

Knowledge, Attitude and Practices towards the Use of Intrauterine Device among Women aged 15-49 years in Wakiso Health Centre IV Wakiso District. A Cross-sectional Study.

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Abstract



Background:

The purpose of the study was to assess knowledge, attitude, and practices towards the utilisation of IUDs among women aged 15-49 years in wakiso health center IV wakiso district.

The specific objectives of the study were to assess the knowledge towards utilization of IUDs among women aged 15-49 years in wakiso health center IV, Wakiso district, attitude towards the utilisation of contraceptives IUDs among women aged 15-49 years in wakiso health center IV wakiso district.

Methodology:

The descriptive cross-sectional study design was used with a simple random technique as a sampling technique. Data was collected using semi-structured questionnaires written in the English language and interviews.

Results:

From the study findings most (52%) respondents preferred to have four children, majority of respondents, majority(80%) respondents have ever heard about IUDs, the majority(60%) obtained information about IUDs from the health facility, most (50%) respondents reported child spacing as the reason as to why they used IUDs, most (50%) respondents knew copper IUDs as a type of IUDs, the majority(70%) knew the site of administration of IUDs.

Conclusion:

Women had good knowledge and practices towards utilization of IUDs despite they had fair attitudes were noticed since most women felt uncomfortable due to side effects, would wish to change to other methods, and were not willing to advise their relatives or friends to use IUDs,

Recommendation:

The MOH, NGOs and other stakes hold should train an adequate number of services providers and health extension workers in the safe removal of the risks or side effects associated with IUDs methods to mitigate the health-related problems.

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1 Background of the study

Long-acting Reverse Contraceptives (LARC), including an intrauterine device (IUDS) which is more effective and cost-effective in preventing unintended

pregnancies than most other contraceptive methods according to the researcher but still IUD use is low in Australia. Only an estimated (3%) of Australian women seeking contraception were using IUDs in 2014 (Richters *et al*, 2016).

D.Hubacher *et al* 2018, the frequency of use of the IUDs among women of different racial/ethnic groups and income levels were comparable; there was an outlier of IUD use, whereas the Oceanic region countries had very low use of IUDs.

According to the United Nations, (2019), the number of women using IUDs was found to be 159 million out of the world's population and the contributing factors were mostly lack of knowledge about the IUD method of family planning.

In Africa, according to a study conducted to determine the number of women using IUDs and access to contraceptive methods, and prevalence of use, the prevalence of IUD use was 8% this was due to increased access to other methods, (John Ross *et al* 2016).

The study carried out among 48 African continents, and 54 Sovereign states are located in the Sub-Saharan Africa region showed that the modern contraceptives that were more highly used among unmarried sexually active than married females were Injectables and Implants due to a lack of knowledge or information about the IUD use, (Amyo *et al* 2017).

High parity predicts the use of LARC conducted a study among women in rural Uganda that showed that in Uganda the utilization of modern contraceptives has increased from 8% to 35% over the last decade, however, long-acting reversible contraceptive use remained as low as 7.8%, this low utilization has been attributed to low awareness, lack or inadequate skilled or trained staff to perform procedures to insert or remove the device and also poor access to family planning in developing countries, (Anguzu *et al*, 2018).

According to the International Classification of functioning. (ICF, 2017). A study in the Lubaga division, Kampala, found that IUCD use was at 1.8% and found to be the lowest among all other methods (Anguzu *et al*, 2018). Uganda still has one of the highest unmet needs at 28% for Family Planning in Sub-Saharan Africa (SSA) (MOH, 2016).

2 Methodology

Study design

A descriptive quantitative cross-sectional study design was employed in the research using self-administered questionnaires. Quantitative methods. The study design was preferred because it

enabled the description of facts discovered without interruption by the researcher.

