Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

FACTORS INFLUENCING UTILIZATION OF INTRAUTERINE CONTRACEPTIVE DEVICES AMONG WOMEN OF REPRODUCTIVE AGE AT ENTEBBE REGIONAL REFERRAL HOSPITAL, WAKISO DISTRICT. A CROSS-SECTIONAL STUDY.

*Kevin Nakate, Mercy Bantia, Immaculate Prosperia Naggulu, Jane Frank Nalubega**
School of Nursing and Midwifery, Mildmay Institute of Health Sciences.

Abstract

Background.

Intrauterine devices are one of the long-acting, safe and effective methods of contraception in women of reproductive age across the world with a safety percentage of 89 %. The purpose of this study was to assess the factors influencing utilization of intrauterine contraceptive device contraception among women of reproductive age at Entebbe regional referral hospital, Entebbe municipality Wakiso district.

Methods.

A descriptive-cross sectional design. Quantitative methods of data collection were employed. A self-administered questionnaire was used to collect data from a sample size of 30 respondents. Data was collected using a simple random sampling method.

Result.

Most 13(43.3%) of the respondents were between 26 and 30 years of age, 11(36.7%) had a primary level of education, 12(40%) had two children, 24(80%) had only one sexual partner and 18(60%) had a low family level of income. Concerning health facility-related factors; more than half 17(56.7%) take four hours and more waiting for family planning services, 16(53.3%) mentioned that health care providers do not recommend the use of intrauterine devices, 18(60%) do not receive health education about the use of intrauterine devices at the facility.

Conclusion.

The Individual factors were; age, level of education, number of children, weight, number of sexual partners, and family level of income. The health facility-related factors were; waiting time, health care providers' recommendations, health education, availability of health facilities in community and availability of intra uterine devices.

Recommendations.

Healthcare workers should implement strategies to minimize waiting times for contraceptive services, including intra-uterine device insertion, and strengthen health education programs within the hospital to raise awareness about the benefits and availability of intra-uterine devices.

Keywords: *Intrauterine Contraceptive Device, women of reproductive age, Entebbe Regional Referral Hospital.*
Submitted: *2025-01-10* ***Accepted:*** *2025-02-20* ***Published:*** *2025-03-10*

Corresponding Author: *Jane Frank Nalubega*
Email: *janecll.nalubega@gmail.com*
School of Nursing and Midwifery, Mildmay Institute of Health Sciences.

Background.

Globally, over 215 million women of childbearing age are in union and use intrauterine contraceptive devices; this constitutes an uptake rate of 14.3%. Among these, almost 200 million still do not have access to contraception, and 64 million still use conventional methods of family planning; the majority of the world's poorest men and women still have less control over when and how many children to have (Prol, Klein, Rennie & Andelija 2024). In the United States, about 89 % of women use contraceptive methods. However, among these, only 1.5% of women in the USA used Intrauterine devices. With this low intrauterine device use nationwide, likely, the unintended pregnancy rate in the USA, 50 per 1000 women aged 15–44 per year would increase substantially, and there is very recent evidence that such increases may have begun in response to these decreases in intrauterine device use (Espey & Ogburn, 2021).

In Africa, intrauterine devices are used by less than 2% of women of childbearing age in all countries in the region, except Guinea-Bissau at 4% and Kenya at 5%. Such rates are substantially lower than those reported in some other parts of the world. Some of the barriers contributing to this low rate include transport attributed to distance (as they live in remote areas, lack of knowledge, and poor attitudes related to cultural myths (Nasri, 2020). In South Africa, intrauterine device use is low and the low rate is mainly due to due to a lack of suitable facilities and adequately trained personnel, and almost half 46% of the women who use an intrauterine device access it through private sector health services which only serve 14% of all contraceptive users (Mhlanga, Balkus, Singh, Chappell, Kamira, Harkoo, Szydlo, Mukaka, Piper, & Hillier 2019).

Uganda has one of the highest population growth rates in the world at 3.3% per year, with a total fertility rate of 5.8 children per woman, which is also one of the highest in the

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

world. The rate of contraceptive usage in Uganda is still low, and about 42.6% of recent births are unintended. Among all contraceptive usage, the intrauterine device makes up the smallest proportion of the current method mix at 3.8% compared with 6.6% for pills, 8.3% for sterilization 10.1% for male condoms, 15.3% for implants, 51.3% for injectable (Twesigye, Buyungo, Kaula, & Buwembo, 2016). At Entebbe Regional Referral Hospital, Entebbe municipality Wakiso district, only 1 in 10 women who attend the family planning clinic utilize an Intrauterine device.

