Perceptions of Indigenous Kiboga Men on Use of LARCs by Their Partners

Ronald Arineitwe Kibonire and David D. Mphuthi

College of Human Sciences, School of Social Sciences, Department of Health Studies, University of South Africa.


Abstract
Worldwide, unintended pregnancies pose a significant public health concern, affecting several women in countries that are in low and middle-income categories, with an estimated annual incidence of 74 million. The African continent is responsible for around 25% of unwanted pregnancies worldwide. Unintended pregnancies may result in many health-related issues for both mothers and children including deaths. Family planning methods, especially long-acting reversible contraceptives, are some of the effective approaches in mitigating maternal mortality, especially those resulting from the effects of unplanned pregnancies. The LARCs assist women in postponing pregnancy and enable them to have extended intervals between childbirths even though their uptake in Uganda, is hindered by the lack of men’s support.

This study aims at gaining insight into the perceptions of indigenous Ugandan men living in Kiboga district in North-Central Uganda on the utilisation of LARCs by their wives. The researchers used purposive sampling to choose a total of 20 participants for focus group interviews and 10 participants for individual interviews. The selected participants were married men or those with female sexual partners between the ages of 20 and 49 years. Semi-structured interview guides were used for both individual and focus group interviews.

Data analysis was performed by transcribing the interviews, sorting the field texts, organising, and storing the data, listening to recordings, and scanning field notes for patterns related to the perceptions. The patterns were coded and categorised to build the theme emerging on the phenomenon. The study revealed that indigenous men had negative perceptions that limited their support for LARC use by their wives. These included perceived side effects, fears like malformed babies, adultery, and single mothers. The study recommended strong social behavioural change communication to educate the men on LARCs to address the negative perceptions and to strengthening service delivery for LARCs.

Keywords: Indigenous Men, Long-Acting Reversible Contraceptives (LARCs), Perceptions, Kiboga

1. Background
Globally, the occurrence of unplanned pregnancies continues to pose a significant public health concern, involving a sizable number of women in less developed and middle-income nations, with an estimated annual incidence of 74 million. The African continent is responsible for around 25% of unwanted pregnancies worldwide [1]. Unintended pregnancies are influenced by several factors, such as inadequate male partner support, failure to use contraception, low levels of mothers’ education, and poverty [2]. The unplanned pregnancies result in health challenges to the mother and infants including mortalities [3]. Unintended pregnancies have many consequences, such as unsafe abortions, high fertility rates, increased likelihood of school dropout resulting in lower educational attainment, and limited career prospects leading to poverty and maternal morbidities and mortalities [4,5]. According to estimates, around 61% of unplanned pregnancies lead to unsafe abortions, which are recognised as a prominent contributor to maternal mortality and morbidity in poor and middle-income countries [5]. Approximately 86.8% of unintended pregnancies, particularly in low and middle-income countries, are attributed to the lack of use of modern contraceptive methods [6,7].

The non-utilization of modern contraceptive methods could globally result in about 25 million unsafe abortions and 47,000 maternal mortalities annually [8].

Currently, Uganda still has a high fertility rate of 5.2 and
approximately 60% of the burden of unsafe abortions is attributed to unplanned pregnancies [9,10]. The national maternal mortality ratio, is currently 336 per 100,000 live births, indicating one of which is still very high. Unintended pregnancies leading to unsafe abortions have been identified as a substantial contributor to maternal mortality and morbidity in Uganda [11]. Additionally, it is worth noting that in the North-Central region of Uganda, where Kiboga, the study district is located, the maternal mortality ratio is 410 deaths per 100,000 live births. This figure is notably higher than the national average ratio of 336 deaths per 100,000 live births [12-14]. Therefore, preventing unintended pregnancies is one of the critical approaches to reducing maternal death. Reducing unintended pregnancies is achieved by reducing the unmet need for family planning through increasing access to modern contraceptive methods [15]. They include short-term, long-acting reversible contraceptives (LARCs) and permanent methods. The long-acting contraceptive methods which are the most cost-effective include implants, copper-bearing Intra-Uterine devices (IUDs), and Levonorgestrel intrauterine devices [11,16]. The permanent contraceptive methods are female sterilization(tubaligation) and male vasectomy [11].