Study area

This study was carried out from Wakiso Health Centre IV in the Wakiso district in central Uganda. Wakiso health Centre IV was located in the Wakiso district in the central region of Uganda approximately 44km southwest of Mulago National Referral Hospital in Kampala. It was about 18.5 kilometers southwest of the Kampala district. The hospital received referrals from nearby health Centres such as Wattuba health Centre III, Wamala health Centre II, and Mudduma Health Centre III. Wakiso received an average number of 250 patients per day from several departments namely; OPD, Inpatients, ART, Dental, laboratory, pharmacy, antenatal care clinic, diabetic clinic, and pediatrics. The researcher selected Wakiso health Centre IV because it was a health facility with a variety of women who received various medical services and the health facility was within the researcher's reach.

Study population

This was focused on women aged 15-49 years were seeking medical services at the outpatient department in Wakiso health IV. Women of that age bracket were selected because some of them were sexually active, not married and some were found conceiving unintended pregnancies.

Sample size and sample size determination Burton's formula (1965) was used to determine the sample size;

Sample size (n) = $\frac{PR}{O}$

Where P: Total number of days taken for data collection.

R: Maximum number of respondents who were interviewed.

O: Maximum time spent on each respondent per day.

P=5days, R=10 respondents, and O=1 hours.

Therefore, $n = \frac{(5 \times 10)}{1}$.

n=50

Therefore, the sample size was 50 respondents.

Sampling technique

The researcher used the simple random technique to choose respondents for the study. The technique was selected because it was not biased in that the respondents were to be selected by chance and was also easy to use.

Sampling procedure

This was composed of women aged 15-49 years attending Wakiso health Centre IV who consented to participate freely in the study.

Data collection method

Before data collection, a pre-test of the questionnaire was employed among 5% (10 women) of Watuba health III and the information gathered was used to rectify and update the data collection. The results from the pre-tested questionnaires were not considered in the main study.

Data collection tools

The researcher collected data using a pre-tested semi-structured questionnaire with open and closed questions with sections A, B, C, and D written in English language and later translated into the local language (Luganda) for respondents who didn't understand English. The questionnaire provided detailed information such as an investigation of knowledge, attitude, and practices towards the use of intrauterine devices among women aged 15-49 years.

Data collection procedure

The letter of introduction was to be obtained from the research committee of Kampala school of Health Sciences and was taken to the In-charge of Wakiso Health Centre IV which helped me to obtain permission from the health Centre admission. The permission was granted, and two research assistants were trained on the subject in the question and data collection procedures they used; before conducting the process, the researcher and the research assistants introduced them and explain the purpose of the study to the respondents.

Study variables

Dependent variable

The use of an Intrauterine device was the dependent variable.

Independent variable

Knowledge, attitude, and practices towards the use of intrauterine devices among women aged 15-49 years was the independent variable.

Quality control

Two research assistants who had good communication skills and knowledge were trained on how to interview and collect data from the right respondents and were selected through the inclusion and exclusion criteria.

Selection criteria

Inclusion criteria

The Inclusion criteria consisted of women aged 15-49 years who came to seek family planning

services in Wakiso Health Centre IV and who consented to participate in the study.

Exclusion criteria

The exclusion criteria comprised women who had come to seek family planning services in Wakiso health center IV that do not fall under the age bracket of 15-49 years and those who were under the age bracket of 15 -49 years but were not willing to give in their consent to participate in the study.

3 Data analysis and presentation

Data were analyzed manually by the use of tally sheets and were entered in the Microsoft excel computer program and the results were presented in frequency tables, bar graphs, and pie charts.

Ethical considerations

Before commencement of the study ethical clearance; a letter of introduction was obtained from Kampala school of health sciences and was addressed to the medical superintendent of Wakiso health Centre IV, Wakiso district that requested permission to conduct the study on knowledge, attitude, and practices towards the use of intrauterine device among women aged 15-49 years in Wakiso health Centre IV Wakiso district.

The permission was granted to the researcher and her assistants introduced themselves, explained the purpose of the study, informed consent was done and respondents were assured of utmost confidentiality, no names were written on the questionnaire.

Study Limitations and possible solutions

Some respondents were not willing to participate in the study freely, this was solved by explaining the objectives of the study to the participants and assuring confidentiality of their information.