The Ugandan government has to reduce unintended pregnancies by raising public knowledge of intrauterine devices through community outreach, health camps, and media advertising (Enyamitiot et al.,2023). Similarly, Entebbe Regional Referral Hospital has given health education on the usage of intrauterine during family planning days at the clinic, unfortunately, there is still only one in ten women who attend family planning clinic utilizing intrauterine devices (HMIS) showing the rate of uptake of intrauterine devices has continuously remained low with a notable 28% unmet demand and due to this, 44% of unintended pregnancies have occurred in Uganda with increased risks of maternal morbidity and mortality (Fatusi et al., 2021). The purpose of this study was to assess the factors influencing the utilization of the intrauterine contraceptive device among women of reproductive age at Entebbe Regional Referral Hospital, Entebbe municipality, Wakiso district.

Methodology.

Study design.

The study was descriptive cross-sectional study design. This design was chosen because it allowed the researcher to collect and analyze data within a short period. A quantitative approach to data collection was used because the questionnaire was used to collect quantitative or numerical data.

Study setting.

The study was conducted at Entebbe Regional Referral Hospital, Entebbe municipality, Wakiso district. The study setting was selected because of the poor utilization of intrauterine devices among women who seek family planning services at a family planning clinic. The setting also has an adequate number of respondents. The hospital is located in the central business district of the town of Entebbe, in Wakiso District, approximately 44 kilometres (27 mi), by road, southwest of Mulago National Referral Hospital, the largest hospital in the country, located in Kampala, Uganda's capital and largest city. Entebbe General Hospital is a public hospital funded by the Uganda Ministry of Health. Originally built by the British colonialists in the 20th century as Entebbe Grade B Hospital, the facility was closed temporarily in December 2013. Between December 2013 and May 2016, the hospital was rebuilt and expanded from 100 to 200 beds for US$7 million (about UGX:23.2 billion), donated by the World Bank. The new facility has a private fee-for-service wing and a public, free-service wing. Other services include pediatrics, radiology, laboratory, maternity, immunization, general surgery, internal medicine, orthopedics, and operating rooms. Patients served come from Wakiso District, Mpigi District, Entebbe Town, and the neighboring islands in Lake Victoria.

Study population

The study population was women of reproductive age at Entebbe Regional Referral Hospital, Entebbe Municipality, Wakiso district.

Sample size determination.

The sample size was determined according to Roscoe's (1975) set guidelines which suggested that a sample size of 30 and less than 500 was appropriate for the most behavioral studies. This study therefore took a sample size of 30 respondents which was manageable because of limited time and resources for data collection.

Sampling procedure.

The study used a simple random sampling technique. This technique was chosen for this study because it ensured that the sample was a representative of the study population as well as reducing bias in the sample. To obtain the participants, the researcher made 60 pieces of similar size and 30 papers were written on ***Q*** and the rest ***P.*** Eligible women picked a single paper at random on each day of data collection. Those who picked papers with the word ***Q*** were enrolled in the study.

Inclusion and exclusion criteria.

The study included only women of reproductive age at Entebbe Regional Referral Hospital, Entebbe municipality, Wakiso district, who voluntarily consented to participate. Those who declined to consent and the very ill were excluded.

Independent variables

The independent variables were individual and social-cultural factors influencing the utilization of the IUD.

Dependent variable.

The dependent variable was the utilization of intrauterine contraceptive devices.

Research instrument.

Data was collected using a semi structured questionnaire. It was written in English and contained open and closed ended questions related to the study objectives. However, illiterate respondents were also considered as the questions were verbally read to them as the researcher filled in their views. The questionnaire consisted of 2 sections which included section on individual and health facility factors.

Data collection procedures.

Data collection started after an introductory letter authorizing the researcher was presented to the director of Entebbe Regional Referral Hospital. The literate sampled respondents conversant in English were administered the questionnaire to fill in independently, while illiterate respondents were verbally assisted by the researcher. Data was collected from 6 respondents per day, and this procedure took five (5) days to cover 30 respondents.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

Data management.

The filled questionnaires were retrieved, counted, checked for completeness, and edited after every data collection day to ensure that they were all returned, coded, and kept in a safe place as a backup. Raw data was locked in the cupboard for security purposes.

Data analysis.

Data from the questionnaires were manually tallied using a pen and paper, coded and analyzed using a computer package called Microsoft excel 2016 to attain a code sheet. Analyzed data from the code sheet was then used to construct tables, figures and statistical texts depicting respondents' responses in frequencies and percentages.

Ethical approval.

After proposal approval, the researcher obtained an introductory letter from Mildmay Uganda school of nursing and midwifery research and ethics committee which was presented to the administration of Entebbe regional referral hospital, Entebbe municipality Wakiso district showing authenticity of the study.

Informed consent

Consent was sought from the respondents before enrolling them to participate. Only questions that did not infringe on the rights and privacy of respondents were asked. They were assured of the confidentiality of their information and anonymity of their identity by using only serial numbers and not names on the questionnaire.

Results.

Individual factors influencing utilization of intrauterine contraceptive devices among women of reproductive age.

