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Original Article

Health facility factors contributing to uptake of long-acting reversible contraceptives among women of reproductive age attending Mukono general hospital, Mukono district. A cross-sectional study.

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Abstract.

Background:

Despite their availability in health facilities, uptake remains low in Uganda, contributing to high rates of unintended pregnancies and poor reproductive health outcomes. This study aimed to assess health facility factors contributing to the uptake of LARCs among women of reproductive age attending Mukono General Hospital in Mukono District.

Methodology:

A descriptive cross-sectional study design was employed among 50 women of reproductive age selected using simple random sampling. Data were collected using researcher-administered questionnaires from participants attending outpatient, maternal and child health clinics, and inpatient wards. Data were analyzed manually and using Microsoft Excel, and results were presented in tables, graphs, and charts.

Results:

Most respondents (36%) were aged 25–29 years, 40% had secondary education, and 42% were married. Additionally, 56% resided in urban areas, and 34% were self-employed. Regarding health facility factors, 54% reported ease of access to health facilities, although 58% lived more than 15 km away. Nearly half (46%) indicated that LARCs were fairly available, and 60% had received counseling from healthcare providers. The majority (64%) perceived healthcare providers as adequately trained, while 38% reported a fairly positive provider attitude. However, 62% experienced difficulties in obtaining LARCs, mainly due to long waiting times (61.29%).

Conclusion:

Health facility factors, including distance, limited availability, long waiting times, and inadequate follow-up services, significantly influence the uptake of LARCs.

Recommendations:

There is a need for the health facilities to increase g staffing in family planning units, improve supply chains to reduce stock-outs, strengthen counseling and follow-up services, and enhance accessibility to improve uptake of LARCs.

Keywords: *Long-acting reversible contraceptives (LARCs), women of reproductive age, Accessibility of health services, Counseling services, Reproductive health, Mukono General Hospital.*
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Background.

Family planning means simply preventing unwanted pregnancies by safe methods of prevention, which is considered to be part of the basic human rights of all individuals or couples (Teka et.al., 2016) and long-acting reversible contraceptives are a form of modern family planning methods in which the length of action ranges from 3-12 years while protecting the user from getting pregnant and return fertility soon after discontinuation (Ayikobua et.al., 2023). Low rates of LARC use indicate a gap between demand and access to sexual and reproductive health care services among women of reproductive age who would like to control child bearing that is to say, there is unmet need for contraception and the proportion of women of reproductive age who have their need for family planning satisfied with modern methods (SDG indicator 3.7.1) is 77% globally, a 10% increase since 1990. This progress occurred in spite of the fact that the number of women with a need for family planning has increased from 0.7 billion in 1990 to 1.1 billion today (UN, 2022). Globally, an estimated 214 million women of reproductive age in developing countries have an unmet need for contraception, resulting in approximately 74 million unintended pregnancies and 36 million abortions annually, and in SSA, the unmet need for family planning is

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high, with an estimated 24% of women of reproductive age unable to access modern contraception (UNFPA, 2021). In Uganda, the CPR is 30% with only 13% of women of reproductive age using modern contraceptives and the assumption that women in central Uganda have easier access to health facilities to have LARCs compared to those in rural areas should be addressed because the proportion of reproductive age women in central Uganda using LARCs is proportionally low at 7.7% (UNFPA, 2021). While at the facility, it was observed that despite the availability of LARCs at Mukono General Hospital, Mukono district, their uptake by women of reproductive age was very low, just as the national trend, thus contributing to the high unmet need for family planning and potentially leading to unintended pregnancies, increased maternal mortality, and poor reproductive health outcomes. This study aimed to assess health facility factors contributing to the uptake of LARCs among women of reproductive age attending Mukono General Hospital in Mukono District.

Methodology.

Study Design.

A descriptive cross-sectional study design was used to enable the researcher to obtain information about the situation at hand and show the current situation of the condition under study in the desired population.

Study site.

This study was conducted at Mukono General Hospital, a public health facility, located in Mukono municipality, Mukono District, in the central region of Uganda. Mukono General Hospital provides primary health care services and maternal and child health services to the residents of the catchment area and the neighboring counties.

Study Population

The target and study population comprised women of reproductive age attending Mukono General Hospital, Mukono district.

Sample Size determination.

