What is the Level of Knowledge of Birth Control among Women of Reproductive Age in Bwaise Slum? A Cross-Sectional Study.

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Abstract

Background

The need to control childbirth and maintain a manageable family size is a fact of modern life. This is because of the social and economic realities of the modern world system. Because of this, the practice of contraception has remained in the spotlight. To increase birth control uptake, knowledge and awareness are frequently used. However, evidence on birth control knowledge among populations in low socioeconomic settings in Africa is limited. The goal of this research was to look into women's knowledge of birth control options in the Bwaise slum.

Methodology

Using a cross-sectional study design, we interviewed 384 women aged 15–49 years, selected through systematic random sampling. Data on socioeconomic characteristics, knowledge of birth control options, and birth control use were collected using a structured questionnaire. Descriptive and inferential statistics (chi-square set at 0.05 level of significance) analysis were done using IBM SPSS version 21.

Results

The mean age of participants was 29.39 years. There is a high level of knowledge and awareness of birth control options but with relatively low uptake, 91.4% of women knew at least one option. 66.4% of respondents reported using any birth control options in the past compared to 37.2% currently using. Injectable, oral pills and Norplant/implant were the most known and used options. Age, level of education, marital status, and income were significantly associated with the use of birth control ($p < 0.05$).

Conclusion and recommendation

Our findings show that respondents have high knowledge of birth control but low use. We, therefore, recommend that government health agencies conduct a sensitization campaign aimed at the increase in the utilization of birth control services involving religious and cultural leaders. Women of reproductive age, to attend at least one SRH counseling session, in any health facility, to be updated with relevant news on birth control services.

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1. Background of the study

Women throughout the world need children at widely spaced intervals to live healthier life (Aransiola, Akinyemi, and Fatusi, 2014). An estimated

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1.1 billion people need family planning among the 1.9 billion women of reproductive age worldwide. They desire to limit or delay childbearing. While knowledge of birth control has grown significantly over the last decade, uptake of birth control services has remained low, particularly in Sub-Saharan Africa (Alege *et al.,* 2016a). Currently, nearly 10% of women who need to prevent or delay conception are not using any form of contraception (Family, 2020). Changes in modern contraceptive prevalence rates (CPR) in some sub-Saharan African countries as expected with the 2020 initiative, which aimed to enable 120 million additional women to use modern contraceptive methods by 2020 in the world's 69 poorest countries remain slow. The provision of modern birth control methods is one of the main components of sustainable global development, poverty alleviation, environmental safety, increased life expectancy, women's empowerment, gender equality, and health promotion, including the decline of maternal morbidity, mortality, and unsafe practices for abortion, and the improvement of child survival and health through birth spacing. Serial sub-Saharan African countries still present a high total fertility rate of almost 5.4 and a low modern contraceptive prevalence rate (Global and Ahmed, 2020). Access to and utilization of FP methods is hampered in most Sub-Saharan African countries due to a lack of knowledge about where to obtain birth control methods and a lack of information about what women consider to be trustworthy sources of birth control information and services (Alege *et al.,* 2016a).

In the East African Region, modern contraceptive prevalence is generally low and with a wide range of disparities, from 17.7% in Burundi to 45.1% in Rwanda. Generally, contraceptive use in most countries in Eastern Africa is low compared to the levels of unmet need. In most countries' reports, injectables and pills are the most popular methods, with low utilization of condoms, implants, and intrauterine devices (IUDs). The use of condoms and IUDs is tainted by numerous myths and misconceptions, both among health workers and the general population (Health, 2020).

Although birth control knowledge is universal in Uganda (98%), at least one option is known by each woman in urban or rural areas (Alege *et al.,* 2016b) (District *et al.,* 2021), many women who want to avoid pregnancy are not using effective family planning methods (Planning, 2020). Ugandan women, on average, give birth to nearly two more children than they want (6.2 vs. 4.5), one of the highest levels of excess fertility in Sub-Saharan Africa (High *et al.,* 2017). More than half of pregnancies in Uganda are unintended, and almost a third of these end up in abortions. This is especially true for most women in rural areas and urban slums, who face various health constraints that increase susceptibility to unsafe abortions and their complications. These account for 5% of maternal deaths in the country (Nteziyaremye and Nteziyaremye, 2020).