The research study was a very lengthy process and yet the researcher had limited time, this was solved by employing two research assistants and conducting the study following the designed work plan.

The study required a lot of resources and funds to carry out the study and this was solved by working under a strict budget.

The intrauterine device was a sensitive topic amongst women and therefore some women did not aria out rightly and were not honest with their responses, this was solved by assuring confidentiality of their information.

Data presentation and analysis:

This chapter presents data obtained from analyzed questionnaires. The data is presented in tables, figures, and texts.

Social demographic data of respondents

Showing age, sex, religion, tribe, marital status, level of education.

The table above shows that majority of respondents were 30/50 (60%) between 25-34, followed by 11/50 (22%) who were between 35-44, 05/50 (10%) who were between 45-49, and 3/50 (06%) who were between 15-24.

Female respondents were 50 (100%). According to religion majority were Catholics 25/50 (50%), followed by Born again 08/50 (16%), protestants 10/50 (20) and Muslims were 7/50 (14).

According to the tribe, the majority were Baganda 30/50 (60%), followed by Basoga 10/50 (20%), Banyankole 06/50 (12%) and others 4/50 (8%).

The majority of the respondents were married 35/50 (70%), Separated or divorced were 06/50 (12%), followed by singles who were 5/50 (10%) and widowed were 08/50 (16) percent.

The majority of respondents had attained Secondary 27/50 (54%) 10/50 (20) attained primary, 8/50 (16%) didn't attain any and only 5/50 (10%) attained tertiary institution.

About occupations 32/50 (62%) were Businesswomen, 11/50 (22%) were Teachers woman, followed by those who were not employed 8 /50 (16%) other were 7/50 (14).

Knowledge of respondents towards utilization of IUDs among women aged 15-49 years.

From the figure, the majority (80%) of respondents had heard about the Intrauterine device /and the minority (20%) had never heard about the Intrauterine device.

From the table above, the majority (78%) of respondents reported that they got Information about IUDs from health facilities and the minority (4%) reported that they received information from other sources.

In the table above majority (60%) of respondents reported that child spacing was the reason as to why they used IUDs and the minority (4%) reported that it prevented STIs.

From the table above, most (50%) respondents knew about Copper IUDs and the least (30%) knew about the hormone-releasing IUDs.

Shows the distribution of respondents according to the site of administration of IUDs they knew

From the table above, the majority (60%) of respondents reported that IUDs are inserted in the uterus and the minority (40%) reported the vagina as the site of IUD administration.

Attitude towards the use of IUDs among women aged 15-49 years:

From the figure above, the majority (90%) of the respondents agreed that IUDs are effective in preventing pregnancy reoccurrence whereas the minority (10%) disagreed.

From the above, most (52%) respondents were willing to use IUDs and least (48%) were not willing to use IUDs.

From the figure above, majority (60%) respondents reported that they feel comfortable when they use IUDs and the minority (40%) who reported that they don't feel comfortable when they use IUDs.

From the table above, most (36%) respondents reported heavy bleeding as their side effect experienced and least (16%) reported other side effects. Practices towards the use of Intrauterine devices among women aged 15-49 years.

From the above, majority (70%) of the respondents had ever used IUDs and the minority (30%) had never used IUDs.

From the table above, most (30%) of the respondents reported infertility as their side effects and least (10%) respondents reported sex interference as their side effects.

From the figure above, the majority (80%) of respondents used copper IUD and the minority (20%) used hormone-releasing IUD.

From the figure above, the majority (70%) of respondents accessed IUDs from the government maternity hospital and the minority (30%) of respondents accessed private tertiary care.

4 Discussion, Conclusion and Recommendations

Knowledge towards utilization of Intrauterine devices among women aged 15-49 years

From the figure above, the majority of respondents (80%) had ever heard about Intrauterine devices. This implies that the majority of women were aware of Intrauterine devices.