The sample was calculated using the Kish and Leslie formula (1965), for cross-sectional studies, which is presented as;

$N = z^2pq/d^2$

Where;

N -Represents the desired sample size

. d- Represents the precision of the study; a precision of 9.5% will be used due to the limited resources and time of the study.

z- Represents standard normal deviation corresponding to 95% confidence interval, which is 1.96

p- Represents proportional characteristics that have been estimated at 50%. (Kalichman, 2015).

q- Represents (1-p), which is (1-0.5) = 0.5.

$N = \underline{1.96^2\times0.5\times0.5}$

0

.

0

9

5

^{2}

N = 106.42

Therefore, the sample size for the study would have been 106 respondents, but due to financial and time constraints, 50 respondents were used.

Sampling Method.

A probability simple random sampling method was employed to identify the participants for the study, and it involved the identification of the women and the collection of data from participants who were identified by use of the sampling method from the OPD, MCH clinic, and inpatient wards at the health facility.

Sampling Procedure.

All women who met the inclusion criteria were requested to randomly pick a pre-prepared paper from a box containing other pieces of paper with words "**yes**" and "**no**" once without replacement. Anyone who picked a paper with the word "**yes**" would be part of the sample, and this was done on every day of data collection until the desired respondents were obtained.

Study Variables.

Dependent Variable.

The dependent variable of this study was the uptake of long-acting reversible contraceptives among women of reproductive age.

Independent Variables

The independent variable was health facility factors contributing to the uptake of long-acting reversible contraceptives among women of reproductive age.

Selection Criteria

Inclusion Criteria

The study included all women of reproductive age attending Mukono General Hospital who voluntarily accepted to participate and with sound mind to give informed consent.

Exclusion Criteria.

The study excluded all women within the study age groups unable to give their consent to participate in the study due to sickness or any other reasons best known to them.

Data Collection.

Data collection method

The study employed a survey data collection method, where a questionnaire was administered to 50 women who met the inclusion criteria at the study site and were selected through a random selection, and each of them participated in the study once.

Data collection tool.

The researcher used researcher-administered questionnaires for respondents to fill out.

Data collection procedure

The exercise of actual data collection would always commence at 08:00 am and end at 02:00 pm every day from Monday to Friday for the 10 days of data collection. The evening hours were always utilized for passing through the research questionnaires answered to check for completeness.

Quality control

Pilot Study

A randomly selected sample of 5 women was used for the pilot study at Mukono General Hospital. Here, the questionnaires were pre-tested for the effectiveness of data collection by interviewing the 5 women. Repetitions, overlapping response options, and other inconsistencies in the tool were identified, and corrections were made to ensure that relevant data were collected. Findings of the pilot study were not used in writing the research report.

Training the Research Assistant

One research assistant with a medical background was trained as an interviewer, and the selection was based on the ability to speak good English and Luganda. The assistant was trained on how to administer questionnaires during data collection, and the main aim of the training was to achieve appropriate techniques in questioning approaches and proper filling of the questionnaires.

Data analysis and presentation

Data was analyzed manually and by using Microsoft Office Excel, and then used the same to present it into tables, graphs, and pie charts, and was also subjected to content analysis, where the obtained data, having been summarized, was analyzed per specific objective and question.

Ethical Consideration

After the research proposal was approved by the Research committee of Kampala School of Health Sciences and duly signed by the supervisor, the researcher was provided with an introduction letter addressed to the in-charge, Mukono General Hospital, Mukono district.

The permission to collect data was obtained from the person in charge of Mukono General Hospital, and given that this study was on a sensitive and controversial topic, the principle of informed consent was always upheld throughout the respondent recruitment process and data collection. The identities of the respondents were not disclosed, and their confidentiality was maintained. Data from the respondents was also stored under lock and key.

Respondents' consent was obtained by signing, privacy and confidentiality of respondents were also ensured by interviewing each respondent alone, separate from others, and using the information for the sole purpose of conducting this research study.

