



KNOWLEDGE AND ACCEPTABILITY TOWARDS INTRAUTERINE DEVICE AMONG WOMEN ATTENDING ANTENATAL CARE IN GASABO DISTRICT HEALTH CENTERS-KIGALI, RWANDA

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OBJECTIVES: To assess the level of knowledge and acceptability towards intrauterine device and factors associated with IUD acceptability among women attending antenatal care in Gasabo district health centers.

Method: A cross-sectional study, using systematic sampling technique was conducted with 128 women in reproductive age between 18 and 49 years old, attending Antenatal care in Gasabo district health centers. Data were obtained using survey questionnaire. The level of knowledge was assessed and scored using a 10 grade knowledge indicators, the score obtained was categorized as inadequate (below 50%), moderate (50-69%), and adequate (above 70%). Acceptability was also assessed and classified as poor (score below 50%) and good (score above 50%). Correlation analysis and chi-square test were used in SPSS version 28 at 95% confidence interval.

Results: the majority of respondent have inadequate knowledge at 68.7%, moderate knowledge at 28.3% and adequate knowledge at 2.3%., the level of acceptability was

good at 77.3%, and having one or more children was associated with IUD acceptability almost two times more than having no child [AOR=1.802; 95% CI=1.243-2.611 P:0.05]. Conclusion: as the population of Rwanda is still increasing with fertility rate of 3.8 birth per women, it poses a challenge not only to country development but also to maternal and child health, therefore different health care structures in Rwanda are recommended to use ANC opportunity to advance family planning education with more focus on IUD as safe long-acting reversible contraceptive not only in couples with many children but also in nulliparous women.

Keywords: antenatal care, contraception, intrauterine device, family planning, long-acting reversible contraceptive method, maternal and child health, primary health care.

1.0 INTRODUCTION

Intrauterine devices (IUDs) has been recognized by leading health organizations as a strategic priority in reducing unintended pregnancy among women in United States and globally, hence subsequent reduction in maternal and neonatal mortality and morbidity (WHO 2019). They have a high efficacy, safety and cost effectiveness with a greater rate of satisfaction and continuation in comparison to other contraceptive methods (Hall *et al.* 2016).

Worldwide, copper containing IUD is the most widely used reversible method of contraception with estimated 14.3% of women in reproductive age either married or in union, with marked regional differences from 1.8% in Oceania to 27% in Asia, there is a marked geographical skewedness where by 80% of users live in Asia and China only accounts 64%. In Africa there is a marked dichotomy in IUD uptake where north Africa account 18.1% of women and Sub Saharan, especially East Africa account less than 2% of users. Such regional IUD uptake differences is associated with various factors at individual, service delivery, program and policy levels. (Buhling *et al.* 2014).

In Rwanda, according to RDHS 2015, the IUD is among the least used methods of modern contraception at 1.1% versus 24.0% of injections among married women, yet Rwanda still account around one in two women with unmet need of contraception, despite the documented

benefits of IUD use include efficacy, ease of use, reversibility and patient satisfaction, in particular for its long-term use and cost. (RDHS 2015).

The International Federation of Gynecology and obstetrics (FIGO) lunched in 2015, the initiative for Initialization of institutionalization of post-partum family planning services with the focus of Post-partum Intrauterine Device (PPIUD), as a routine act of antenatal and post-natal counselling; The initiative was about counselling of expectant mothers during ANC visits, generating, and giving out brochure about FP methods, wall charts, FP video as well as TV messages in the waiting area revealed that the intervention increased PPIUD uptake at 4% points, and that would have been 17% increment points of PPIUD uptake if all women had received counselling by the program as stated by FIGO. (Pradhan *et al.* 2019).