2. The Situation in Uganda
The uptake of the most cost-effective LARCs in Uganda is generally low, and the usage is estimated to be 21.4%, with implants contributing 17.3% and Intrauterine devices comprising only 4.1% of the family planning method mix [17]. The study district, of Kiboga, has one of Uganda’s highest maternal mortality ratios and high fertility rates. The high mortality ratios are related to complications arising from pregnancies and children’s birth such as haemorrhage, hypertensive disorders, abortion complications, pregnancy-related sepsis and indirect causes [18]. Using contraceptives, especially the most cost-effective LARCs could avert some of the complications that lead to mortalities with a significant reduction in mortality ratio in the study district while at the same time reducing the total fertility ratios [5].

Despite the high maternal mortality, the uptake of contraceptive services, including LARCs for Kiboga, in the study district remains low compared to the national uptake at 9.2% and a rural real fertility rate of 6.3 [13,19,20]. The low uptake of LARCs means that a key intervention that is effective in preventing some of the causes of maternal morbidity and mortalities resulting from unintended pregnancies is not well utilised in the study district. The low uptake of LARCs is partly blamed on opposition by indigenous men in Kiboga which could be due to the perceptions they hold just like in other parts of the world have shown [21-24]. Therefore, this study strove to generate an informed understanding of the perceptions of indigenous men living in Kiboga district hold regarding the uptake of LARCs by their wives. Understanding the perceptions would enable the researcher to develop strategies to enhance the utilisation of LARCs among the women Kiboga district.

3. Methodology
This study used the qualitative research method as an approach because of its appropriateness for a study seeking to understand the perceptions of indigenous men living in the Kiboga district regarding the utilisation of LARCs by their female partners. The qualitative approach also guided the selection of the research design that followed.

4. Design
The researcher used a constructive phenomenological approach for qualitative data collection. The use of phenomenology as a research technique stems from its ability to document the lived experiences of individuals and the subjective interpretations they ascribe to these experiences [25].

5. The Setting of the Study
The present study was conducted in the rural district of Kiboga, situated in the Central-North region of Uganda. The choice of this research site was based on its rural characteristics, high unintended pregnancies, limited usage of LARCs at 9.2% lower than the national coverage of 21.4%, a higher fertility rate of 6.3, and higher maternal death rate of 410 above the national averages of 5.2 and 336 per 100,000 respectively.

6. Study Population
The research population consisted of married or in-union indigenous men, aged 20 to 49 years, residing in the Kiboga area of Uganda two years before they participated in the study. The researcher’s assumption, which was based on the 2016 and 2022 Uganda Demographic Health Survey, led to the selection of the age range of 20 to 49 years for this study. The assumption was that a significant proportion of indigenous men residing in the Kiboga district were sexually active, married, or had female sexual partners who were falling within the reproductive age bracket, hence being potential candidates for LARCs [25].

7. Sampling and Selection of Participants
This study applied purposive sampling using the inclusion criteria defined in the paragraphs below to select the needed sample size [26,27]. The researcher chose the two sub-counties of Bukomelo and Dwanilo because of their rural location and low LARCs use in the district of Kiboga. A total sample size of 31 participants was designated from two sub-counties of which 21 participants were for the focus group discussions (ten and eleven for Bukomelo and Dwanilo sub-counties respectively) and 10 participants for face-to-face in-depth individual interviews (Five from each sub-county). The participants who were not comfortable sharing their views in focus group discussions were allowed to participate in the in-depth individual interviews after disclosing to them the processes for both approaches of data collection. The data saturation determined the total number of interviews. This was achieved when the researcher did not get any new information from the new interviews he conducted with additional participants.
8. Inclusion Criteria
The inclusion criteria for the study included Indigenous who were born in Kiboga districts or those men who had lived in the district for at least two years. Additionally, other inclusion criteria included men who were aged 20-49 years who were married or had female sexual partners and accepted to take part in the study. Also, men who accepted to be tape-recorded, consented in writing and were in good mental state were included in the study.

9. Exclusion Criteria
The exclusion criteria for this study were non-indigenous men who were not married and were outside the age bracket of 20-49 years. Additionally, men who were not residents of Kiboga districts for at least two years and those who did not accept signed a consent form. The two years of residence were considered because that period was adequate for those men who had come from outside to district to have had enough interaction with the indigenous men in their sub-counties of residence and were likely to be having similar perceptions in many aspects including on LARCs. More to that, men who did not accept to be recorded, and those who were identified as being unstable mentally by their local leaders as they understood their residents well were excluded.