Results

Demographic data

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Table 1: Shows the distribution of respondents according to demographic data (N=50)

Characteristics		Frequency (f)	Percentage (%)
Age	15-19	5	10
	20-24	12	24
	25-29	18	36
	30-34	9	18
	35-39	4	8
	40-44	1	2
	45-49	1	2
Highest level of education	Never went to school	3	6
	Primary	19	38
	Secondary	20	40
	Tertiary/University	8	16
Marital status	Single	18	36
	Married	21	42
	Separated/Divorced	8	16
	Widowed	3	6
Tribe	Muganda	18	36
	Musoga	8	16
	Munyankore	7	14
	Langi	11	22
	Other	6	12
Religion	Protestant	7	14
	Catholic	11	22
	Muslim	6	12
	Other	26	52
Employment status	Employed	11	22
	Self employed	17	34
	Un employed	10	20
	Student	12	24
Residence	Urban	28	56
	Rural	22	44

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From table 1, the study findings revealed that the majority of the respondents (36%) were aged between 25-29 years, whereas the least (4%) were aged 44-49 years. In regard to the highest level of education, the majority of the respondents (40%) had attended secondary school, and a minority (3%) had never attended any level of education. The study findings also revealed that the majority of the respondents (42%) were married, whereas a minority (6%) were widowed. In regards to the tribes of the respondents, the majority (36%) were Baganda, whereas the least of the respondents (12%) belonged to other tribes. In addition to that, the findings revealed that more than half (52%) of the respondents were affiliated with other religions, whereas the least (12%) were Muslims. It was also revealed by the study findings that the majority of the respondents (34%) were self-employed, whereas the least (20%) were unemployed, and furthermore, more than half of the respondents (56%) resided in urban areas, whereas the rest (44%) resided in rural areas.

Health facility factors contributing to uptake of long-acting reversible contraceptives among women of reproductive age.

Table 2: Shows if there were ease of access to health facilities in their area (N=50)

Response	Frequency	Percentage
Yes	27	54
No	23	46
Total	**50**	**100**

From table 2, more than half of the respondents (54%) reported ease of access to health facilities in their area, whereas the minority (46%) reported difficulty of access.

Figure 1: Showing the distance of the health facility from their homes (N=50)

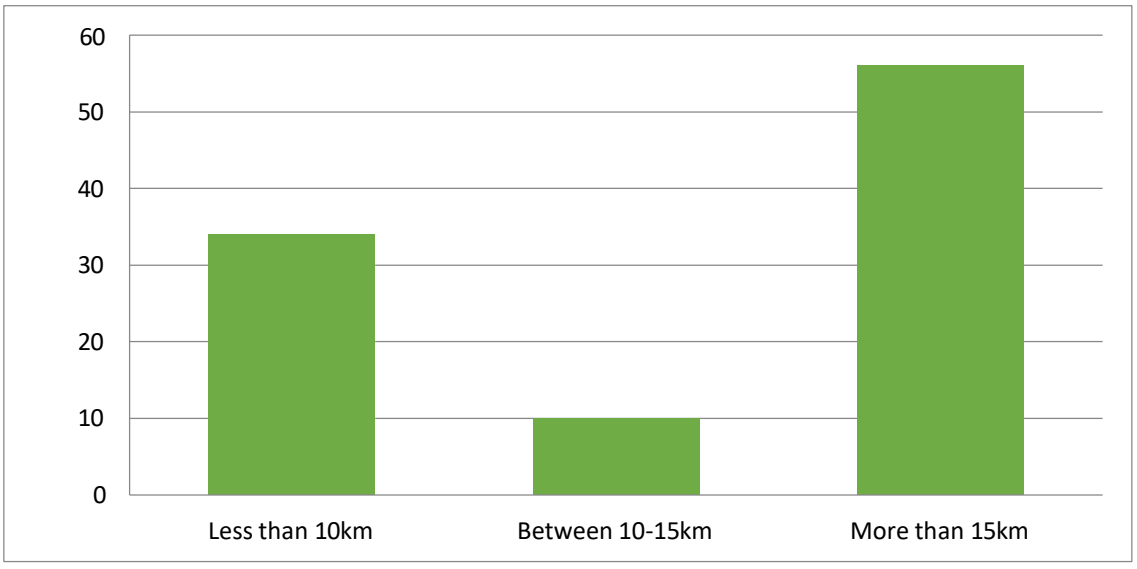

Figure 1 shows the majority of the respondents (58%) reported a distance of more than 15km from their home to the health facility, whereas the minority reported it to be between 10 and 15 km.