Rwanda has made a commendable stride in improving the health of its people, by increasing family planning accessibility and uptake among other initiatives. The trend in contraception uptake in married women in Rwanda increased from 17% in 2005 to 53% in 2014-15 (RDHS 2015) and that aligns with the Rwanda's goal to tackle unmet need for family planning along with the desire expressed by Rwandan mothers to prevent or space ulterior pregnancies. (Farmer DB *et al.*, 2015).

Despite the deployed efforts by Rwanda ministry of health, in addressing the issue of unmet need of family planning, still about 1 in 5 married women aged to 15-49 have unmet need of family planning and more pronounced among the ones in postpartum period; Particularly the low uptake of IUD contraception which was at 0.8% of sexually active unmarried women and 2.1% in married women aged 15-49 years, in comparison to 15.3%, 6.9% and 26.6% for injectable, oral contraceptive methods and implant respectively. (RDHS 2019-20).

The rate of unplanned pregnancy remained high worldwide and Rwanda in particular, despite the tremendous increase of modern contraceptive use, nearly every second there is unintended

pregnancy, and one in five (22%) end up in induced abortion, and according to a hospital-based research done in Kigali, on near-miss during pregnancy, 45% of all severe morbidity and 28% of mortality were abortion related, almost a half of unintended pregnancies is accounted from contraceptive users as result of inconsistency or incorrect use (Rulisa *et al.* 2015). For IUD to be correctly used, does not depend on patient participation, hence its lowest failure rate estimated to be 2-3 pregnancies per 100 women-years; therefore, in order to succeed in preventing unintended pregnancies, decreasing the number of unmet need of family planning, long acting contraceptive methods such as IUD are required as women who choose them are least likely to experience contraceptive failure. (Naidoo *et al.*2015).

1.1 PROBLEM STATEMENT

Intrauterine device (IUD) is one of the very effective contraceptive of long-term use, and most widely used long lasting reversible contraceptive method worldwide. One out of three married women in china, two in five among Scandinavian countries, and more than one in ten in Northern Africa countries. With failure rate considered to be low than 1%, however, it's still the least used methods in Sub-Saharan Africa and Rwanda in particular. (WHO 2018). Researchers attribute that low uptake to barriers such as low knowledge about IUD contraception by clients, frequent misconceptions and fear of side effects. According the study done in Uganda, the beliefs such as IUD contraception can cause cancer; birth defects and infertility were common. Another study conducted in Ethiopia highlighted the underutilization of IUD services due to factors including inadequate knowledge of the benefits of IUD, lack of counseling and ineffective delivery of health information to assist women in decision making. (Anguzu *et al.*,2014, Woldeyohannes *et al.*2022).

Fear of IUD insertion and partner disapproval, excessive bleeding and weight loss, were also noted factors by researchers to decrease the IUD contraception uptake among women in

reproductive age (Hohmann *et al.*2011). Contraception counselling done earlier, especially during ANC visit was linked with higher uptake in PPIUD as the basic knowledge on family planning methods; IUD in particular is low among women in childbearing age. (Puri *et al.* 2020).

Though the number of unmet need of family planning has significantly decreased among women in reproductive age, recent statistics in Rwanda showed increment in modern contraceptive uptake from 53.2% in 2015 to 64.1% in married women with marked predominance of injectable and implants from 15.3% to 24% and 7.7% to 26.6% respectively; however the IUD contraceptive uptake in the same age group changed insignificantly from 1.1% to 2.1 % among married women and remained constantly low at 0.8% among sexually active unmarried women in reproductive age. (RDHS 2015, RDHS 2019-20).

According to study by projet San francisco (PSF), despite the known advantages of IUD such as failure rate which is low, less reliance on user adherence, supply chain which is consistent and fewer health side effect, less familiarity with LARC methods Such as IUD, misconception about how safe and effective they are and little participation of male partners were some of drawbacks to increase its uptake (Brunei *et al.*2013). Our study assessed knowledge and acceptability towards IUD contraception among women attending ANC services in Gasabo district health centers, Gasabo district, Kigali, Rwanda.