Table 1: Individual demographic factors influencing utilization of intrauterine contraceptive devices among women of reproductive age n=30

Variable	Category	Frequency (f)	Percentage (%)
Age (years)	18-25	11	36.7
	26-30	13	43.3
	31-35	3	10
	36-40	3	10
Level of education	Non formal	9	30
	Primary	11	36.7
	Secondary	6	20
	Tertiary	4	13.3
Number of children	None	2	6.7
	One	9	30
	Two	12	40
	Three and more	7	23.3

Table 1 shows that 13(43.3%) of the respondents were between 26 and 30 years of age while the least 3(10%) were 31 to 35 and 36 to 40 years, respectively. Regarding the level of education, most 11(36.7%) of the respondents had a primary level whereas the least 4(13.3%) had a tertiary level. Concerning the number of children, 12(40%) of the respondents had two children while the least 2(6.7%) had no child.

Figure 1: Weight of the respondents n=30

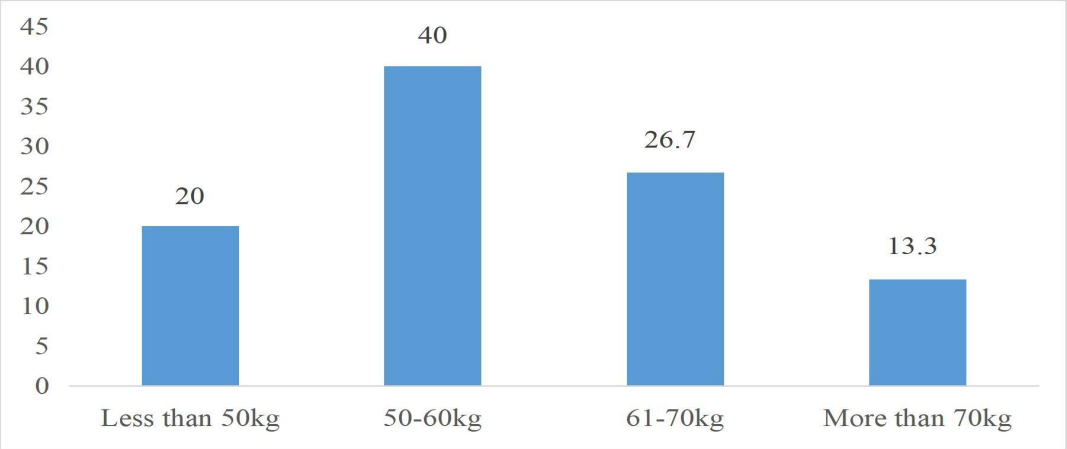
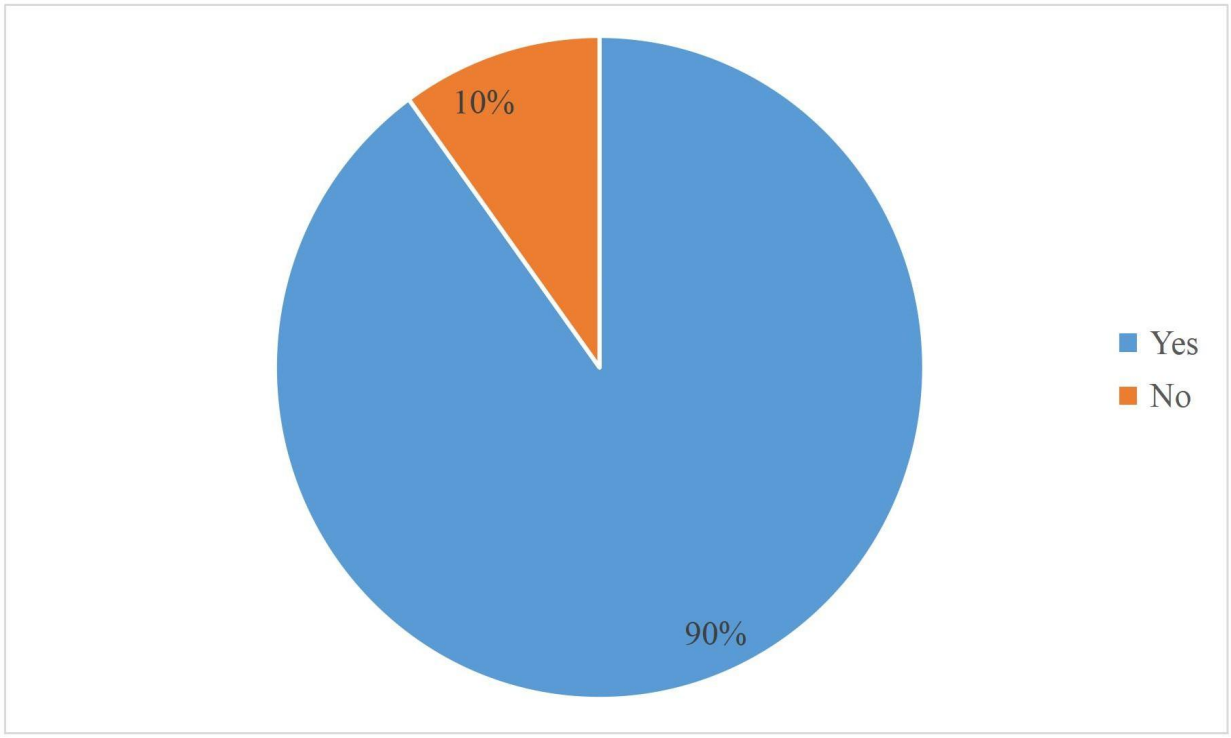