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Figure 2: Showing how they would rate the availability of LARCs in their health facility (N=50)

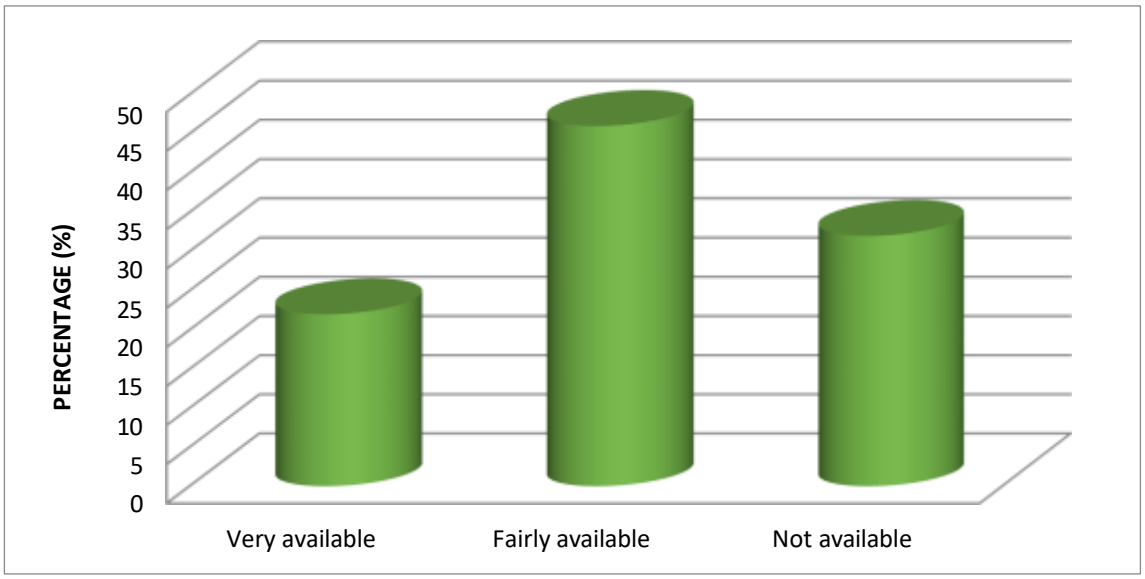

Figure 2 shows almost half (46%) of the respondents reported that LARCs were fairly available at their local health facility, and a minority (22%) reported LARCs to be very available at the health facility.

Table 3: Showing whether they had ever been counseled about LARCs use by any health care provider (N=50).

Response	**Frequency**	**Percentage**
Yes	30	60
No	20	40
Total	**50**	**100**

Table 3 shows the majority of the respondents (60%) reported having ever been counseled about using LARCs by a health care provider, while the minority (40%) reported not having been counseled before about LARC use.

Figure 3: Showing how they perceived the attitude of health care providers towards the use of LARCs (N=50)

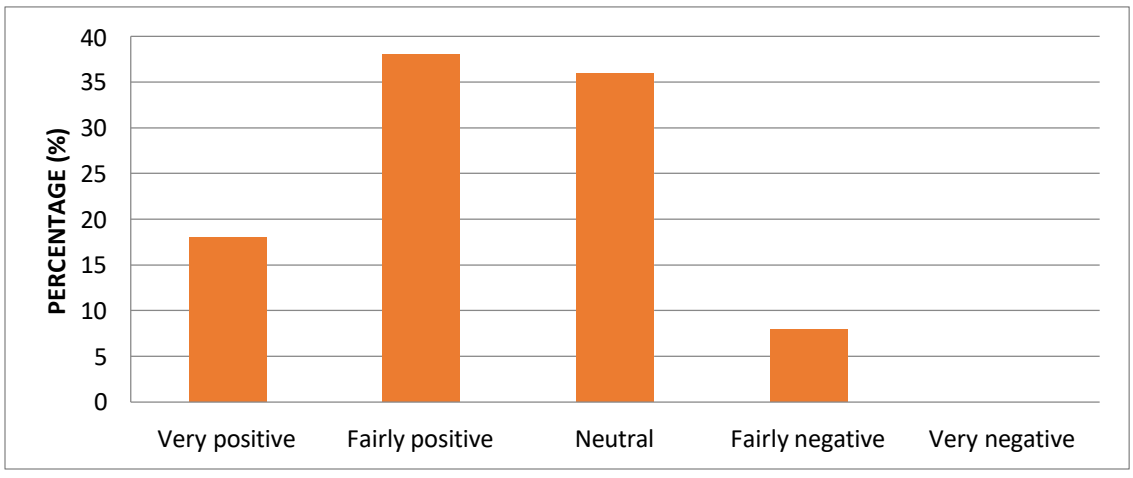

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Figure 3 shows the majority of the respondents (38%) reported that health care providers had a fairly positive attitude towards the use of LARCs, and the minority (8%) reported a fairly negative attitude of health care providers towards LARC use.