1.2 Research Objectives

- i. To determine the level of knowledge about IUD contraception among women attending antenatal care in Gasabo ditrict health centers.
- ii. To assess the level of acceptability of IUD contraception among women attending antenatal care in Gasabo district health centers.

- iii. To establish factors associated with IUD acceptability among women attending antenatal care in Gasabo health centers.

2.1 Theoretical review

As one the most cost-effective investment a country can make for its future, family planning has a range of advantages from improving maternal and child health, education and women empowerment (Starbird *et al.*2016). For over one century ago, Intrauterine devices were used in preventing pregnancy and they have been improved from a ring made of silkworm gut to more advanced safe and effective levonorgestrel-releasing and copper containing IUDs with easy manipulability during insertion and removal. With a success rate greater than 99% among users in the first year of utilization, the copper T380A was found to be the most effective copper bearing device, they are also ranked the most widely used reversible contraceptive method worldwide. (WHO, 2011).

There are two types of IUD brands available globally, copper containing IUD para Gard, which prevent pregnancy effectively for up to 12 years, and Mirena which works by releasing progestin hormone in small amount and effective up to 5 years, with failure rate in preventing pregnancy at 0.8% and 0.2% respectively. (Curtis *et al.*2016). Its continual use in United states has contributed in decreasing the number of unplanned pregnancy significantly, taking advantage of its benefit such as efficaciousness, easier to use, reversibility, and patient satisfaction in terms of long-term use and cost. (Kavanaugh *et al.*2018).

2.2 Empirical review

Despite being the most extensively used form of family planning worldwide, the intrauterine device is still underutilized in many regions, particularly in sub-Saharan Africa and Rwanda,

where users still account less than 2% of all women. In comparison to other contraceptive methods, the intrauterine device has a high satisfaction and continuing rate. It is also extremely effective, safe, and affordable. (15-49). RDHS 2020.

According to researchers, Knowledge about IUD device has been associated with greater use, in a Brazilian study, it was revealed that a significant portion of women had intrauterine device knowledge below the median, and that this knowledge was linked to socio-demographic factors such as low educational attainment and younger age. It was also found that this knowledge was correlating with current and past utilization of the IUD as well as interest in using it. (Borges *et al.*2020)

High proportion of incorrect answers were identified such as such as attributing IUD with unpleasant side effects or linking IUD with increased risk of uterine cancers, risk of infertility, all hence these misconceptions were identified in different studies in Unites States (Craig *et al.*2014).

In a study of large sample of undergraduate women at campus, in United States, there was an exceedingly low knowledge of IUDs and implants, with much lower perceived knowledge than measured knowledge and it was noted than the individual-level perceived barrier precluding IUD use was “not knowing enough” they also misperceived IUD side effects, pain, other related health problems and eligibility criterion to the method, and these findings evoke the role of perception rather than actual knowledge as determinant of IUDs contraception non-use. In addition, there were limited awareness for access to the IUDs, as 75% did not know that IUDs were readily available to them on campus (Hall *et al.*2016).

3. MATERIAL AND METHOD

3.1 RESEARCH DESIGN

The study was a cross-sectional design aiming at determining the level of knowledge and acceptability towards intrauterine device contraceptive among women in reproductive age attending ANC visit in primary health facility settings, this design was used as detailed information was necessary to assess different knowledge levels and acceptability towards intrauterine device contraceptive among women attending ANC in primary health facilities, it also helped to make inferences about a population of interest at one point in time.

3.2 RESEARCH SETTINGS

Kigali was chosen as an area of study because it was found to have the greatest number of women with unmet need of family planning in Rwanda at 16% (RDHS 2019-20), with lowest uptake of intrauterine device contraception , Gasabo district is one of three district of kigali city composed of 15 sectors with population of 879,505 (census 2022),and two health centers of urban (Remera) and rural (Nduba) contexts of Gasabo district were considered as primary health care facilities, the first level of health system in Rwanda where IUD contraception can be offered by trained personnel.