10. Data Collection Method
The researcher used phenomenological data collection methods to collect data for both focus group and individual interviews. The open-ended interview guide with semi-structured questions was used to explore the perceptions of participants from the face-to-face in-depth individual and focus group interviews. The interview guides for focus group and in-depth individual interviews were different as required and approved by the institutional review boards of the University of South Africa, The AIDS Support Organisation (TASO) and the Uganda National Council for Science and Technology (UNCST) that gives the final clearance for any research in Uganda. The researcher deployed two approaches of focus group and in-depth individual interviews to give alternatives to men who did not want to share their views in the presence of other men in a focus group.

Participants were asked questions to elicit a wealth of responses on their perceptions about LARC. The researcher conducted data collection in a natural setting such as participants’ homes, open but secure venues near the trading centres and community meeting venues where non-participants were not able to hear what was discussed. The venues for the interviews were identified and arranged by the respective village leaders in the two sub-counties. The questions in interview tools were initially written in English but were translated using language experts into Luganda, the main language spoken in Kiboga districts. The interviews were taped and then transcribed.

11. Development of Data Collection Tools
Before data collection, research instruments were created. Guides for open-ended focus group and individual interviews, a consent information document, and an informed consent form were developed. The open-ended questionnaires permitted the participants to speak freely on the topics they deemed significant, using their own words, and articulating their experiences in depth using stories, narratives, and examples. After developing research instruments, the researcher had them translated into Luganda, the primary language spoken in Kiboga districts, so that study participants could easily comprehend them. The English and Luganda versions of the questionnaires were all approved for use by the University of South Africa's ethics committee under number UNISA Rec-240816-052, the ethics committee of The AIDS Support Organisation (TASO) in Uganda with registration number TASO-2021-56, and the Uganda National Council of Science and Technology (UNCST) under reference number HS2152ES [28,29].

12. Approval for Data Collectio
To recruit participants for the study, the researcher initially obtained a letter from the UNCST (Uganda National Council for Science and Technology) under the President’s Office authorizing the researcher to proceed with data collection in the Kiboga district. The researcher then used this letter to request permission from the Resident District Commissioner (RDC) of Kiboga to conduct research in the district.

This permission from the RDC was essential for security clearance as this official is the head of security in the district. After obtaining permission from the RDC, the researcher proceeded to the district health office to inform the District Health Officer about the study since it was health-related and required permission at that level.

The researcher then proceeded to the headquarters of Bukomero and Dwaniro sub-counties in the Kiboga district to obtain another level of permission before proceeding to the village level. The permission of the sub-county leadership was crucial because they oversee the activities of the villages in their areas of jurisdiction, including security and health issues. While in the two sub-counties, the researcher sought permission from the sub-county local council and the indigenous leaders. Securing permission from the local council leadership and indigenous leaders was crucial as they are responsible for monitoring all activities in their respective villages.

The village local council chairpersons, along with the indigenous leaders, also assisted in identifying the participants, guided by the inclusion criteria. The local council leaders provided registers of homes with potential participants, and the researcher selected homes randomly from the lists provided. This was done to minimize bias in participant selection by the local leaders.

Moreover, the village council leaders assisted the researcher in securing appropriate venues where individual interviews and focus group interviews took place. These venues were typically under tree shade in a playground or in open, secure places such as trading centers and community halls within the respective villages.

13. Interview Process
The community leaders from two villages helped the researcher
in mobilizing the potential participants within the Kiboga district. Ethics issues were emphasised as per the information contained in the information sheet that was written in the Luganda language. Those participants who provided their consent in writing were included in the In-depth face-to-face individual and focus group interviews. The total number of research participants was 31 of which 21 participated in the focus group discussions and 10 in the in-depth face-to-face individual interviews. This sample size was determined by data saturation, the point where no new views were emerging from the additional participants. The focus group interview lasted between 60 to 80 minutes while individual interviews lasted between 40 to 50 minutes. The data collection exercise lasted for 6 days.

The researcher conducted in-depth individual and focus group interviews in Luganda, the major language spoken in the Kiboga districts. The investigator used probing questions to keep up the conversation and elicit specific responses on the topic of perceptions. The probing questions shed more light on the phenomenon of perceptions regarding LARCs use. More than that, the researcher offered respondents an opportunity to provide more information on the topic at hand. After establishing that no further information emerged from the participants, the researcher expressed his appreciation to the participants for their participation. Individual interviews conducted with men in Kiboga are provided below.