Table 4: Showing whether they had ever experienced any difficulties in obtaining LARCs at the health facility (N=50).

Response	Frequency	Percentage
Yes	31	62
No	19	38
Total	**50**	**100**

Table 4 shows the majority of the respondents (62%) reported having difficulties in obtaining LARCs at the health facility, whereas a minority (38%) reported not having any difficulties in obtaining LARCs.

Figure 4: Showing the difficulties they had experienced when obtaining LARCs at the health facility (N=31)

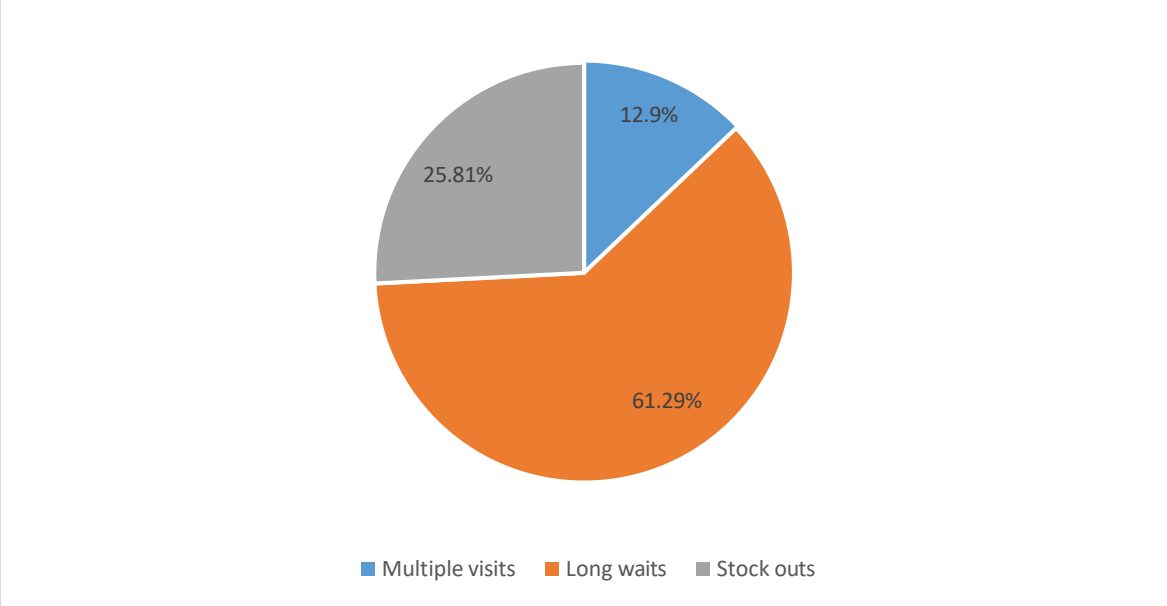

Figure 4shows the majority of the respondents (61.29%) mentioned long waits as the main difficulty they experienced when obtaining LARCs at the health facility, whereas the minimum (12.9%) mentioned stockouts.

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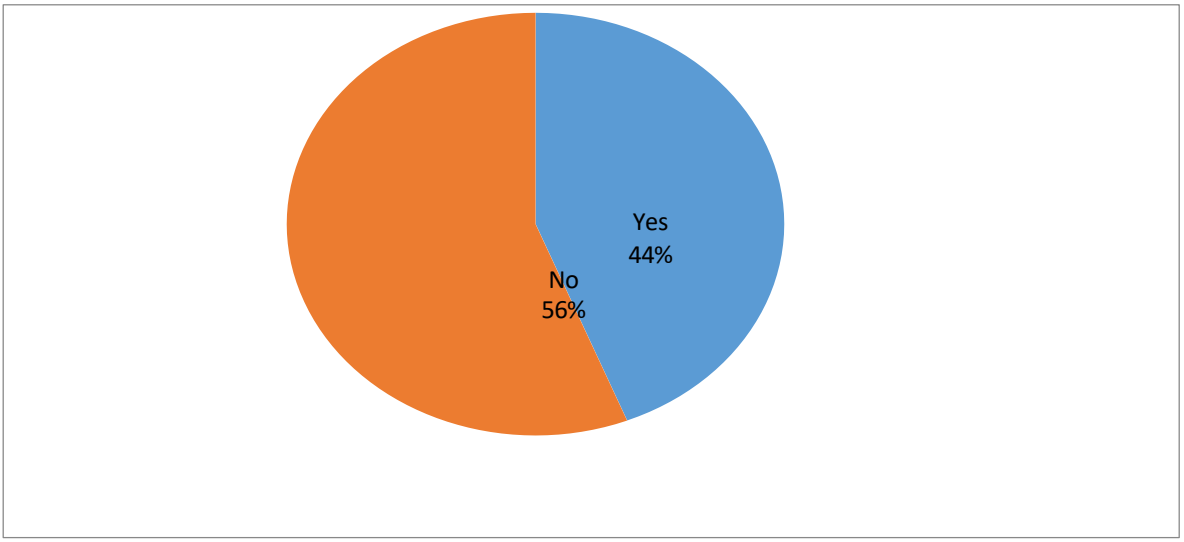
Table 5: Showing whether they thought health care providers were adequately trained to provide LARCs (N=50)