The projected high population growth rate for urban slums in the immediate future (Nolan, 2016), leads us to believe that birth control service conditions will get worse and the impact on the availability and safety of options will be huge. It is critical to Improve Sexually and Reproductive Health (SRH), by raising awareness of and providing a variety of affordable, effective, and safe birth control options (Renzaho *et al.,* 2017). Hence, it is relevant to address the gaps relating to birth control in slums for policy and program implementation for 2030 agenda effectiveness (Sustainable and Goals, 2020). The purpose of the study was to assess the level the knowledge on birth control use among women of reproductive age in the Bwaise slum.

2. Methodology

Study design

A descriptive cross-sectional study survey was conducted employing quantitative approaches. This was to help in the collection of the data from birth control among women of reproductive age.

Study area

The study was carried out in the Bwaise slum, in Kawempe Division, Kampala Central District, Uganda. It mixes commercial, industrial, and residential settlements. The data was collected be-

tween the second and third weeks of April 2022, from 11th to 23rd.

Study population

The study population was comprised of women of reproductive age (15–49 years) living in the Bwaise slum three months before the study and who were able to give consent to participate in the study.

Sample size determination

Sample of 384 married women was obtained using the Cochran formula no= Z2pq/e2 (Naing, 2003 , where:

- The sample size is no.

- At a 95% confidence level, the standard normal deviation is set at 1.96 (Z).

- e, the margin of error, absolute size precision set to 5%. The level of significance is 0.05, i.e., 0.05

- p, the estimated proportion of an attribute that is present in the population. The target population's characteristics are not known, so (50% or 0.5), which is the standard for unknown populations and

- q = 1-p

- no = (1.96)2 (0.5) (1-0.5) / (0.05)2 = 384

Sampling procedure.

Systematic random sampling was used for selection. Respondents in this targeted area were selected from a larger group using a random starting point, with a fixed interval of 10. This sampling method provided an equal probability for all women of reproductive age to be included in the study hence the selected sample was representative of the study population.

Data collection method and tools

A structured questionnaire was administered to collect data with closed-ended questions. A Google form, an instrument developed by the researchers, was used. The questionnaire in English was instantly translated into Luganda, the most widely spoken language in the study area, as per the respondent's choice.

Quality control

During data collection, the research supervisor was close to the researcher to ensure that the right data is collected. Continuous verification of data was done during data collection, entry, and cleaning to further ensure the integrity of the data. Identified errors during the process were immediately rectified at the different levels. The questionnaire was pretested in the parish of Bukesa. This was done to test the validity and reliability of the questionnaire's questions.

Selection criteria

Inclusion criteria

The study was carried out among married women of reproductive age (15–49) living in the Bwaise slum three months before the survey, and only those who gave consent were included in the study.

Exclusion criteria

Women who are not residents of the Bwaise slum and those who have stayed in the Bwaise slum for less than 3 months before the survey were not included. Women who refuse to give their consent and those not in a capacity to give consent were excluded.

Data collection procedure

An introductory letter from the head of the department at Cavendish University Uganda Faculty of Science and Technology was given to the researcher and this helped to introduce researchers to authorities, community leaders, and participants for a better collaboration after understanding the purpose of their presence in the area. The researcher administered the questionnaire to participants who consented through a face-to-face interview.

Data management

The data that were collected from each individual were kept on a secured computer under lock and key, with only the researcher and the assistant having access to them.

Variables

In this study, independent variables were Sociodemographic characteristics and knowledge of birth control options, whereas the dependent variables were the use of birth control options.

Data process

All the 384 filled questionnaires were entered into one Excel sheet then edited, coded, and entered into IBM SPSS version 21 for analysis. Descriptive statistics were presented in frequency and percentage. The chi-square test was used to

establish a hypothesis, association between the independent variable (social demographic variables) and the dependent variable (use of birth control options), and Fisher's exact test for variables with an expected count less than 5 in cells, was performed and a p-value < 0.05 was accepted as statistically significant at 95% CI. ANOVA was also used to compare the means between the different barriers to BC use.