14. Data Analysis
In this research, the recordings of both in-depth face-to-face individual and focus group interviews were carefully and repeatedly listened to in a silent, distraction-free environment. The researcher precisely transcribed every detail of the recorded interviews. The transcribing stage was followed by memoing, a method of keeping note of what was learned from the data [30]. After memoing, the investigator manually coded the data, verifying themes, concepts, and categories before labelling analogous text segments [31,32]. In addition, the researcher also used a co-coder, an independent researcher from one of the organizations conducting research in Uganda. The researcher discussed and reached a consensus with the co-coder on to consider having one theme, one category, and four sub-categories. The agreed theme was perceptions related to LARCs, the category considered was fears related to real or perceived side effects and the four sub-categories as indicated in the table1 below. The researcher ensured rigour throughout the study process to achieve trustworthiness.

Results

<table>
<thead>
<tr>
<th>Themes</th>
<th>Categories</th>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of LARCs</td>
<td>Fears related to real or perceived side effects.</td>
<td>Reduced libido, effect on the organs of the body and infertility in women. Domestic violence, couples separation, single mothers, and adultery. Fear of losing ancestral land to non-Baganda tribes. LARC causes the delivery of disabled children.</td>
</tr>
</tbody>
</table>

Table 1: The Summary of emerging themes from in-depth individual and focus group interviews in Kiboga District

In this section, the following abbreviations below are used.

FGD: Focus Group Discussion
IDI: Individual interviews.
KB: Refers to participants from Kiboga District, Bukomero Sub-County
KD: Participant from Kiboga District, Dwanilo Sub-County

15. Summary of the Findings (refer to Table 1 above)
The indigenous men of Kiboga have negative perceptions that hinder their support for women's use of LARCs. Low libido, effects on the body organs and infertility in women, domestic violence, separation of couples resulting in single mothers and infidelity, worry of losing their land to other non-indigenous people, and LARC use result in the birth of disabled children. In addition, men were concerned about having children with disabilities because of women using LARCs. Therefore, it can be concluded that men have a limited comprehension of how LARCs function, which contributes to their negative perceptions of their partners' use of those contraceptive methods. The detailed findings from the interviews conducted with men in Kiboga are provided below.

16. Low Libido, Effect on the Body Organs and Infertility in Women
According to the study findings from the district of Kiboga men perceive LARCs as family planning methods that lower sexual strength in both women and men. The study Participants expressed that LARCs reduce women's sexual drive, resulting in less frequent sexual endeavours with their husbands. In other occurrences, the libido of certain men also weakens when their women use LARCs. Therefore, most participants indicated that they cannot support their wives to use LARCs as their contraceptives of choice because of the perceived loss of libido in both men and women. The following quotations represent the responses of some respondents.

"When a woman uses the capsule that is inserted in the arm and the womb, she gets less attracted in sexual intercourse, and when as a man I touch her, it appears as if she is a log in bed and therefore this makes me not to support her to use such family"
"When a woman is using in the arm and the one, they put in the womb, it also affects sexual power of the husband as well and for this reason, I cannot accept my wife to use those methods." (IDI KD 3)

"The LARCs make our women impotent and uninterested in sex when aroused in preparation for doing the intercourse during bedroom time which makes me hate those methods" (FGD KB 7).

Moreover, the study participants indicated the fear of the perceived effect of LARCs on the body organs as one of the reasons they did not like the use of LARCs by their wives. It became obvious that several men believe that LARCs affect both women’s sexual reproductive systems. The participants indicated that the use of LARCs reduce the size of women's reproductive sexual organ to the point where the men are unable to penetrate during sexual intercourse. In addition, participants expressed that LARCs cause also cause the penis of partners to become smaller, weakened, and unable to satisfy their wives. Additionally, men believed that LARCs could disappear in women and move to other body parts such as the heart and other parts causing cancers. The following excerpts from selected study participants.

"I have heard from my friends that when some women use the capsule in the arm, which disappears and ends up in the heart where it causes heart diseases and pressure" (IDI KD 15).

More to that, men expressed fear of infertility in women as one of the reasons they did not want their wives to use LARCs. Most men in this sub-category believe that LARC use results in a delayed return to fertility or lifelong infertility. They also perceived LARCs as a method of contraception that burns the eggs of women making them not produce again. Therefore, the majority of men preferred short-term or natural methods of contraception over LARCs. Even when LARCs are reversible, it appears that many men are not aware of their reversible nature as evidenced by their incorrect negative perceptions. Below are some of the expressions of men.