Figure 1 shows that 12(40%) of the respondents mentioned that they had between 50 and 60 kilograms while the least 4(13.3%) mentioned that they had more than 70kg.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

Figure 2 shows that the majority, 27(90%) of the respondents mentioned that they had ever become pregnant while the minority 3(10%) mentioned that they had never.

Figure 2: Showing respondents who had ever become pregnant n=30



Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

Figure 3: Number of sexual partners by respondents n=30

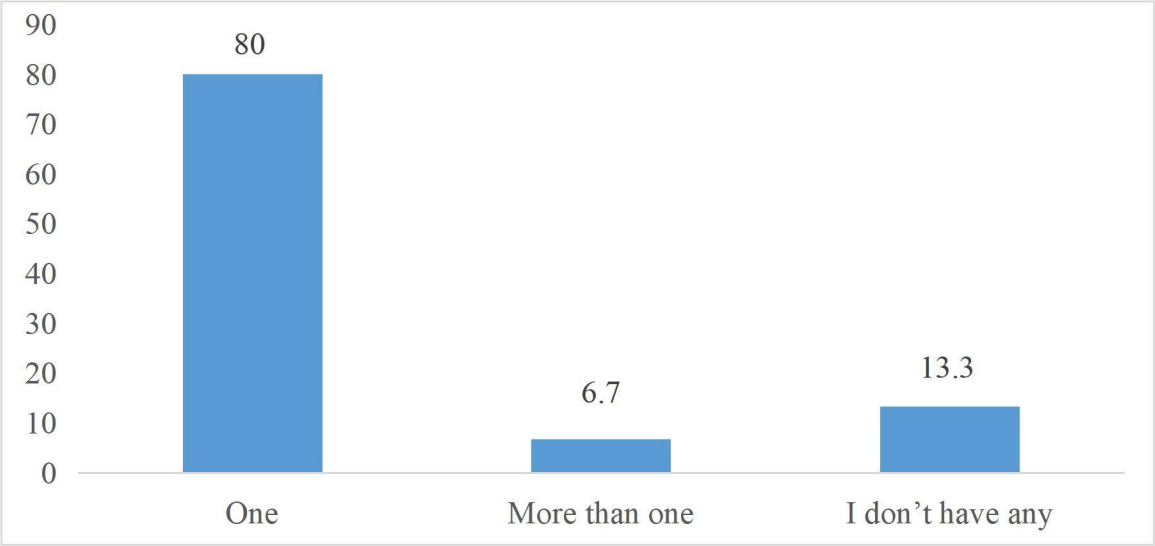


Figure 3 shows that the majority, 24(80%), of the respondents mentioned that they had only one sexual partner while the minority, 2(6.7%), mentioned that they had more than one sexual partner.