3.3 TARGET POPULATION

The research targeted women in reproductive age (18-49) attending Remera and Nduba health centers ANC services, in Gasabo District-Kigali city. Both health centers were chosen considering urban and rural perspectives, participating women have diverse backgrounds in terms of age, parity, number of children, education level and socio-economic statuses. The total target population was 188 women from 2 health centers, obtained as average number of women who attended NDUBA and REMERA Health centers in a period of 3 consecutive months (October, November, and December 2021) then divided again into 2-weeks average attendance.

Target population per health facility (site)

<i>October</i>	<i>November</i>	<i>December</i>	<i>total</i>	<i>Average/ month</i>	<i>Average/ 2 weeks</i>	<i>Proportion (%)</i>
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<i>REMERA</i>	270	317	320	907	302	151	80.3
<i>NDUBA</i>	62	83	78	223	74	37	19.7
<i>TOTAL</i>	332	400	398	1130	376	188	100

The total target population in this study was 188.

3.4 SAMPLE SIZE AND SAMPLING PROCEDURE

To determine the sample from the population, the Yamane’s formula was applied, whereby the sample size was equal to the total number population over one plus the total population, multiplied by a square of margin of error (Yamane, 1967)

The average number of women attended ANC services at each health center was estimated based on previous 3 months’ attendance flow obtained from data manager office.

$$\text{Hence } n = \frac{N}{1+(N \cdot e^2)} = n = \frac{188}{1+(188 \cdot 0.05^2)} \sim 128 \quad \text{source: Yamane, 1967}$$

Where:

n: sample size (128 women)

N: total target population (2 weeks’ average:188 women)

e: margin of error, which is 0.05

Sample size per health facility (site)

<i>Site</i>	<i>Total target population</i>	<i>Proportion (%)</i>	<i>Sample size</i>
<i>REMERA</i>	131	80.3	103

<i>NDUBA</i>	57	19.7	25
<i>TOTAL</i>	188	100	128

Total sample size is 128

3.5 Sampling procedure

In this study, we used a systematic sampling technique in which research participants were selected after determining interval k obtained by dividing total population size by sample size. In that case, the total target population of 188 over a sample size of 122 pregnant women attending ANC in Remara and NDUBA Health centers, we obtained the interval k equals 1.54, when rounded it become 2. Then once at targeted health facility, every pregnant women attending antenatal care visit by the time of data collection was eligible to participate in the study.

The researcher picked the first pregnant woman on the queue every morning, there after every second one as they were on bench waiting for their arrival in consultation room until the sample size was reached.

3.6 DATA COLLECTION

As primary data collection, the pre-tested structure questionnaire, conceptualized based on research objectives, was utilized as the main method of data collection as it preserves confidentiality, quick and simple to use. (Bell, 1993). The questionnaire was considered perfect since it enabled researcher to obtain data from a wider sample. Additionally, it increased the sense of anonymity, which encourages candid responses to sensitive questions.

The questionnaire was composed of three sections to mention socio-demographic data, questions about knowledge, questions about acceptability of IUD contraception among women attending Gasabo district health centers, and the scoring was based on proposed indexes.

3.7 DATA ANALYSIS

Data were analyzed and interpreted in a baseline of study objectives using statistical package for the social scientist (SPSS) version 28. Questionnaires were cleaned, variables were coded and transcribed into excel sheet before being exported into SPSS. The frequency distribution of dependent and independent variables was used. The association between variables was measured and tested using Chi-square. A P-value < 0.05 was considered to be statistically significant, and results were presented using statistical charts and graphs with narrative explanations.