"I heard from my friends that when women use family planning methods, especially the long-acting reversible ones, they burn the eggs, and such women cannot produce again" (FGD KB13).

"I have heard that women who use those family planning methods take longer to get pregnant, and others do not even produce again. That is not good when a man wants another child. Therefore, personally, as a man, I am not in support of the use of those long-acting contraceptive methods" (FGD KB11).

"In case a child dies when there is a need to produce another one, it is not possible if the woman has been on long-acting family planning. I believe it is hard to reverse the process to make the woman produce to replace the dead baby. Therefore, I am not in support of LARC use." (IDI KD15)

17. Domestic Violence, Separation of Couples Leading to Single Mothers and Adultery

In this study, participants thought the LARCs might lead couples to separate due to domestic violence, particularly when the woman used the methods without her husband's consent. This is echoed in the following submission: "A woman using family planning (LARCs) becomes less interested in having sexual intercourse with her husband, and when a man tries to have sex by force, a fight could erupt. Consequently, the woman ends up separating from her husband to become a single mother. Therefore, to avoid such a scenario, I cannot support my wife to use LARC (IDI KB 13).

Some participants believed that the use of LARCs contributes to reduced libido in women, and when men seek sex, they decline. As a result, the men may end up leaving those women and seeking solace with other women, leaving them as single mothers. The following vignette captures this sentiment: "When your woman is using a family planning method that takes longer in the body, her energy during sex reduces, and this can cause a man to go for a younger woman, leading to separation of the couple" (FGD KD 14).

In order to avoid such a situation, participants stated that they would prefer their women Using short term and natural contraceptive methods over LARCs. Some participants thought that when women use LARCs, they produce very few children and, if they disagree with their spouses, they leave the relationship. This is because they are still attractive to other men, after all, they have not had many children, allowing them to easily remarry. The majority of participants were against their spouses using LARCs for this reason.

In addition, participants believed that if their spouses use LARCs, they are unlikely to be impregnated because of extramarital sexual relations, and this will encourage them into such relationships. Therefore, participants in Kiboga districts thought that LARCs could result in infidelity among women. The same assertion holds for men who believe that, once their partners begin using LARCs, their libido reduces and could cause husbands to go to sexual satisfaction from other women. According to the respondents, this has led to both men and women contracting sexually transmitted diseases, including HIV/AIDS and therefore for that reason, they do not support the use of LARCs by their wives.

"When women are using a family planning method, especially those that are hidden from a man, such as the capsules, they engage in looking for other men because they are sure they cannot get impregnated by their outside lovers since they are protected. So, I can never allow my wife to use such methods because she will easily go for other men and I will not know" (IDI KD 11).

"I have heard that a woman who is using a long-term family planning method is very tricky; she can easily sleep with other men as she is sure she can never get pregnant" (FGI KB 14).
18. Fear of Losing Land to Non-Baganda Tribes
The majority of participants in the Kiboga District believed that the Ugandan government was encouraging the Baganda to use LARCs so that they produce fewer children, while other non-Baganda tribes in the same district continued to produce children without restrictions. The participants were concerned that non-Baganda tribes, especially those with origin from the West (Bakiga, Banyakore, and Banyarwanda), would take away their land and wealth because of the diminished number of Buganda population. Therefore, some Baganda in Kiboga District oppose the use of LARCs so that they can maintain a large population to protect their land. Some of the quotations are stated below.

"The Government of Uganda could be having a hidden agenda to reduce the population of Baganda in our district by encouraging them to use family planning (LARCs) whereas the Banyankole and Banyarwanda keep producing many children. Eventually, the non-Baganda will continue to grab our land in this district of Kiboga" (IDI KB 13).

"Why do they want us to use a long-term type of family planning (LARCs) when other tribes in our sub-county are producing so many children like rabbits? Don't you think there is a motive to take away the Baganda land? I cannot therefore support the use of any family planning methods" (IDI KD 13).

"We the Baganda is still few, and therefore there is no need to use the long-term family planning methods since we have to produce as many children as possible that can safeguard the Baganda land" (IDI KB15).

19. LARC use Leads to the Production of Children with Disabilities
The study findings from the Kiboga district revealed that participants believed that LARC use could make their wives give birth to disabled children. The participants claimed that some women who used LARCs ended up producing abnormal children. For that reason, therefore, they were unwilling to support the use of LARCs due to such fear.

