (Byaruhanga et al., 2022). Studies show that religious, societal, and medical issues have an impact on how accessible VMMC is in the majority of nations, especially in low- and middle-income nations (Nzamwita & Biracyaza, 2021). However, these factors differ from region to region which calls for understanding of contextual barriers in the Ugandan context.

VMMC has been incorporated as part of the comprehensive HIV prevention strategy to keep men free of new HIV infections. Despite the known benefit, research indicates that few married men (43% in Uganda and 26% in mid-Northern Uganda) are opting for it (Mati et al., 2016). The majority of married men, aged between 15-49 years registered the lowest rate of VMMC in Uganda (Mati et al., 2016). This age group of men remain sexually active, and their HIV prevalence is at 7.9% in the Kitgum which is higher than the national average of 7.6%.(Arebo et al., 2022) Statistics indicate that only 31.9% of the population were circumcised in 2018 in Kitgum Garenne (2022) which is lower than the national average of 45%. There is a need to understand the barriers to VMMC uptake among the married men in Kitgum district. This study, therefore, explored the barriers to VMMC uptake among the married men in the study area.

The motivation for this was due to the fact that, adoption of a VMMC policy, contextualization and implementation of VMMC among HIV/AIDS implementation organizations, VMMC media campaigns, social mobilization, and outreach services are all strategies for scaling up and expanding VMMC use in Uganda. In the rural context, VMMC is provided at both the institution and community levels through outreach services, which are primarily supported and supervised by Non-government organizations and other implementing partners. However, Uganda, with a high HIV prevalence has low rate male circumcision. We were therefore motivated to understand the barriers to VMMC uptake among the married men.

Materials and Methods

Study Setting

The study was carried out in the outpatient department of Kitgum general hospital located in Kitgum municipality. Kitgum is bounded to the north by Lamwo District. Kitgum municipality is also bounded to the north by Lamwo District, to the north-east by Mucwini, to the east by Kitgum Matidi, to the south by Acholibur, and to the west by Pajimu. The major city in the Acholi sub-region, Gulu, is located 104 kilometers (65 mi) to the northeast of the town. This

is roughly 435 kilometers (270 miles) north of Kampala, the capital of Uganda. The Hospital has various departments that include; outpatient departments, medical, surgical, pediatric, maternity and antenatal wards, HIV clinics, nutrition departments, mental health clinics, and laboratory and surgical theatre.

Research Design

A facility-based descriptive cross-sectional research design using a qualitative approach was used for this study. Data was collected from Kitgum general hospital about February 10, 2022, to March 10, 2022.

Study Participants and Sample Size Estimation

The study participants included married men who were residents of Kitgum municipality from the different divisions of Pandwong, Pager and Central and were willing to participate in the study. A total of 30 married men aged 15 and 49 years participated in the study. The sample size was estimated using the saturation principle as applied in a qualitative study (Saunders et al., 2018). When no fresh data were produced, redundancy was used to estimate the ultimate sample size.

Sampling Criteria

We used the consecutive random sampling technique to select the representative sample. All participants meeting the inclusion criteria and available were recruited. All the men who were living as husband and wife under the same roof for at least 12 months, had undergone traditional or cultural marriage or wedded were considered for the study. Married men who needed immediate medical attention for OPD were excluded from the study.

Data Collection Instruments

An in-depth interview was used to collect data on the barriers to VMMC uptake among married men. The researcher developed the interview guide using guidelines provided by Huberman and Miles (Huberman & Miles, 2002). Also, the development of an interview guide was based on the literature on barriers with input from experts who had experience with HIV prevention and treatment. The guide was translated and back-translated to establish consistency.

Procedure

Three male research assistants, fluent in both English and Acholi and had received training in qualitative methodologies performed in-depth interviews. They had previously conducted research in the community. The researchers were introduced to the outpatient department by the medical superintendent. The researchers then asked to talk to the participants and asked them brief demographics whether they were married or not and where they came from to help get the right participants. The interviews lasted for 25-30 minutes and responses from the participants were recorded using a voice recorder. Interviewers continuously probed and watched the body language of respondents to elicit rich and accurate perspectives on the barriers to VMMC uptake. Given the nature and availability of the respondents, every participant meeting the inclusion criteria was selected until saturation was achieved. Informed consent forms were hand-delivered by the researchers to the prospective respondents.