3.8 ETHICAL CONSIDERATION

An introduction letter for data collection was obtained from Institute of Post-graduate studies and research of Mount Kenya University and approval for data collection was given by Kibagabaga level 2 teaching hospital Ethic committee. The researcher approached and explained to potential participants every aspect of research; objectives, criteria for participation, and consent form with those willing to participate in the study was signed, the participation was voluntary and each participant signed a consent. Participant who declined to be part of the study were excluded. Confidentiality and privacy of participant was kept at each step of data collection and processing. All pregnant mothers aged above eighteen years attending ANC service in Gasabo district health centers by the time of data collection were eligible to participate in the study after consent signing.

4. RESULTS

4.0 socio-demographic characteristics of women attending antenatal care in Gasabo district health centers.

A total of 128 women attending antenatal care at Remera and Nduba health centers were sampled to participate in the current study, the individual characteristics were age, marital status,

education level, income generation category as well as religious affiliation as all of them were of female gender.

Table 4.0: Socio-Demographic Characteristics of pregnant women attending antenatal care services in Gasabo district health centers.

Variables	Frequency (N=128)	percentage (%)	
Age	15-20	11	8.6
	21-25	44	34.4
	26-30	37	28.9
	31-35	25	19.5
	36-40	9	7.0
	41-45	1	0.8
	46-50	1	0.8
Education	None	10	7.8
	Primary	60	46.9
	Secondary	53	41.4
	University	5	3.9
Occupation	Employed	39	30.5
	Not employed	89	69.5
Marital Status	Married	97	75.8
	Single	26	20.3
	Divorced	4	3.1
	Widower	1	0.8
Income Categories	Ubudehe I (LOW CLASS)	20	15.6
	Ubudehe II (MIDDLE CLASS)	69	53.9
	ubudehe III (HIGH CLASS)	39	30.5
Religion	Christian	117	91.4
	Muslim	10	7.8
	None	1	0.8

Primary data (2022)

As indicated in table above, participants were sampled from two health centers (NDUBA and REMERA) of Gasabo district, Kigali city and majority of them (63.3%) were aged between 21 and 30 years, and they were all females.

From the study respondents, 46.9% have primary education level, and 41.4% attended secondary schools, as occupation more than 69.5% were reported to be self-employed as farmers or not having a formal monthly based income job. For marital status of respondents, 75.8% were married while 10 women out of 128 were single.

Income generation capacity were classified according to national based ubudehe categories and most of respondents were in Ubudehe category two II (or middle class), 68.4% and per religious affiliation, Christians were the majority at 93% of respondents.

4.1 level of knowledge of IUD among women attending Antenatal care in Gasabo District health centers

The first objective was to assess the level of knowledge about IUD contraception among women attending ANC in Gasabo District health centers.

The level of knowledge was assessed and scored using a 10 grade knowledge indicators, where each correct answer scored :1 and incorrect answer scored 0. The overall score was generated by aggregating the scores. The maximum attainable total score was 10 and the minimum was 0.

A percentage score was generated and classified as inadequate knowledge (<50%), moderate knowledge (50 – 69%), and Adequate knowledge ($\geq 70\%$). Results were presented as shown in below pie chart.