Table 1. Showing age, sex, religion, tribe, marital status, level of education

ITEMS	FREQUENCY (f)	PERCENTAGE (%)
AGE IN YEARS		
15-24	03	06
25-34	30	60
35-44	11	22
45-49	05	10
Total	50	100
RELIGION		
Catholics	25	50
Protestants	10	20
Muslims	07	14
Born again	08	16
Total	50	100
TRIBE		
Baganda	30	60
Basoga	10	20
Banyankole	06	12
Others	04	8
Total	50	100
EDUCATION LEVEL		
Not educated	08	16
Primary	10	20
Secondary	27	54
Tertiary/University	05	10
Total	50	100
OCCUPATION		
Not educated	08	16
Teacher	10	20
Business women	27	54
Others	05	10
Total	50	100
MARITAL STATUS		
Single	05	10
Married	35	70
Separated/Divorced	06	12
Widowed	04	08
Total	50	100

Table 2. shows the distribution of respondents according to where they obtained information about Intrauterine device (N=50)

Response	Frequency (f)	Percentage (%)
Health facility	39	78
Media	04	8
Relatives/ friends	05	10
Others	02	4
Total	50	100

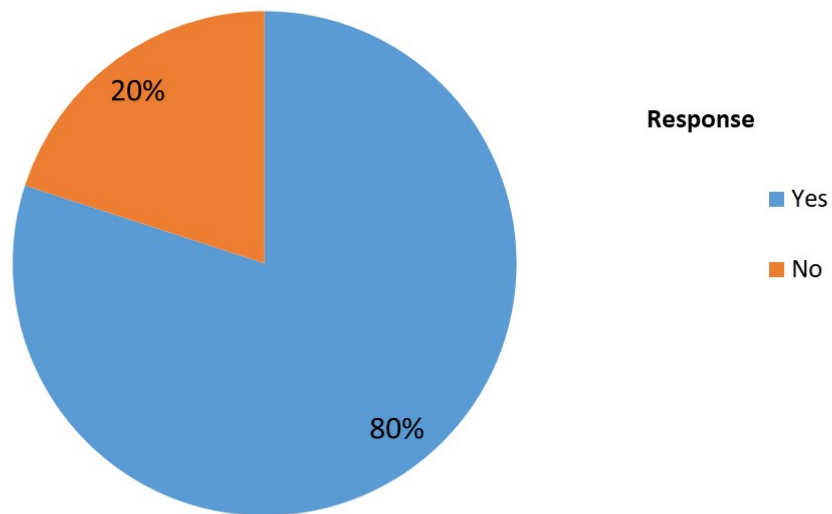


Figure 1. Shows the distribution of respondents according to whether they had ever heard about IUD (N=50)

Table 3. Shows the distribution of respondents according to the reason as why they used IUDs. (N=50)

Response	Frequency (f)	Percentage (%)
Child Spacing	30	60
Prevent pregnancy	15	30
Prevent STIs	02	4
Others	03	6
Total	50	100

Table 4. shows the distribution of respondents according to the types of IUD they knew N=50)

RESPONCES	FREQUENCY (f)	PERCENTAGE (%)
Copper IUD	20	50
Hormone releasing IUD	15	30
Total	50	100

Table 5. Shows the distribution of respondents according to the site of administration of IUDs they knew