Ethical considerations

Respondents' safety, privacy, and anonymity were observed during recruitment and interviews, as recommended by the World Health Organization in the Standards and Operational Guidance for the Ethics Review of Health-Related Research with Human Participants. The interviews were voluntary after signing a written consent form, and participants could withdraw anytime they feel uncomfortable. Participants' confidentiality of collected information was insured by clients' not providing names or any other identifiers only a unique code, which was given to each participant. The study methodology was reviewed and approved by the Institutional Review Board (IRB) of Cavendish University Uganda.

Bias

The quality of data entered will depend on the credibility of respondents, Information bias may occur because of participants not responding truthfully, the confidentiality of the respondent must be ensured, and the question formulated in a way that minimizes the risk of inappropriate answers by emphasizing the purpose of the study. Limited resources like funds and time.

3. Results

Socio-demographic characteristics of the study participant shows the socio-demographic characteristics of respondents in this study. A total of 384 women of reproductive age (15–49) took part, with a mean age of 26.39 and a distribution of ages as follows, under 18 being 66 (17.2%), 19-29 being 205 (53.4%), 30-39being 78 (20.3%), and 40-49 being 66 (17.2%). About 198 (51.6%) of women reported living with their partners, either married or cohabiting. Approximately half of the participants, 178 (46.4 %), have completed some form of secondary education. In terms of religion, the majority of those polled (176, 45.8 %) were Protestants, followed by Muslims (117, 30.5 %), and Catholics (90, 23.4 %). Almost half of the participants (185, 48.2 %) have ever had an unplanned pregnancy and 73 (19.0%) have ever had an abortion. At the time of the survey, 21 (5.5 %) respondents were pregnant. Our respondents had a variety of occupations, the majority 151 (39.3%) were small business owners, 78 (20.3 %) are housewives, 74 (19.3 %) are salaried, and 57 (14.8 %) were students, and 24 (6.3 %) no structured activity. 218 (56.8 %) have an income but only 37 (9.6 %) of these find it sufficient for themselves and their families. 48.2% have ever had an unplanned pregnancy and 19.0% have ever had an abortion.

Table 1. Socio-demographic characteristics of the study participants

Variable	Frequency (n)	Percent (%)
Age groups		
19-29	205	53.4
30-39	78	20.3
≤18	66	17.2
40-49	35	9.1
Marital status		
Married/Cohabiting	198	51.6
Single, No partner	83	21.6
Single, Non-regular partner	66	17.2
Divorced/separated	29	7.6
Multiple partners	4	1.0
Widow	4	1.0
Level of education		
Secondary incomplete	178	46.4
Primary incomplete	84	21.9
Tertiary	55	14.3
Primary complete	31	8.1
Secondary complete	29	7.6
Non-formal education	7	1.8
Religion		
Protestant	176	45.8
Muslim	117	30.5
Catholic	90	23.4
None	1	.3
Occupation		
Housewife	78	20.3
Paid employment	74	19.3
School	57	14.8
Small business owner	151	39.3
Unemployed: no structured activity	24	6.3
Income		
Yes	218	56.8
No	166	43.2
Sufficient income		
Yes	37	9.6
No	347	90.4
Unplanned pregnancy		
Yes	185	48.2
No	199	51.8
Abortion		
Yes	73	19.0%
No	311	81.0%

Knowledge of participants on Birth control

Knowledge of birth control among participants in this study is high (383, 99.7 %). Approximately 351 (91.4 %) of those polled were aware of at least one option, the majority 225 (58.6 %) with knowledge of three to five options. The most frequently mentioned options were injectable 291 (75.8 %), oral pills 242 (63.0 %), Norplant 230 (59.9 %), and IUD 140 (36.5 %). While the least known

method were spermicides 2 (.5 %), Male sterilization 2 (.5 %), female sterilization 8 (2.1 %), emergency contraception 27 (7.0 %), natural methods 34 (8.9 %), condoms 64 (16.7 %) and 30 (7.8 %) who did not know any options.