LEVEL OF KNOWLEDGE OF RESPONDENTS ON IUD

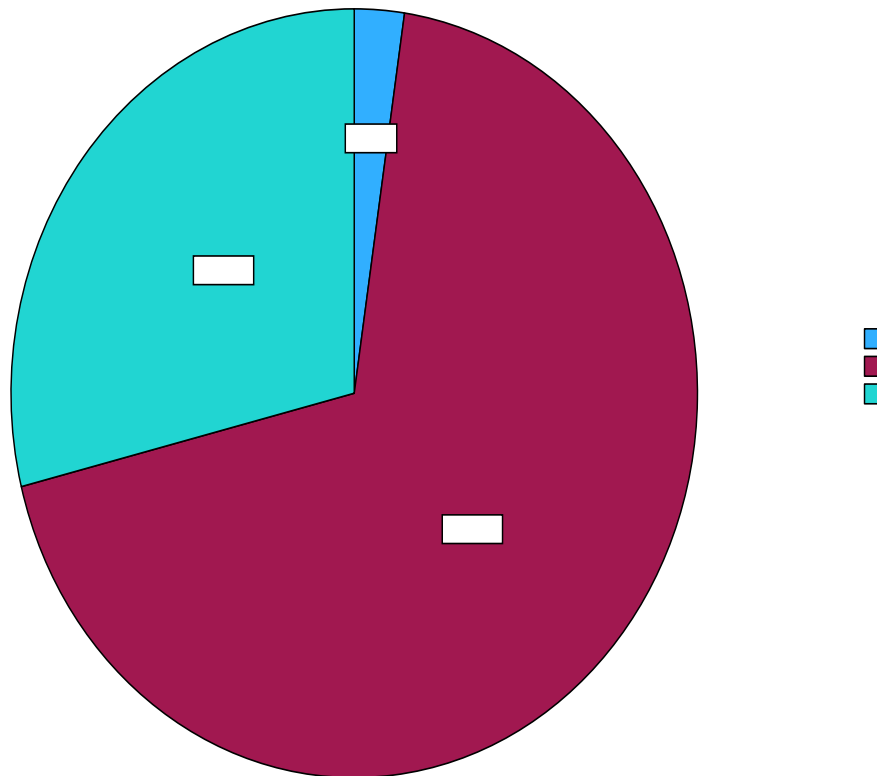


Figure 1:Level of knowledge of women attending antenatal care in Gasabo district health centers, Kigali -Rwanda

Source: primary data

As presented in figure 1. the majority of respondents had inadequate level of knowledge about IUD contraception at 68.7%, moderate knowledge at 28.1% and only 2.3 % of respondents have adequate knowledge of IUD contraception.

Table 1:Level of Knowledge of Respondents and Corresponding Frequencies

Variables	N	%
1. By definition, an intrauterine device is small contraceptive device inserted into uterus to prevent pregnancy	YES	76 40.6
	NO	52 59.4

2. There are two types of IUD contraceptive: copper IUD and Hormonal IUD	YES	24	18.8
	NO	104	81.3
3. During IUD insertion and removal, the pain experienced is unbearable, and require surgical operation	YES	24	18.8
	NO	104	81.8
4. According to what I know, IUD prevents pregnancy by causing abortion	YES	112	87.5
	NO	16	12.5
5. According to what I know, IUD are very effective and reliable method of family planning.	YES	77	39.8
	NO	51	60.2
6. IUD can prevent pregnancy for a period of 10-12 years and I can get it removed whenever I want to get pregnancy without any other consequences	YES	67	52.3
	NO	61	47.7
7. According to what I know, IUD may cause an endless menstruation	YES	92	71.9
	NO	36	28.1
8. I think when I choose IUD as family planning method, my husband will feel strings during sexual intercourse and they can hurt him	YES	92	71.9
	NO	36	28.1
9. While using the IUD as contraceptive methods, it's said that the device can migrate into other parts of the body.	YES	87	68
	NO	41	32
10. During ANC session the knowledge I received on IUD was satisfactory for me to decide whether I can choose the method or not	YES	23	82
	NO	103	18

4.2 Level of acceptability of IUD contraceptive among women attending ANC in Gasabo district health centers.

The objective two of the current study was to determine the level of acceptability of IUD contraception among women attending ANC in Gasabo District health centers. It was determined using a ten acceptability indicators graded one point for each indicator, the maximum score was ten and minimum was nil. After computing, a percentage total score was generated and classified as poor acceptability for a score below 50%, and good acceptability for a score equal to or above 50%), and result figure was obtained below