RESPONDENTS	FREQUENCY(f)	PERCENTAGE (%)
Uterus	30	60
Vagina	20	40
Total	50	100

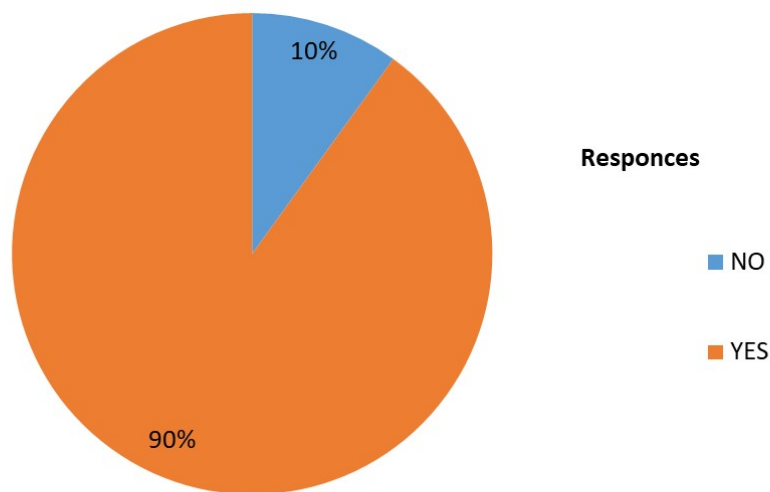


Figure 2. Shows the distribution of respondents according to whether they think IUDs are effective in preventing the reoccurrence of pregnancy (N=50)

Table 6. Shows the distribution of respondents according to whether they were willing to use IUDs (N=50)

RESPONSES	FREQUENCY (f)	PERCENTAGE (%)
Yes	26	52
No	24	48
Total	50	100

Table 7. Shows the distribution of respondents according to their reasons as to why they don't feel comfortable when they use IUDs (N=50)

RESPONSE	FREQUENCY (f)	PERCENTAGE (%)
Heavy bleeding	17	36
Weight gain	15	30
Infections	9	18
Others	8	16
Total	50	100

Table 8. Shows the distribution of respondents according to whether they have ever used IUDs (N=50)

RESPONSE	FREQUENCY (f)	PERCENTAGE (%)
Yes	35	70
No	15	30
Total	50	100

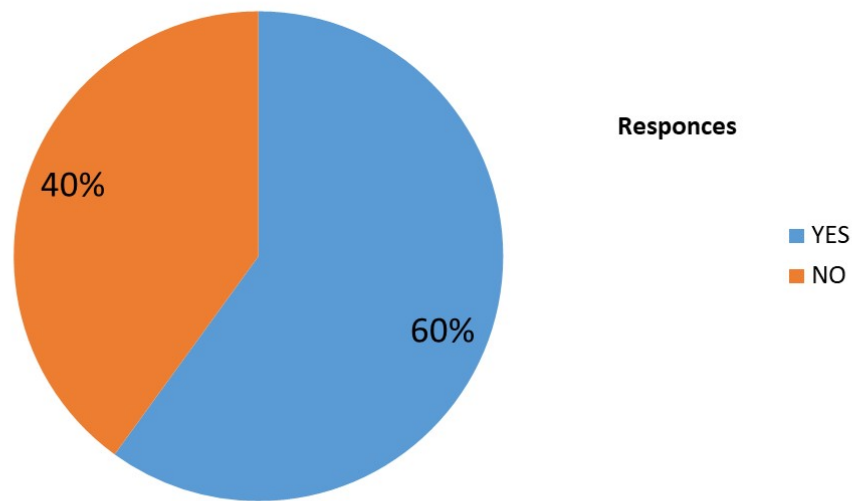


Figure 3. Shows the distribution of respondents according to whether they feel comfortable when they use IUDs (N=50)

Table 9. Shows the distribution of respondents according to the reasons why they had never used IUDs (N=50)

RESPONSE	FREQUENCY(f)	PERCENTAGE (%)
Infertility	15	30
Infections	12	24
Abdominal pain	10	20
Sex interference	5	10
Womb perforation	8	16
Total	50	100

More than half (78%) of the respondents reported that they obtained information about Intrauterine devices from the health facility. This implies that, at the facility, health workers are the main service providers of family planning and that could be the reason why they were the key sources of information for women seeking family planning.

In regards to the reasons why they use Intrauterine devices, half of the respondents (52.7%) reported child spacing as the reason why they use IUDs, study results were in agreement with Ojule et al (2018) were, a large proportion of married women reported that they used IUDs to prevent pregnancy than child spacing 30%.