"I have heard from my village people that women who use an implant or IUDs produce lame children as I hear from friends that it has ever happened in our sub-county. For that reason, I cannot allow my partner to use those methods of family planning." (IDI KD 14)

"The Long-acting contraceptive methods such as capsules, coils, and injections have made some women in our sub-county produce children who are disabled. Therefore, allowing my wife to use such methods is like telling her to produce unhealthy children" (IDI KB12).

20. Summary of the Findings
According to the findings of this study, the indigenous men living in the Kiboga district of Uganda have negative perceptions which hinder men's support for the use of LARCs by their wives. The study also revealed that men had limited knowledge about LARCs, which made them have negative perceptions about those methods. The discussion below provides the findings from both depth-individual and focus-ground interviews conducted with participants in the Kiboga district as they relate to the available literature.

21. Discussion of the Study Findings
The perceptions that indigenous Ugandan men have regarding LARCs are key to the uptake of the same methods by their rural women. When men have negative perceptions, as in the case in the current study, they become resistant to the use of these contraceptives by their rural women, leading to low uptake. The discussions below highlight the study findings and the relevant literature on perceptions and LARCs uptake.

22. Low Libido, Effect on the Body Organs and Infertility in Women
The use of Depot medroxyprogesterone acetate (DMPA) implants and vaginal rings has been associated with a decrease in sexual desire, often referred to as loss of libido. However, this correlation has not been seen with the use of hormonal or non-hormonal intrauterine devices [33]. The issue of decreased libido among men aligns with the findings of research conducted by Omar et al in Sweden, which found concerns over the potential impact of modern contraceptive methods on future fertility [34]. As a consequence of perceived detrimental negative impacts, male partners see the use of all long-acting reversible contraceptives (LARCs) by their female counterparts as undesirable, even though not all women experience such side effects.

Nevertheless, there is a lack of empirical data supporting the notion that males whose partners use long-acting reversible contraceptives (LARCs) encounter a decrease in sexual desire. The view of men in Kiboga may be attributed to their limited understanding of LARCs [35]. Caruso et al conducted research that revealed that individuals using implants had a heightened inclination towards engaging in sexual activity [36]. This finding effectively refuted the prevailing notion among participants that long-acting reversible contraceptives (LARCs) induce diminished libido in women. This finding is further supported by Guida et al in their research, which demonstrated an increase in sexual activity among those on long-acting reversible contraception (LARC) [37]. Failure to address the psychological and physical aspects of diminished male libido may result in continued avoidance of long-acting reversible contraceptives (LARCs) by both genders, despite the many advantages they provide in avoiding unwanted births. Consequently, the utilisation of LARCs may persist at a low level. Additionally, as the research's findings demonstrate, participants expressed the opinion that the use of implants or intrauterine devices (IUDs) might cause their disappearance from the stomach and heart, potentially leading to other health issues like the emergence of malignancies, high blood pressure (hypertension), and a variety of other bodily disorders. This assertion posits that
men possess negative perceptions that hinder their endorsement of long-acting reversible contraceptives (LARCs) among their female partners, while it does not align with reality. However, this assertion aligns with the results obtained in research conducted by Boivin, Carrier, Zulu, and Edwards, despite the limited amount of published information available to substantiate this assertion [38]. Furthermore, the results obtained in the Kiboga district align with a study conducted in Ethiopia, wherein it was observed that individuals expressed apprehension against using long-acting reversible contraceptives (LARCs) due to many concerns [39]. These concerns included the potential migration of implants inside the body and the belief that intrauterine devices (IUDs) may lead to the development of cancer and inflict damage upon the genitalia.

In addition, men's hesitance to endorse their spouses' utilisation of long-acting reversible contraceptives (LARCs) may be attributed to inaccurate knowledge they have of those methods [40]. Certain participants expressed concerns over the potential detrimental effects of Long-Acting reversible contraceptives (LARCs) on women's reproductive capabilities, specifically concerning the viability of their ova. This observation aligns with the findings of research conducted by Boivin et al [38], whereby it was shown that males express comparable apprehensions about the potential detrimental effects of contraceptives on embryonic development. Nevertheless, the assumption made by men is only a subjective view, since there is a lack of scholarly literature to substantiate this notion. In a similar vein, research carried out in Malawi substantiated the apprehension about potential adverse effects as a hindrance to the acceptance of implants and intrauterine devices (IUDs), which aligns with the findings of the present study, which also identified the fear of side effects as a deterrent to the adoption of implants and IUDs [41].