IUD Acceptability among respondents

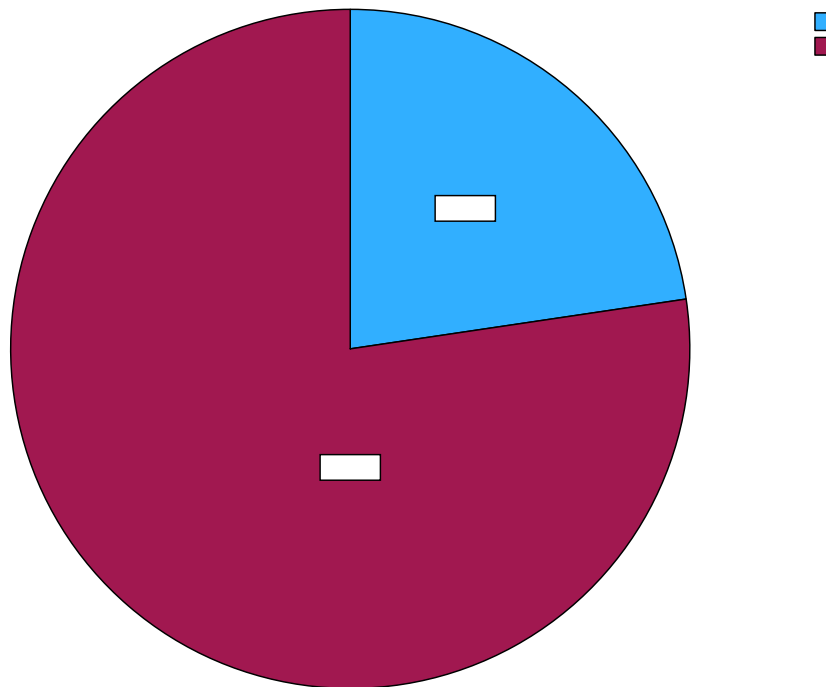


Figure 4.2: Level of IUD acceptability among women attending antenatal care in Gasabo district health centers, Kigali -Rwanda

Source: primary data (2022)

4.3. Factors associated with IUD acceptability among women attending ANC in Gasabo district health centers

Correlation analysis and chi-square test were used to determine the association between socio-demographic characteristics and level of IUD acceptability among women attending ANC in Gasabo District health centers, findings were shown in table 3.

Table 4.3: Factors associated with IUD acceptability among women attending antenatal care in Gasabo district health centers

variable	Poor acceptability		Good acceptability		OR	95% CI		P-Value
	N	%	N	%				
Age								
30 Years and Less	21	16.4	71	55.5	1.010	0.781	1.305	0.942
Above 30	8	6.2	28	21.8	0.975	0.500	1.902	
Marital status								
married	21	16.4	76	59.4	0.943	0.735	1.210	0.630
Not married	8	6.2	23	17.9	1.187	0.596	2.367	
Education level								
Primary school and less	16	12.5	54	42.2	1.011	0.696	1.470	0.952
Secondary and above	13	10.2	45	35.1	0.986	0.986	1.559	
Occupation								
employed	21	16.4	68	53.1	1.054	0.812	1.369	0.701
Non employed	8	6.2	31	24.2	0.881	0.456	1.701	
Religious affiliation								
Christian	27	21	90	70.3	1.024	0.911	1.151	0.711
Others	2	1.5	9	7.0	0.759	0.174	3.317	
Number of living children								
Has no living child	19	14.8	36	28.1	1.802	1.243	2.611	0.005
Has one or more living children	10	7.8	63	49.2	0.542	0.321	0.914	
Antenatal care								
First ANC	11	8.5	31	24.2	1.211	0.699	2.098	0.504
More than 1 ANC	18	14.0	68	53.1	0.904	0.660	1.237	

Source: Primary Data (2022)

According to finding in table 3, there was no statistically significant association between socio-demographic characteristics and level of acceptability of IUD contraception among women attending ANC in Gasabo district health centers.