From the study findings, most of the respondents (50%) reported copper IUDs as a type of IUD they

knew and this could be attributed to the fact that most women were using or had never used copper before. The study results were in agreement with Nguyen 2017, women (60%) who had ever used an IUD and few were able to mention at least one type of IUD that is to say hormonal releasing IUDs.

Also, the study showed that most of the (70%) respondents reported 3-5 years as the duration period of IUDs. This implies that women had relatively good knowledge about contraceptive IUDs. The study findings were contradicting Rhona Refaat (2021), where Results showed that (40%) reported 12 years, (32%), 10 years, 7years (18%), and others as the duration period of IUDs.

Attitude towards utilization of IUDs among women aged 15-49 years

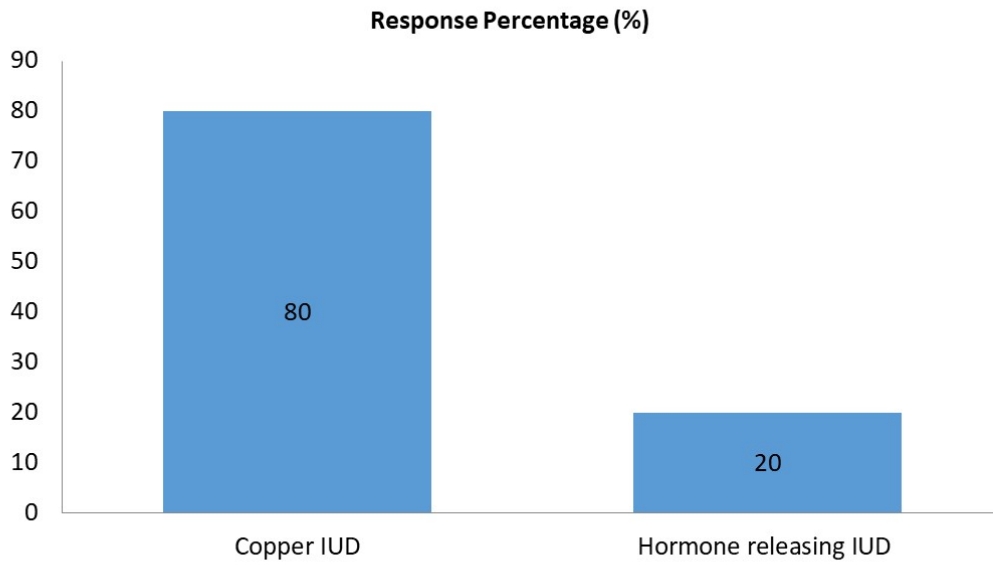


Figure 4. Below shows the distribution according to the type of IUD used (N=50)

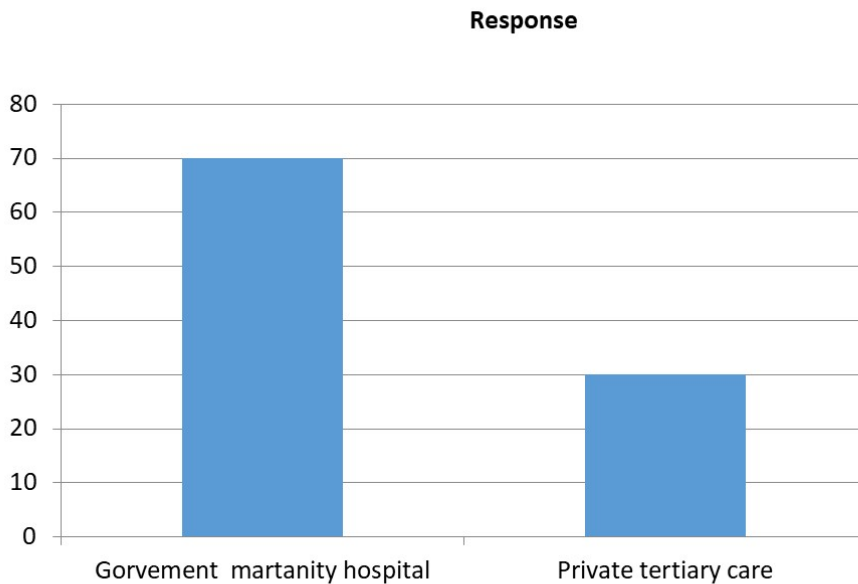


Figure 5. Shows the distribution of respondents according to them where they get access to IUDs (N=50)