Figure 4: Level of family income n=30

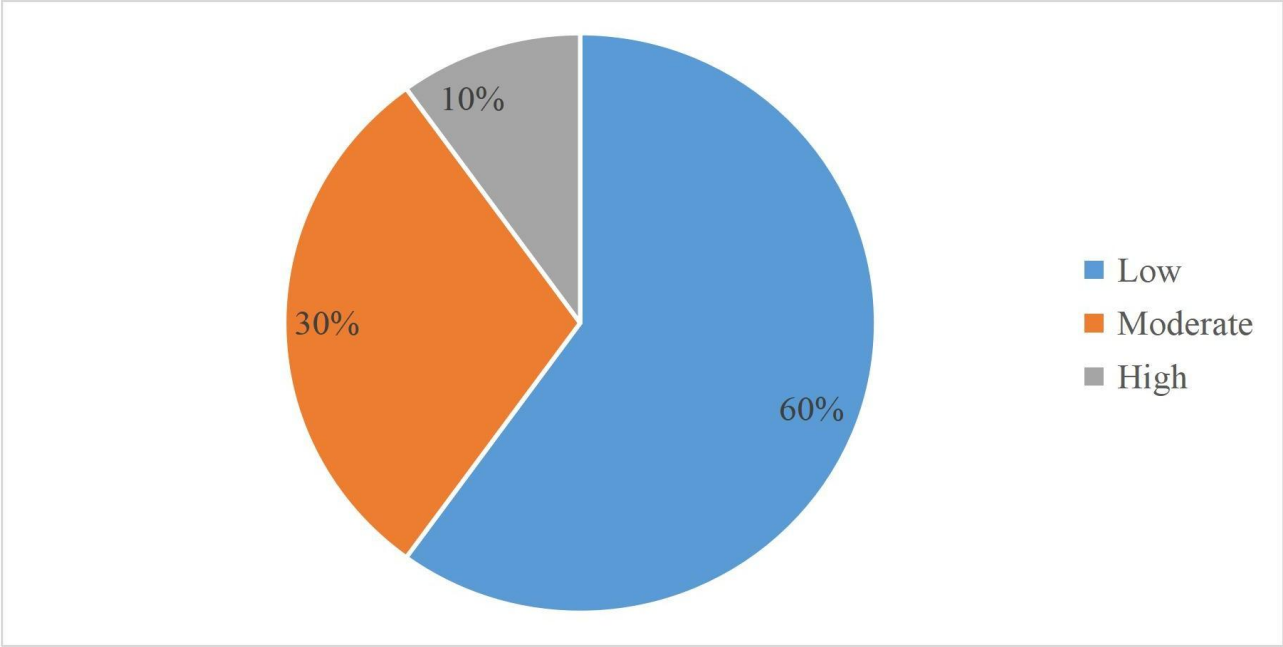


Figure 4 shows that majority 18(60%) of the respondents mentioned that their family level of income was low while the minority 3(10%) mentioned that it was high.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

Table 2: Health facility-related factors influencing utilization of intrauterine contraceptive device among women of reproductive age n=30

Variable	Category	Frequency (f)	Percentage (%)
Waiting time	Less than one hour	1	3.3
	Two hours	4	13.3
	Three hours	8	26.7
	Four hours and more	17	56.7
Health workers' recommendations	Yes	14	46.7
	No	16	53.3
Health education	Yes	12	40
	No	18	60
Adequate Health facilities in community	Yes	4	13.3
	No	26	86.3
Antenatal visits attended	4 visits	19	63.3
	8 visits	6	20
	None	5	16.7
Availability of IUDs	They always available	4	13.3
	Sometimes they are not Available	24	80
	They are not available at all	2	6.7
Adequate health care Providers	Yes	13	43.3
	No	17	56.7
Provision of community Outreaches	Yes	21	70
	No	9	30
Availability of family Doctor	Yes	3	10
	No	27	90

Table 2 shows that more than half, 17(56.7%), of the respondents mentioned that they took four hours or more waiting for family planning services at the facility, while only 1(3.3%) mentioned less than one hour. Most 16(53.3%) of the respondents mentioned that health care providers didn't recommend the use of intrauterine devices, whereas the least 14(46.7%) mentioned that health workers recommend intrauterine devices. The majority, 18(60%), of the respondents mentioned that they didn't receive health education about the use of intra-uterine devices, while only 12(40%) mentioned that they received health education about the use of intrauterine devices. The majority, 26(86.3%), of the respondents mentioned that they didn't have adequate health facilities in their communities that could provide intrauterine devices, while the minority, 4(13.3%), mentioned that they had them. The majority 19(63.3%) of the respondents mentioned that they attended 4 antenatal visits while the minority 5(16.7%) mentioned that they didn't attend antenatal care. The majority, 24(80%) of the respondents, mentioned that sometimes intrauterine devices are not available at the facility, while the minority 2(6.7%) mentioned that they are not available at all. More than half, 17(56.7%) of the respondents mentioned that they didn't have adequate health care providers that provide family planning services at the facility, while only 13(43.3%) mentioned that they had. The majority 21(70%) of the respondents mentioned that the health facility provided outreaches in the community regarding utilization of family planning while the minority 9(30%) mentioned that it didn't have outreaches in their communities Majority 27(90%) of the respondents mentioned that they didn't have a family doctor that provides advice regarding the utilization of intrauterine device while the minority 3(10%) mentioned that they had.

Discussion.

Individual factors influencing utilization of intrauterine contraceptive devices among women of reproductive age.

This study revealed that most 13, 43.3%) of the respondents were between 26 and 30 years of age. This indicated that they were still young and thus may not be actively involved in family planning due to the desire to

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

have more children. This finding is similar to the findings by Diedrich, Madden, Zhao & Peipert (2015) in the USA, who reported that continuation of intrauterine device usage at 48 months was highest among women older than 29 years of age at insertion as compared to women younger than 24 years of age. However, it is contrary to the findings by Ontiri, Ndirangu, Kabue, Biesma, Stekelenburg, & Ouma (2019) in Kenya, who revealed that those who were young at first birth were twice more likely to use intrauterine devices than their counterparts. In addition, findings showed that 11(36.7%) of the respondents had a primary level of education. This indicated a lower education level and thus could have less information about intrauterine devices due to illiteracy, leading to inadequate utilization. This finding is in line with findings by Bolarinwa & Olagunju (2019) in Nigeria, who revealed that the level of education of women was significantly associated with using intrauterine devices. Women with high education status were twofold more likely to use IUDs than those with low education.