The difference in level of acceptability among Respondents aged 30 years and above and those aged 30 years and below was not statistically significant [OR=1.010; 95% CI = 0.781-1.305 P: 0.781] as well as the level of education and occupation status were not significantly associated with the level of IUD acceptability [OR=1.011 ;95% CI=0.696-1.470 P: 0.781] and [OR:1.054; 95% CI=0.812-1.369 P: 0.701]

However, it was noted that having one or more children was almost two times associated with IUD acceptability than not having one [OR= 1.802; 95% CI=1.243-2.611 P:005].

DISCUSSION

The present study found that among women attending ANC in Gasabo district health centers, 64.8% have inadequate knowledge about IUD contraception, 28.1% have moderate knowledge and only 7% have adequate knowledge, explanation for that might be related with their level of education and they get family planning education at health facility but may not be able to find more details by internet or through books, this go in line with other studies conducted in Zambia in which the low client knowledge among women in reproductive age and misconception about IUD contraception was noted by Neukom et al. ,in Brazil where Borges et al. found that a significant portion of women had knowledge about IUD Contraception below the median, and it was therefore associated with current and past use of method ,in Ghana, not having IUD-specific knowledge, relatively low community influence, up fronts cost and limited or absence of method choice resulted in low utilization of such a highly effective method of contraception, in United states Craig et al. found a high proportion of incorrect answers among the respondents such as

associating IUD with unpleasant side effect, infertility or uterine cancer , (Neukom et al. 2011; Borges et al.2020,Greene and Stanback,2012; Craig et al.2014).

Antenatal care is seen as a good opportunity for both women and health care provider to address misconception around IUD, to clarify the difference between true advantage and disadvantage of IUD contraceptive method therefore increase the level of knowledge for more informed choice in postpartum family planning contraception, (Da Costa et al.2019).

Others researchers in United states have found the same attitude level among 143 young women who have heard about IUD contraception, only 14.7% had a positive attitude towards IUD, which however was significantly changed by increased knowledge about the method by a brief educational intervention about IUD use, risks, benefits, cost, side effect, as well as demonstration about IUD insertion and removal, after the intervention the positive attitude proportion risen to 53.8 % of participants.(Whitaker et al.2010)

In terms of factors associated with IUD acceptability in Gasabo district health centers, the researcher has found no significant association between IUD acceptability and respondent factors such as age, marital status or level of education, however, having one or more children increased the level of IUD acceptability up to two times more than having no child [OR= 1.802; 95% CI=1.243-2.611 P:005].,in a study done in Uganda, the research identified belief that IUD contraceptive can cause long-term sterility has negatively affected the women's attitude towards the method due to fact that their status in marital families and in society depend most of the time on their proven fertility. (Asiimwe et al.2014), the same findings were observed in Egypt, a study conducted in 10 public family planning clinics assessing IUD acceptability among nulliparous women, where among 530 nulliparous women seeking contraception, most of them refused IUDs at 96.2%; subsequent infertility related fear was the strong reason indicated by more than a half of surveyed women. (Elkhateeb et al.2020),

In developed countries, the availability, affordability and acceptability of contraceptive method is high include IUD, contrary to many developing countries especially in sub-Saharan Africa where uptake contraception is low, IUD in particular is linked to limited choice, cultural or religious biases, poor quality of family planning services, fear of side effects and economic barriers as well. (Townsend et al.2007, Greene and Stanback,2012).

CONCLUSION

This study's main objective was to assess the level of knowledge and acceptability towards intrauterine device contraceptive in Gasabo district health centers, Rwanda.

The findings revealed the majority of respondents have inadequate knowledge towards IUD contraceptive yet with good IUD acceptability showing their good will to use the method despite the low knowledge and misconception about it. Therefore, as the population of Rwanda is still increasing not in accordance with resources and posing a challenge to the development of country; Intrauterine device as a Long acting reversible contraceptive method can play its role in addressing the issue of high fertility rate to improve maternal and child wellbeing in Rwanda.

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