In regards to the effectiveness of the method, the majority of the respondent (90%) agreed that IUDs are effective in preventing the reoccurrence of pregnancy. This could be attributed to the fact that these women had never used this method and they did not conceive. The results were in agreement with Katherine et al (2017), who found that (70%) of women accepted copper IUDs as a very effective contraceptive in preventing pregnancy when compared to other methods of contraception.

Furthermore, most (50.9%) of respondents were willing to use IUDs and this might be attributed to the fact that most of the women were married, had already had children, and therefore needed to limit births or spacing for a long period. The study results were not correlating with Nwali, (2018), where the results showed that 68 respondents, (29.6%) discontinued the use of IUDs for the reason of desire for another pregnancy (54.4%) while (46%) was to change the contraceptive method.

Interestingly more than half (60%) of the respondents reported that they don't feel comfortable when they use IUDs. This could be attributed to some reasons the study is yet to discover.

About the reasons why they don't feel comfortable, more than half of the respondents (64%) reported that they experienced challenges of side effects as a reason they didn't feel comfortable when using IUDs and such side effects differ depending on how hormones react towards the contraceptive IUD. The study results were in line with Gujju et al (2019) results showed that (61.5%) experienced vaginal bleeding (2.56%) and abdominal pain.

In addition, in the study conducted among women of reproductive age regarding attitude towards IUDs, (60%) of women experimented. this implies that for them it was a long-term cost-effective method of contraception.

More than half of the respondents (58%) reported that they could not advise their relatives/friends to use the IUD. This could be attributed to the fact that women perceived negative attitudes toward the side effects of IUDs which could be the reason why they could not advise their friends about IUDs.

Practices towards utilization of IUD women aged 18 -49 years

From the study results, most of the respondents (70%) had ever used IUDs. This showed that women had good practices towards IUDs since more than half of the respondents had used the method. The

findings were not in line with Yadav et al,2017 results the showed that the majority of participants (65.7%) had not yet used any method of family method in the past, and only (7.1%) of participants had used IUCD as a family planning.

In addition, a study conducted on attitudes and practices related to IUDs for nulliparous women showed that most respondents had inserted (90.2%) and perceived IUDs as a very good method of family planning. The results were in line with Avinash et al (2018), where results showed that almost (71%) of women had inserted their IUDs after a postpartum, this was attributed to the role of family affairs counselors who spread the information about IUDs.

About the type of IUDs used by women, most respondents (60%) reported that the type of IUDs they were using were copper IUDs. This could be attributed to the fact that women had chosen this type because they had a desire for more children since once you remove it you conceive. The findings were in line with Negaunee et al where the majority of respondents were using copper IUD (50%), and (20%) used hormone-releasing IUD.

The study showed that more than half (60%) of respondents started using IUDs after birth. They could be attributed to the fact that they were advised by health workers or their husbands due to their good child spacing. The findings were in line with Avinash et al (2018) where results showed that most of the respondents started using IUDs after giving birth and (22.7%) started using the IUDs before giving birth.

From the study findings of (50%) of respondents had used IUDs for 2 years. with such a percentage rate. It implies that very few respondents had used the method for a long time. The results were in disagreement with Nepal et al (2017) where the majority of respondents had used the method for 3 years.

Finally, respondents reported that (78%) reported to the health facility government the access to the IUDs and this was attributed to convenience purposes. The study was in line with Avinash et al (2018) where the majority of the respondents (70%) inserted their IUD from a government maternity hospital and (24.5%) received theirs in a private tertiary care center.