Response	Frequency	Percentage
Yes	32	64
No	18	36
Total	**50**	**100**

From Table 5, the majority of the respondents (64%) thought that health care providers were adequately trained to provide LARCs, and the minority (36%) thought otherwise.

Figure 5: Shows the distribution of respondents according to whether they receive follow-up services after LARCs insertion (N=50)



From Figure 5, more than half of the respondents (56%) reported not having received follow-up services after LARCs insertion, whereas the rest (42%) reported having received follow-up services after LARCs insertion.

Discussion.

Health facility contributing to the uptake of long-acting reversible contraceptives among women of reproductive age.

In relation to ease of access to health facilities, the study revealed that 54% of the respondents reported ease of access to health facilities in their area. This may be as a result of the government establishing lower-tier health facilities to decentralize health services delivery. These findings were in agreement with findings of a cross-sectional study in Nigeria by Feyisetan et.al. (2020), which revealed that women in rural regions were 20% less likely to use LARCs than those in urban centers, primarily due to distance and the lack of health facilities. The study further discovered that the majority (58%) of the respondents reported a distance of more than 15km from their home to the health facility. This can be attributed to the fact that despite the government's efforts to bring health services closer to people, challenges still remain because of the poor road networks. This was in disagreement with a cross-sectional study conducted in Mityana, which showed that most of the respondents (56%) reported < 10 km distance from their homes to the nearby health facility (William et.al., 2022).

From the study results, the majority (46%) of the respondents reported LARCs to be fairly available in their local health facility. This can be because of a number of factors, like logistical issues, which may delay the supply of LARCs to health facilities. This is in agreement with results from a study by (Benova et.al., 2020) which noted that stock outs of LARCs in public health facilities are a widespread issue across countries and also revealed that women in facilities with stock outs were 50% less likely to opt for LARCs and that 40% of health facilities had stock outs at

some point during the year thus severely limiting access. The study also revealed that the majority (60%) of the respondents reported having ever been counseled about using LARCs by any health care provider. This may be as a result of health care providers having sufficient knowledge about the LARCs. This was in disagreement with a study conducted in Ethiopia by Gebremedhin et.al. (2018), which showed that only 30% of women received adequate counseling on the advantages of LARCs, which impacted their uptake. In addition, the majority (38%) of the respondents reported having perceived a fairly positive attitude of healthcare providers towards the use of LARCs. This can still be attributed to the fact that health workers always offer services to patients according to their needs and also try to stay neutral. This was in agreement with a cross-sectional study conducted in Mityana by William et.al. (2022), which showed that more than half of the respondents (56%) reported that the attitude of health service providers towards women seeking family planning services was fair. From the study findings, the majority (62%) of the respondents reported having ever experienced difficulties in obtaining LARCs at the health facility. This may be due to a number of factors, including multiple visits, long waits, and stockouts. This was in agreement with results from a cross-sectional study conducted in Malawi by Mavhu et.al. (2017), which revealed that women faced significant challenges when attempting to access LARCs, with the majority (54%) citing long waiting periods. Results from the study further revealed that the majority (64%) of the respondents thought that healthcare providers were adequately trained to provide LARCs. This can be because the health workers were knowledgeable about LARCs when pre-counseling the respondents, leading to the development of confidence in the healthcare providers. These findings were in agreement with those from a study conducted in Kenya by Keesera et.al. (2021), which revealed that most of the respondents (60%) reported that providers with comprehensive training in LARCs were more likely to offer detailed counseling, resulting in increased uptake.