Furthermore, 12(40%) of the respondents had two children. This indicated that respondents would desire to have more children since they had few, thus leading to low uptake of intrauterine devices. This finding is in line with findings by Sand, Mavhandu-Mudzusi, Tirfe & Mundeta (2015) in Ethiopia, who revealed that individual factors did influence the uptake of intrauterine devices such as the number of children. Women with 5 or more children were 60% more likely to use intrauterine devices than those with a lower number of children. The study findings showed that 12(40%) of the respondents mentioned that they had between 50 and 60 kilograms. This indicated that they had average weight. This finding is contrary to findings by King, Michels, Graubard & Trabert (2021) in the United States, who revealed that women who were obese were more likely to use intrauterine devices than non-obese women. In addition, the majority, 24(80%), of the respondents mentioned that they had only one sexual partner. This indicated that they were not involved in multiple sexual relationships and therefore would not have issues of becoming pregnant, which could contribute to low utilization of intra-uterine devices. This finding is in agreement with findings by Kavanaugh, Jerman, & Finer (2015) in the USA, who revealed that women's number of sexual partners was significantly associated with intrauterine device use. Findings showed that the intrauterine device uptake rate for those with fewer than two sexual partners in the previous year increased from 9.2–12.4%.

The study revealed that the majority, 18(60%), of the respondents mentioned that their family's level of income was low. This led to a low uptake of the utilization of intrauterine devices due to inadequate funds that would facilitate the utilization of intrauterine devices. This finding is in agreement with findings by Anik, Islam & Rahman (2022) in Bangladesh who revealed that about 40% of families with poor income status perceived children as a source of income or as a means of getting financial assistance in the future when they grow up and this resulted in low uptake of intrauterine device decreasing the uptake rate from 13% to 6%.

Health facility-related factors influencing utilization of intrauterine contraceptive devices among women of reproductive age.

According to the study findings, more than half 17, 56.7%) of the respondents mentioned that they took four hours or more waiting for family planning services at the facility. This showed that there was a long waiting time and, therefore, would lead to low utilization of the service. This is probably because of too many patients or inadequate care providers. This finding is in agreement with findings by Weston, Martins, Neustadt & Gilliam (2022) in the USA, who revealed that long waiting times and strong recommendations by Healthcare providers were significantly associated with intrauterine device uptake among women of reproductive age. In addition, results demonstrated that 16(53.3%) of the respondents claimed that healthcare providers didn't recommend the use of intrauterine devices. This indicated that respondents were not informed about this type of family planning method. This could be due to the availability of other family planning methods. This finding is in agreement with findings by Weston, Martins, and Neustadt & Gilliam 2022), who reported that 37% of women who sought intrauterine device services reported that it was due to strong recommendations from their Healthcare providers.

Furthermore, the study showed that the majority, 18(60%), of the respondents mentioned that they didn't receive health education about the use of intrauterine devices. This indicated that respondents were not informed about this type of family planning. This is probably because of a lack of time by health workers, thus making them unable to provide comprehensive health education. This finding was in line with findings by Nobiling & Drolet (2022) in the United States, who revealed that the provision of health education by Healthcare providers increased uptake of intrauterine devices by 19%. The study findings showed that the majority, 26(86.3%), of the respondents mentioned that they didn't have adequate health facilities in their communities that provide intrauterine devices. This indicated a lack of accessibility to intrauterine devices in the nearby health facilities. This is probably because of inadequate resources needed to provide services near people. This finding is in line with findings by Opiro, Opee, Sikoti, Pebalo, Ayikoru, Akello, Manano, & Bongomin, (2024) in the United Kingdom who reported that areas with a sparse distribution of health facilities had a two folds

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 6 No. 3 (2025): March 2025 Issue
https://doi.org/10.51168/sjhrafrica.v6i3.1581
Original Article

intrauterine device usage compared to those with a limited number of health facilities.

The study findings revealed that the majority, 24(80%), of the respondents mentioned that sometimes intrauterine devices were not available at the facility. This indicated a lack of adequate intrauterine devices; thus, women would not seek them due to unavailability. This finding is in agreement with findings by Omana & Namuli (2020) in Uganda, who reported that the lack of availability of intra-uterine devices in most health facilities leads to poor utilization by women of reproductive age. The study findings showed that the majority, 27(90%), of the respondents mentioned that they didn't have a family doctor who provided advice regarding the utilization of intrauterine devices. This indicated that they lacked a physician close to the family who would provide information about intrauterine devices. This could be due to a lack of adequate facilitation for the physician. This finding is in line with findings by Tyler et al. (2022) in Georgia, USA, who revealed that health facility-related factors, such as using an office-based family medicine physician, resulted in more than 60% of infrequent intrauterine device provision.

Conclusion.

This study was about factors influencing utilization of intrauterine contraceptive device contraception among women of reproductive age at Entebbe regional referral hospital, Entebbe municipality Wakiso district. The Individual factors were; age, level of education, number of children, weight, number of sexual partners, and family level of income.