The presence of fear among men regarding infertility and delayed conception aligns with the results of a study carried out in Ethiopia, which revealed a strong association between the husband's endorsement of contraception and the perception that it leads to infertility [42]. Similarly, a study conducted in Uganda identified men's apprehension regarding infertility resulting from the use of intrauterine devices (IUDs) [43]. The lack of understanding of the reversibility of long-acting reversible contraceptives (LARCs) among a significant portion of men may perhaps account for their opposition to their spouses' adoption of these contraceptive techniques.

In a related context, it is worth noting that two studies have identified concerns about potential negative impacts on future fertility and bodily harm as reasons behind women's decision not to use long-acting reversible contraceptives (LARCs) [40,44]. Nevertheless, existing data indicates that reversible contraceptives, such as implants and IUDs, do not induce infertility and do not impede the resumption of fertility upon discontinuation [11]. The results of the current research align with a previous study conducted in Uganda, which provided evidence that women who held the belief that contraceptive techniques had an impact on their future fertility were less likely to use contraception [45]. Significant obstacles to the use of reproductive health services were identified in research done in California and Kenya, with similar findings being reported [46,47]. These studies revealed that the worries expressed by participants about infertility related to the use of LARCs play a crucial role in hindering their access to and utilisation of such services. Moreover, research done in China unveiled that the apprehension about potential infertility in the future constituted a noteworthy obstacle to the acceptance and utilisation of intrauterine devices (IUDs) [48].

23. Domestic Violence, Couples Separation, Single Mothers, and Adultery

Based on the results of this research, native Ugandan males still reject their wives' use of LARCs because they fear domestic abuse and being left alone, which might result in single motherhood. This conclusion is based on the men's impressions of LARCs, which may be a result of their little understanding of those forms of birth control. The results are in line with research done in Ethiopia, which found that women were afraid to take contraceptives because they thought their partners would leave them if they became infertile [42]. Contrary to what the results of the present research show, men worry that their wives may leave them for other men. Similar findings were made by Nigerian research, which revealed that some husbands separate from women who use contraceptives by forcing them to leave their homes [49]. Separation was also noted in Kenyan research, which found that males had similar reservations about their wives using LARCs [47]. This conclusion is based on the men's impressions of LARCs, which may be a result of their little understanding of those forms of birth control.

The result of the present study on the fear of adultery that men had is in line with research conducted in Kenya, where participants expressed worry about being suspected of infidelity by their spouses if they used contraception [50]. In the same study, women expressed concern that by taking contraceptives, their husbands would be more likely to have extramarital affairs. Furthermore, Mwaikisa et al found that fear of infidelity was a factor influencing the use of contraception [47]. As a result, the participants in the current research were reluctant to let their spouses use LARCs to keep their families free from adultery. In contrast, another study conducted in Ethiopia indicated that when women take contraceptives, they improve their health and attractiveness to their male partners yet men in the Kiboga districts do not support their wives to use LARCs as a result of the negative perceptions they have [51].

24. Fear of Losing the Ancestral Land to Non-Baganda Tribes

Regarding the fear of non-indigenous tribes grabbing land in the Kiboga district because of contraceptive use as per the current study finding, there is no research from Uganda or outside to support this notion among men. There is no supporting literature that LARCs uptake by female partners has the potential to cause indigenous Baganda to ultimately lose their land to non-Baganda tribes as a result of the reduced population of Baganda. This
concern could be just a perception resulting from tribal mistrust and prejudice between the non-indigenous tribes people living in Kiboga districts, particularly those from Western Uganda, who are perceived to be receiving preferential treatment from some political leadership in the Government. Participants gave instances of how non-indigenous individuals from outside the Kiboga district had taken land from their tribemates. There is, however, no literature to support the assertion that the government is pushing other non-Baganda tribes to seize land from the indigenous Baganda.

25. LARC use Leads to the Production of Children with Disabilities

According to the study findings, Kiboga indigenous men disapproved of the use of LARCs by their spouses out of concern that they would give birth to children with disabilities. The findings in the current study relate to those of another study done in Tanzanian [52]. Likewise, the findings of the research carried out in Kenya showed that participants feared that the use of contraceptives could result in producing babies with abnormalities [47]. Therefore, even though there is no evidence to support the assertion that taking certain types of contraceptives, including LARCs, might cause disabilities in children, the men could be using such negative perceptions to oppose their partner's use of LARCs due to the limited understanding of LARCs.