In relation to whether the respondents received follow-up services after LARCs insertion, the study findings revealed that the majority (56%) reported not having received the follow-up services. This may be because after insertion of LARCs, most women only report back to the health facility when side effects set in or with any other illness. These findings were in agreement with those from a study conducted in Zambia by Chola et.al. (2020), which indicated that the majority of women (55%) who were not provided with adequate follow-up support were more likely to discontinue LARC use.

Conclusion.

The study also discovered that the uptake of LARCs were somehow fair and this was shown by about (54%) of the respondents reported ease of access of health facilities in their area, (58%) reported a distance of more than 15km from their home to the health facility, (46%) of the respondents reported that LARCs were fairly available at their local health facility, (60%) reported to have ever been counseled about using LARCs by a health care provider, (38%) reported that health care providers had a fairly positive attitude towards the use of LARCs, (62%) reported to have difficulties in obtaining LARCs where (61.29%) mentioned long waits as the main difficulty they experienced when obtaining LARCs at the health facility, (64%) thought that health care providers were adequately trained to provide LARCs and (56%) reported not to have received follow-up services after LARCs insertion.

Study Limitations.

The study was limited to only the women of reproductive age, yet there may have been other categories outside this age bracket who may have had a rationale regarding the low uptake of long-acting reversible contraceptives in the catchment area.

The study was also limited by time constraints, which did not allow the study to be carried out on a large number of respondents.

Recommendation.

The district health officer and the hospital at large should also recruit more personnel and subsequently increase the allocation of health workers in the family planning unit, as this will help to reduce the time women have to wait in order to access family planning methods, particularly LARCs, which take a lot of time to be inserted due to the many precautions taken.

Further studies need to be carried out in order to find out the causes of the increased preference for short-acting family planning methods over the highly effective LARCs.

The MoH should also increase the delivery of LARCs to health facilities, as their presence at the facility is a major factor in whether reproductive age women will opt for them over the always available short-acting methods.

List of abbreviations

LARCs – Long-Acting Reversible Contraceptives
WHO – World Health Organization
UN – United Nations
UNFPA – United Nations Population Fund
SDG – Sustainable Development Goals
MoH – Ministry of Health
HMIS – Health Management Information System
OPD – Outpatient Department
MCH – Maternal and Child Health
IUD – Intrauterine Device
SSA – Sub-Saharan Africa
CPR – Contraceptive Prevalence Rate

Source of funding.
The study was not funded.

Conflict of interest.
There is no conflict of interest.

Availability of data.
Data used in this study are available upon request from the corresponding author.

Author's contribution.
EL designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript.
RK supervised all stages of the study from conceptualization of the topic to manuscript writing and submission.

Author's biography.
Edgar Lando is a student of a diploma in clinical medicine and community health at Kampala School of Health Sciences.
Richard Kanyesigye is a research supervisor at Kampala School of Health Sciences.

References.
1. Ayikobua, E., et al. (2023). Long-acting reversible contraceptives and their effectiveness among women of reproductive age.
2. Benova, L., et al. (2020). Availability of contraceptive methods and stock-outs in public health facilities in low- and middle-income countries.
3. Chola, L., et al. (2020). Follow-up care and continuation of long-acting reversible contraceptive use in Zambia.
4. Feyisetan, B., et al. (2020). Access to health facilities and utilization of family planning services in Nigeria.
5. Gebremedhin, M., et al. (2018). Counseling and uptake of long-acting reversible contraceptives among women in Ethiopia.
6. Kalichman, S. C. (2015). Research methods in health sciences: Sample size determination and application.
7. Keesera, V., et al. (2021). Health provider training and its influence on contraceptive uptake in Kenya.
8. Mavhu, W., et al. (2017). Barriers to accessing long-acting reversible contraceptives in Malawi.
9. Ministry of Health, Uganda. (2020). Uganda Family Planning Costed Implementation Plan 2020–2025. Kampala: Ministry of Health.
10. Teka, T., et al. (2016). Family planning as a human right and its global implications.
11. United Nations (UN). (2022). World Family Planning Report 2022. New York: United Nations.
12. United Nations Population Fund (UNFPA). (2021). State of World Population Report.
13. William, T., et al. (2022). Health facility factors influencing contraceptive use in Mityana District, Uganda.