The health facility-related factors were; waiting time, health care providers' recommendations, health education, availability of health facilities in community, number of antenatal visits, availability of intra uterine devices, adequate health care providers, and having a family doctor. Therefore, health facility related factor had much influence on utilization of intra uterine devices.

Recommendations

Reduce Waiting Time; The hospital should Implement strategies to minimize waiting times for contraceptive services including Intra uterine device insertion, Health Education; Strengthen health education programs within the hospital to raise awareness about the benefits and availability of Intra uterine device.

The hospital should ensure healthcare providers receive regular training on contraceptive counseling and intra-uterine device insertion techniques. Availability of Devices Maintain consistent availability of intra-uterine devices to meet the demand of women seeking contraceptive options.

Education and Awareness: Women should attend health education sessions to better understand the benefits of intra-uterine devices.

Postnatal mothers should attend the recommended visits where the most suitable contraceptive options like intra-uterine devices can be discussed based on individual factors, this can be done through open discussions with families to increase acceptance and support of contraception.

Acknowledgment.

I sincerely acknowledge the almighty God for my life and the gift of perseverance He gave me throughout my studies.

I wish to acknowledge my supervisor, Ms. Bantia Mercy, for the contribution and cooperation rendered to me in the production of this report.

I fully acknowledge the principal, teaching staff, and whole administration of Mildmay Uganda School of Nursing and Midwifery for the hard work they have done to impact in me the knowledge and skills, for their tireless guidance and prayers during the compilation of this research report.

List of abbreviations.

FP: Family Planning
IUDs: Intra Uterine Devices
MOH: Ministry of Health
USA: United States of America
WHO: World Health Organization

Source of funding.

There is no source of funding.

Conflict of interest.

No conflict of interest was declared.

Availability of data.

Data used in this study is available upon request from the corresponding author.

Authors contribution

KN designed the study, conducted data collection, cleaned and analyzed data and draft the manuscript and MB supervised all stages of the study from conceptualization of the topic to manuscript writing.

Authors biography

Kevin Nakate is a student with a diploma in midwifery at Mildmay School of Nursing and Midwifery.

Mercy Bantia is a research supervisor at Mildmay School of Nursing and Midwifery.

References.

1. Anik, A. I., Islam, M. R., & Rahman, M. S. (2022). Association between socioeconomic factors and unmet need for modern contraception among the young married women: A comparative study across the low-and lower-middle-income countries of Asia and Sub-Saharan Africa. *PLOS Global Public Health*, *2*(7), e0000731.
2. Azmoude, E., Behnam, H., Barati-Far, S., & Aradmehr, M. (2017). Factors affecting the use of long-acting and permanent contraceptive methods among married women of reproductive age in East Iran. *Women's Health Bulletin*, *4*(3), 1–8.
3. Bolarinwa, O. A., & Olagunju, O. S. (2019). Knowledge and factors influencing long-acting reversible contraceptive use among women of reproductive age in Nigeria. *Gates Open Research*, *3*.
4. Boog, K., & Cooper, M. (2021). Long-acting reversible contraception. *Obstetrics, Gynaecology & Reproductive Medicine*, *31*(7), 185–191.
5. Diedrich, J. T., Madden, T., Zhao, Q., & Peipert, J. F. (2015). Long-term utilization and continuation of intrauterine devices. *American Journal of Obstetrics and Gynecology*, *213*(6), 822-e1.
6. Enyamitoit, S. R., Byonanuwe, S., Kahimakazi, I., Almenares, U., Sentongo, E., Latortue, J. W., Okello, M., & Tornes, Y. F. (2023). *Level of Uptake and Influencing Factors of Long Acting Reversible Contraception among Post-abortion Women in Uganda*.
7. Espey, E., & Ogburn, T. (2011). Long-acting reversible contraceptives: intrauterine devices and the contraceptive implant. *Obstetrics & Gynecology*, *117*(3), 705–719.
8. Fatusi, A., Riley, T., Kayembe, P. K., & Mabika, C. (2021). Unintended pregnancy, induced abortion, and abortion care-seeking experiences among adolescents in Kinshasa, Democratic Republic of Congo: a cross-sectional study. *BMJ Open*, *11*(9), e044682.
9. Gonie, A., Worku, C., Assefa, T., Bogale, D., & Girma, A. (2018). Acceptability and factors associated with post-partum IUCD use among women who gave birth at Bale Zone health facilities, Southeast Ethiopia. Contraception and Reproductive Medicine, 3, 1–8.
10. Kavanaugh, M. L., Jerman, J., & Finer, L. B. (2015). Changes in use of long-acting reversible contraceptive methods among US women, 2009–2012. *Obstetrics & Gynecology*, *126*(5), 917–927.
11. King, L. A., Michels, K. A., Graubard, B. I., & Trabert, B. (2021). Trends in oral contraceptive and intrauterine device use among reproductive-aged women in the US from 1999 to 2017. *Cancer Causes & Control*, *32*, 587–595.
12. Masembe, K. (2019). *Factors affecting the use of contraceptive methods among childbearing women attending obstetrics and gynecology clinics in Kiryandongo District Hospital, Kiryandongo, Uganda*.
13. Mbuthia, F. W., Okumbe, G. M., Monda, J., & Ng'ang'a, P. M. (2017). Intrauterine device uptake among women seeking family planning services in Nairobi County, Kenya. *African Journal of Midwifery and Women's Health*, *11*(1), 46–50. https://doi.org/10.12968/ajmw.2017.11.1.46
14. Mhlanga, F. G., Balkus, J. E., Singh, D., Chappell, C., Kamira, B., Harkoo, I., Szydlo, D., Mukaka, S., Piper, J., & Hillier, S. L. (2019). Feasibility and safety of IUD insertion by mid-level providers in sub-Saharan Africa. *International Perspectives on Sexual and Reproductive Health*, *45*, 61–69. https://doi.org/10.1363/45e8019
15. Namanda, C., Atuyambe, L., Ssali, S., Mukose, A., Tumwesigye, N. M., Makumbi, F. E., Tweheyo, R., Gidudu, A., Sekimpi, C., & Hashim, C. V. (2023). A qualitative study of influences on the uptake of contraceptive services among people of reproductive age in Uganda. *BMC Women's Health*, *23*(1), 130.
16. Nasri, M. (2020). *Prevalence and factors associated with uptake of long-acting reversible contraceptives in Kiambu Level Five Hospital Kiambu County*. University of Nairobi.
17. Ontiri, S., Ndirangu, G., Kabue, M., Biesma, R., Stekelenburg, J., & Ouma, C. (2019). Long-acting reversible contraception uptake and associated factors among women of reproductive age in rural Kenya. *International Journal of Environmental Research and Public Health*, *16*(9), 1543.
18. Opiro, K., Opee, J., Sikoti, M., Pebalo, P. F., Ayikoru, J. H., Akello, H., Manano, P., & Bongomin, F. (2024). Utilization of modern contraceptives among female health care workers at Gulu University teaching hospitals in Northern Uganda. *Contraception and*
19. *Reproductive Medicine*, *9*(1), 13.
20. Prol, B., Klein, S., Rennie, C., & Andelija, S. (2024). Respondent Demographics and Contraceptive Use Patterns in the United States: A National Survey of Family Growth Analysis. *Cureus*, *16*(1).
21. Rustagi, N., Taneja, D. K., Kaur, R., & Ingle, G. K. (2010). Factors affecting contraception among