Statistical Analysis

The interviews were transcribed verbatim. Then, NVivo 10 was used to code the transcripts. As a method of qualitative analysis, the framework approach Ritchie & Spencer (2002) was utilised, which offers a systematic structure allowing for both a priori and emergent codes. The transcripts were read twice by the researchers to familiarize themselves with the data before coding, as advised by Bogdan and Biklen (Bogdan & Biklen, 1997). This was done in an effort to acquire a better overall perspective of the context as well as the perceptions and experiences of the participants. To eliminate biases in the construction of codes based on the researchers' past information, opinions, and perceptions concerning VMMC, an open coding technique was employed. The data was coded using Opler's nomenclature of "expression" and "themes"(Ryan & Bernard, 2003). "Expressions" refers to the fundamental facts or happenings in the text that, after being synthesized and compared among other examples, grow into sub-themes and themes. Basic expressions discovered in interview transcripts were identified using descriptive codes, which were then grouped into themes and sub-themes and given more analytical coding labels. We applied Ryan and Bernard's methods for extracting themes from simple textual utterances (Ryan & Bernard, 2003). According to Gibbs'(Gibbs, 2007) advice, the method of data analysis switched from descriptive to analytical coding.

Ethical Approval and Consent to Participation

This study was conducted per the declaration of Helsinki. Ethical approval was obtained from the Institutional Review Board (IRB) of Gulu University (GUREC-2021-164). All participants provided written informed consent. Participation was voluntary and no form of coercion was used. The data collected was confidential and anonymous with no information like names linking the study participants to the data.

Results

Thirty married males, with ages ranged from 17 to 49 years old participated in this study. Numerous factors, including the person's beliefs and views, interpersonal influences, and broader social and cultural norms, have an impact on the decision to undergo circumcision. Using illustrative statements and placing discussions of what we refer to as attitudinal "barriers and facilitators" to undertaking VMMC within the context of comparative findings from related studies concentrating on such concerns. The population background in which this study was conducted must be understood to properly evaluate the data. Although the barriers mentioned by interviewees may not necessarily reflect personal experiences with the treatment, they point to difficulties in adopting VMMC in Kitgum Municipality.

Barriers to VMMC

The examination of the current study's qualitative data identified a number of obstacles and challenges for VMMC. With respect to barriers to VMMC, several themes were identified and these included the following;

Fear

Quantitative information showed that barriers to medical circumcision included worry about post-operative complications such pain and bleeding. It was usually found that peer experiences were essential considerations to make when deciding whether or not to undergo VMMC. The fear of pain and the result are revealed through the following quotes;

> "*I was worried when I saw one of my friends bleeding after finishing circumcision. He had to go back to the operation as a result to have the stitches redone. That made me anxious when it was my time*". *(IN 3)*
> *"…there is a lot of pain… inject you directly on the penis to make you not feel pain during the procedure and this is really painful." (IN 9)*
> *"…you may not be properly given medicine to stop the pain and so you will end up in a lot of pain during the procedure…" (IN 1)*

The participants also indicated that operated area during erection in the morning causes a lot of pain as noted below;

> *"...men always have ….. early morning erections and when one erects with this wound it is really painful …." (IN 17).*

Sexual Dissatisfaction

There were concerns about complications relating to surgery; threats to masculinity, including loss of penile sensitivity or penis size, concerns about sexual performance and sexual inactivity. They claimed the operation reduces the penile sensitivity for sexual satisfaction as evidenced by their excerpts

> "The issue with circumcision is that once the [penis] has been improperly sliced, it will never become erect again." *(IN 29)*
> *"……a man with the fore skin is ... sensitive and sexually strong …. can satisfy his wife…if you are that circumcised man, you cannot satisfy your wife… you are not sensitive anymore."…. (IN 30).*
> *"…when you get circumcised your sexual drive reduces because that fore skin gives more sensitivity and so when you get circumcised this sensitivity is lost….."(IN 22)*

One participant believed that strength in bed is reduced. Also, the sexual life with the wife will be wanting as there will be no sexual pleasure as noted in the excerpt below

> *"…. after being circumcised, one loses the strength of sexual performance meaning your sexual life with your wife will now be very unsatisfying…." (IN 11).*