26. Recommendation

The District Health management team of Kiboga district supported by the implementing partners should re-orientate Village Health Teams (VHTs) to provide them with adequate basic information on LARCs. This orientation would enable the VHTs to disseminate accurate and proper information on LARCs to their community members, especially the men. This approach would help increase men's understanding of LARCs, which could result in positive perceptions and belief systems regarding the use of LARCs. More to that, the Kiboga district health management teams working with the health facility staff should organize and conduct regular community dialogues for men of LARCs and other aspects of family planning. Once the community dialogues for men are implemented, they would enable the health workers and VHTs to address the negative perceptions, rumours, and misconceptions about LARCs among men. This approach would increase the understanding of LARCs and could increase men's support for using LARCs by rural women. The district health management teams, working with the health facility staff and supported by the implementing partners, should identify, train, and deploy male-satisfied users as champions to disseminate positive information about LARCs.

The champions could achieve this by sharing their positive experiences regarding LARC use with their wives. This approach has the potential to encourage more men to support rural women's use of the LARCs. In addition, the district health management team, working with the health facility staff with support from the Ministry of Health and the implementing partners, should recruit and train community entertainment and bar attendants on family planning and LARCs. After their training, these attendants should be supported to disseminate accurate information that promotes the use of LARCs at their places of work.

27. Limitations of the Study

Although the study's emic findings about men's beliefs and belief systems concerning rural women's use of LARCs in Kiboga, it has some limitations as outlined hereunder. The study had a limited sample size and was conducted in a specific geographical area of Kiboga meaning that findings can not be generalised to other contexts outside the Kiboga district.

More to that the qualitative nature of this research is subjective and cannot measure how the perceptions and beliefs influence men's opposition to LARC use among rural women. Also, the qualitative research design meant that the study documented the experiences of a relatively small number of participants, which has negative consequences for the generalizability of the study's findings to other contexts. Moreover, due to the context-specific nature of the qualitative study, the analysis and interpretation of the research data were heavily reliant on the researcher's decisions; however, the same data could have been interpreted differently by another researcher, which could have led to different conclusions. Despite these limitations, the results are reliable, valid, and trustworthy. This is especially true because the emic methods applied to collect and analyse the data were systematic and were verified by an expert researcher in qualitative research regularly throughout the process of the data collection, analysis, and reporting.

28. Conclusion

In conclusion, the study most indigenous Ugandan men living in the Kiboga district districts possess negative perceptions of LARCs. These perceptions could be related to the limited knowledge those indigenous men have regarding LARCs which makes them not support such contraceptive methods. To enhance the support of those indigenous men living in Kiboga towards the use of LARC by their partners, there is a need to address the identified negative perceptions by implementing the recommendations above.

29. Declarations

30. Ethics Approval and Consent to Participate

The clearance to conduct this study was given by the Department of Health Studies at the University of South Africa, The AIDS Support Organisation Uganda (TASO), and then the Uganda National Council for Science and Technology (UNCST) for the final clearance for data collection. All data collection methods and tools used were approved in line with relevant guidelines and regulations. The written informed consent was obtained from all participants before data collection commenced.

Competing Interests

The authors hereby declare that they have no competing interests.

Authors' Contributions

Ronald Arineitwe Kibonire developed the study concept, the study design, the data collection and interpretation, prepared the
manuscript, and read the paper. He is the principal investigator for the study.

David Ditaba Mphuthi served as the supervisor for the researcher and guided at every stage during the conception of the study, study design, data collection, and analysis. He also reviewed the manuscript and provided feedback for refining. He was the co-investigator on this study.

Funding
This work was supported by the University of South Africa through a Masters and Doctoral bursary awarded to the researcher.

Availability of Data and Materials
The primary study document contains all the necessary detailed information and data sets used and analysed during this study. It is available upon an appropriate request from the corresponding author.

Acknowledgement
The authors thank those in Rubanda and Kiboga who participated in the study. We also thank the Office of Resident District Commissioners, through the District Health Officer in Kiboga, for granting permission to conduct the research in the two districts. Special thanks go to the staff of the District Health Office that helped in coordinating and mobilising the participants for the study.

Consent for Publication
Not Applicable.

References
maternal and child health care in Western Uganda: perspectives from the community. BMC Public Health, 19(1), 1-10.