Conclusion

The study established good knowledge and towards utilization of IUDs, the majority of respon-

dents (80%) had ever heard about IUDs (78%) obtained information about IUDs from the health facility, (60%) reported child spacing as a reason why they used IUDs, (50%) knew copper IUD as a type of IUDs, (70%) knew sites of administration of IUDs and (60%) respondents were able to specify the duration period of IUDs as 3-12 years.

The overall attitude of women towards the utilization of IUDs was fair in view that however much (90%) respondents perceived IUDs to be effective in preventing the reoccurrence of pregnancy, (52%) were willing to use them but (40%) felt uncomfortable after using IUDs due to the challenge of side effects they experienced (36%) with such side effects (46%) would wish to change to other contraceptive methods and (30%) were not willing to advise their relatives/ friends to use IUDs.

Regarding the overall practice, the study recognized good practices towards the utilization of IUDs (70%) ever used IUDs, (60%) were using copper IUDs, (70%) started using IUDs after giving birth, (40%) had used IUDs for 3 years periods and (70%) reported health facility the place where they get access to IUDs

Finally, the researchers concluded that women had good knowledge and practices towards the utilization of IUDs even though fair attitudes were noticed since most women felt uncomfortable due to side effects and they would wish to change to other contraceptive methods and were willing not to advise the relatives/friends to use IUDs yet side effects of family planning methods according to how a particular method react in so will me one's body.

Recommendation

Health workers at Wakiso health center IV showed further trained on the methods of counseling by representatives from Marie stops international and other stakeholders to avoid misconceptions and therefore this will enhance its use since most of the women were not willing to advise their friends/relatives to use IUDs.

To enhance IUD utilization at each level, husband involvement should be considered. Hence, government and non-governmental, organizations health facilities, and other stakeholders should ensure married couples' discussion and sustained advocacy for use of IUD methods to prevent disapproval.

The MOH, NGOs, and other stakeholders should train an adequate number of service providers and health extension workers in the removal of IUDs

as timely as possible and also advocate the risks or side effects associated with IUDs methods to migrate the health-related problems.

Further research is needed to assess related factors, the competency of the health service providers towards the utilization of IUDs, and identify the extent of IUD use in different population groups including unmarried women in both urban populations and rural women.

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I also acknowledge the administration of Wakiso health center IV for having provided a very conducive environment during my data collection period.

5 List of abbreviations/ acronyms

CHC:	Community Health Care.
IUD:	Intrauterine Device.
IUCDs:	Intrauterine Contraceptive Device.
IUC:	Intrauterine Contraceptive.
MOH:	Ministry of health.
OPD:	Out-Patient Department.
PAM:	Performance, monitoring, and accountability.
PHC:	Primary health care.
PIDs:	Pelvic inflammatory diseases.
PPIUCDs:	Postpartum intrauterine contraceptive devices.
UAHEB:	Uganda Allied Health Examinations board.
UBOS:	Uganda bureau of statistics.
US:	The United States.

WHO: World Health Organisation.

LARC: Long-Acting Reverse Contraceptive.

LGH: Local Government Hospital.

Definition of key terms:

Attitude: Refers to the person's effective feeling of like or dislike in this case of intrauterine device use.

Contraceptives: This refers to the methods or devices which women use to prevent themselves from becoming pregnant.

Fertility rate: Birth per 1000 women categorised according to a specific composition of the population between the ages of 15-49 years.

Family planning: Is the process of preventing unintended pregnancies.

IUD: This is a small T-shaped birth control device that is inserted into the uterus to prevent pregnancy.

Knowledge: Is awareness or correct response given by the married common regarding the intrauterine device.

LARD: These are methods of birth control that provide effectiveness,

contraception for an extended period of requiring user action.

Maternal mortality: Is the death of women while pregnant or within 42 days

of the termination of pregnancy or its management.

Practice: This is the process of putting something into action.

Unintended pregnancy: Refers to pregnancies that are miss-timed, unplanned, or

unwanted and that occur at the time of conception.

Unmet need for family planning: Refers to women who are married either in union or are fecund and are sexually active but are not using any method.

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Table 10.

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