Advanced in Age

This category of advanced age was one of the barriers to VMMC where the participant felt they were already advanced in their age and were no longer exploring other women like the youth do to look for more children as noted in their excerpt below

> *"…advanced in age like for instance me who is already 48 years of age…i no longer act like the youth where they want to explore every woman…" (IN 26)*

One participant also felt that being advanced in age, they already had children and were no longer looking for women. This they felt barred them from utilising VMMC services as stated below;

> *"…we are already advanced in age…men already have 5 to 10 children by this time… with all these children I am not looking for women anymore… this no longer makes sense to me." (IN 4)*

"…i am already advanced in age and I am not into sexual adventure with other women anymore…" (IN 8)

Female Health Providers in VMMC Rooms

According to the data, some men felt uneasy having their health care provided by women in the VMMC room. The participants felt embarrassed being touched by a female staff in a sensitive area, they claimed provoked an erection as noted by their excerpts below;

"…being touched by a woman in such a sensitive area, ……can prompt an erection which would embarrass me so much. "(IN 1)

"…the female staff always play with your penis before the doctor arrives…this is why I do not accept it"…they want you to first erect so that the procedure can be done well...it is embarrassing… They pull behind the fore skin as they wash it. This is playing with our things…" (IN 2).

"….I feel ashamed being worked on by a female staff…men feel like they are losing their respect by exposing themselves to her…" (IN 7)

Cultural Beliefs

Culturally unacceptable practice was a barrier to circumcision and exposing private organs to other people. The participant said it is a culture for other tribes that could destroy their own culture and so this barred them from going for the procedure as noted in the excerpt below

"our culture of the Langi, Acholi …. does not accept circumcision….it is a culture for other tribes….it destroys ours…" (IN 1)

They also felt that culturally a man should have all his body parts and so cutting off some parts is not culturally accepted as indicated below

"…. our culture says that a healthy man must have all his body parts…. that part that is being cut off is now not culturally allowed….is a culture for the Bagishu but our culture does not approve of this…." (IN 22)

They also mentioned that this practice of exposing their sexual organs to other people is not culturally practiced in their tribe as stated;

"…in our culture…it is shameful to show your private parts for people to see… …" (IN 13)

Religious Beliefs

Some participants expressed fear that having their bodies cut off could violate their religious convictions and the sacredness of their bodies. In particular, the fear of being forcefully converted to the Islamic faith and yet for them they are Christians was the reason why participants failed to embrace VMMC.

"Rumours is… that the government's plan is to convert everyone to Islam like me who is an Anglican to be forcefully converted to Islam … they want to send soldiers to fight in Somalia so they need these soldiers to be Islam…this brings money for the government… this is not good". (IN 12)

"…we heard some rumour going on that they want to convert everyone to be a Moslem…Muslims are needed to go and fight al-Shabaab… I am a Christian…I do not want to be converted to be a Moslem" (IN 3)

"Why would I want to change since I was born this way?"

Fear of Women Committing Adultery

The participants' barrier to VMMC was also fear of their women or wives cheating on them. The participants feared that as they are still healing, they are unable to have sex with their wives and so they cannot meet their sexual demands and will therefore cheat on them to get this sexual satisfaction. This is noted in the excerpts below

"…our wives will cheat on us or leave…you cannot satisfy their sexual needs…" (IN 5)

"….one gentleman was circumcised and the wound became very big… very bad…they ended up chopping off his penis…. This … has given men great fear of going for circumcision…they stand great chances of losing their wives…" (IN 22).

In addition, participants also noted that some women do not support the VMMC and they often threaten to leave their husbands.

"…some women do not want their men to get circumcised. She says if you get circumcised I will leave you…" (IN 6)

"…your woman will go away to look for another man…you cannot satisfy her sexually since you are still healing…" (IN 7)

Financial Constraints

The participants' barrier to VMMC was due to transport costs to and from the health centres and the hospitals. They stated that after being circumcised you cannot walk back home neither can you ride your bicycle. Indicating that one must have some money for this activity to able to move between home and the hospital while receiving the services. This is evidenced in the excerpt below;

"…transport to and from the hospital…you cannot ride a bicycle after getting circumcised…you must have some money to get an easier transport means…it becomes expensive…" (IN 18)

"…they wait for long without eating...they stay hungry and they have to come with some money to eat while they wait…they will have to spend some money…" (IN 11)