women in a minority community in Delhi: a qualitative study. *Health Popul Perspect Issues*, *33*(1), 10–15.
22. Sandy, P. T., Mavhandu-Mudzusi, A. H., Tirfe, B. T., & Mundeta, B. (2015). Factors influencing the utilization of the intra-uterine contraceptive device among women in Addis Ababa, Ethiopia. *Africa Journal of Nursing and Midwifery*, *17*(2), 4–16.
23. Srivastava, S., Mohanty, P., Muhammad, T., & Kumar, M. (2023). Socio-economic inequalities in non-use of modern contraceptives among young and non-young married women in India. *BMC Public Health*, *23*(1), 797.
24. Tyler, C. P., Whiteman, M. K., Zapata, L. B., Curtis, K. M., Hillis, S. D., & Marchbanks, P. (2012). Health care provider attitudes and practices related to intrauterine devices for nulliparous women. *Obstetrics & Gynecology*, *119*(4), 762–771.
25. Twesigye, R., Buyungo, P., Kaula, H., & Buwembo, D. (2016). Ugandan women's view of the IUD is generally favorable, but many have misperceptions about health risks. *Global Health: Science and Practice*, *4*(Supplement 2), S73–S82.
26. Weston, M. R. S., Martins, S. L., Neustadt, A. B., & Gilliam, M. L. (2012). Factors influencing uptake of intrauterine devices among postpartum adolescents: a qualitative study. *American Journal of Obstetrics and Gynecology*, *206*(1), 40-e1.
27. Wijaya, V. F., Rahardjo, S. S., & Adriani, R. B. (2019). Religious belief, social support, and the acceptance of intrauterine devices among women of reproductive age in Klaten, Central Java. *Journal of Maternal and Child Health*, *4*(3), 201–211.
28. Woldeyohannes, D., Arega, A., & Mwanri, L. (2022). Reasons for low utilization of intrauterine device utilization amongst short-term contraceptive users in Hossana town, Southern Ethiopia: a qualitative study. *BMC Women's Health*, *22*(1), 30. https://doi.org/10.1186/s12905-022-01611-6

PUBLISHER DETAILS:

Student's Journal of Health Research (SJHR)
(ISSN 2709-9997) Online
(ISSN 3006-1059) Print
Category: Non-Governmental & Non-profit Organization
Email: studentsjournal2020@gmail.com
WhatsApp: +256 775 434 261
Location: Scholar's Summit Nakigalala, P. O. Box 701432, Entebbe Uganda, East Africa