Discussion

This study therefore explored the barriers to VMMC uptake among the married men in the study area. Our results revealed that the barriers to VMMC uptake among the married men were fear of physical pain, sexual dissatisfaction, advance in age, embarrassment, cultural beliefs, religious beliefs, fear of women committing adultery and financial constraints. The findings of this study are generally consistent with those of earlier research in more comprehensive VMMC programs (George et al., 2014). This study also identified barriers identified in earlier studies , including fears of pain and unfavorable outcomes, threats to masculinity, expenses (particularly implicit) connected with VMMC, and cultural and religious (George et al., 2014)

Although age, cultural factors, and fear of post-operative consequences like pain and bleeding were all identified as impediments to VMMC, qualitative research produced more surprising results. The majority of study participants identified discomfort as a significant barrier to VMMC, which is consistent with findings from other studies that have identified a range of problems as barriers to VMMC. Pain and hemorrhage and edema are the most often mentioned VMMC side effects (Mavhu et al., 2018). Glans amputation has been documented in incredibly rare instances of negative outcomes (Manentsa et al., 2019)

This study found a unique finding of cutting off body parts as not being culturally accepted as a barrier to VMMC which is not indicated anywhere in literature. Cultural beliefs and practices affect uptake of health services especially if the form of treatment is against the cultural beliefs and practices of that society (Hatzold et al., 2014). This is in line with findings in Kenya where the elderly men viewed VMMC as accepting a practice of the culture of different tribes and that it goes against their cultural beliefs (Herman-Roloff et al., 2011). Consequently, the participants in this study felt they were being forced to convert to Islamic. This perception is likely to cause a barrier to the fight against HIV infection. This is consistent with findings in Kampala which found that religious sentiments were a great barrier to VMMC uptake among the married men (Mugwanya et al., 2013)

Our findings showed that some males were uncomfortable receiving care from female health professionals in the VMMC rooms. Some of the males on the circumcision team felt uncomfortable because there were female health professionals there, especially since they weren't ill. Participants reported that some males erect when a female provider gets them ready for circumcision which correlates the results in Malawi (Masese et al., 2021).

Sexual dissatisfaction after being circumcised was a barrier to VMMC uptake as mentioned by many participants. Sexual dissatisfaction among the married men is a big threat to masculinity as this makes them feel inadequate and incapable of sustaining their marriages (Auvert et al., 2013). This made them fear that they stood chances of not satisfying their wives after getting circumcised. The fore skin is more sensitive in the uncircumcised glans mucosa because it has an erogenous sensitivity which means that after circumcision genital sensitivity is lost (Bronselaer et al., 2013). This finding has however been of considerable debate among researchers where others say that circumcision increases sexual performance and satisfaction while others say it does not (Yang et al., 2014). These finding are in line with findings in Mazowe- Zimbabwe which found negative effects of VMMC on sexuality like decreased penile sensitivity and reduced sexual performance as barriers to VMMC uptake among the married men (Ancia et al., n.d.).

Conclusion

In Kitgum municipality, VMMC Uptake is still low, but the majority of the males had sufficient knowledge about it. We found the low uptake was primarily attributed to anxiety, involvement of female health workers, financial instability, sexual unhappiness, and advanced age. There is need for proper re-packaging of the health education messages during mobilisations to address the anticipated side effects and to clearly state the reasons for VMMC program. There is a need for proper re-packaging of the health education messages during mobilisations to address the communication gaps and to clearly state the reasons for VMMC program. Adequate psychological preparation of the men to expect any sex of staffs working in these clinics.

Strength and Limitations of the Study

This study found a unique finding of cutting off body parts as not being culturally accepted as a barrier to VMMC which is not indicated anywhere in literature. This is a descriptive cross-sectional study and may not establish a causal correlation. The results may not be generalizable due to geographical limitations. This was a smaller study there is need for a bigger study to explore more on the barriers of VMMC among the married men on a bigger scale vis-a-vis the mentioned barriers. There is a need to explore the lived experiences of circumcised married men.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request

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Authors' contributions

All authors made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; took part in drafting the article or revising it critically for important intellectual content; agreed to submit to the current journal; gave final approval of the version to be published; and agree to be accountable for all aspects of the work.

Disclosure

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