Table 2. Knowledge on Birth control options

Variable	Frequency (n)	Percent (%)
Knowledge on Birth control		
Yes	**383**	**99.7**
No	**1**	**.3**
Number of options known		
0-1	**78**	**20.3**
2-4	**279**	**72.7**
≥5	**27**	**7.0**
Source of information		
Health workers	**128**	**33.3**
Friends/Relatives	**124**	**32.3**
School	**73**	**19.0**
Media	**48**	**12.5**
Never heard about	**11**	**2.9**
Formal training or teaching on birth control		
Yes	**211**	**54.9**
No	**173**	**45.1**
Knowledge of advantage of using a birth control option		
Avoid Unplanned pregnancy	**179**	**46.6**
Good spacing	**98**	**25.5**
Well planning for my family	**61**	**15.9**
None	**33**	**8.6**
Economic stability	**9**	**2.3**
Reduce risk of HIV/STI	**2**	**.5**
Reduce incidence of abortion	**1**	**.3**
Child development	**1**	**.3**

Table 3. Birth control options known, ever used and currently used

Options	BCO known		BCO ever used		BCO currently used	
	N	%	N	%	N	%
Condoms	64	16.7	23	6.0	16	11.2
Emergency contraception	27	7.0	24	6.3	12	8.4
Female Sterilization	8	2.1	1	0.3	1	0.7
Injectable	291	75.8	173	45.1	45	31.5
IUD	140	36.5	5	1.3	2	1.4
Male sterilization	2	0.5	0	0	0	0
Natural Methods	34	8.9	25	6.5	32	22.4
None	30	7.8	129	33.6	113	29.4
Norplant/Implant	230	59.9	64	16.7	30	21.0
Oral Pills	242	63.0	71	18.5	14	9.8
Jelly/Foam/Sponge	2	0.5	0	0	0	0

Health workers were the most common first source of information about birth control, accounting for 128 (33.3 %), followed by friends and relatives at 124 (32.3 %), and the media was the least common first source, 11 (2.9 %) followed by school 73 (19.0 %) and 11 (2.9 %) had never heard about birth control options. The majority of participants (211, or 54.9 %) had ever received formal training or education on birth control options.

Table 3. Level of knowledge, knowledge on facility with birth control services and being taught previously about birth control

		Level of knowledge of birth control options			
		Low	Moderate	High	P-value
Having been formally taught about birth control	Yes	15 (7.1)	177 (83.9)	19 (9.0)	**.000**
	No	63 (36.4)	102 (59.0)	8 (4.6)	
Know a facility which provides birth control services	Yes	34 (11.8)	228 (79.4)	25 (8.7)	**.000**
	No	44 (45.4)	51 (52.6)	2 (2.1)	

Use of birth control options

About 255 (66.4%) participants have ever used a birth control option, among which the majority ever used injectable 173 (45.1%), followed by oral pills 71 (18.5%), Norplant/implant 64 (16.7%), natural methods 25 (6.5%), emergency contraception 24 (6.3%), condom 23 (6.0%), while the least used were female sterilization 1 (.3%) and IUD 5 (1.3%). Injectable, Norplant, oral pills, and natural methods were perceived to be the best, safer, and with fewer side effects as shown in Table 4. At the moment of survey, 143 (37.2%) of respondents reported using a birth control option, among which 45 (31.5%) were using injectable, 32 (22.4%) natural methods, 30 (21.0%) Norplant, 16 (11.2%) condoms, 14 (9.8%) oral pills, 12 (8.4%) emergency contraception, 2 (1.4%) IUD and 1 (.7%) tubal ligation. Injectable, natural methods, norplants, oral pills, and condoms were perceived to be the best, safer, and with fewer side effects. Controlling birth accounted for 138 (35.9) and was the most reported by the respondent to be the major reason for currently using a birth control option and the least reasons were economic and well-being, respectively .5% and .8 %. Results show that for the majority of participants currently using birth control, the decision was taken mutually with the partner 90 (23.4%), while 52 (13.5%) took the decision individually. About 110 (28.6%) of current users and partners were informed of the use of birth control.

Table 4. Perception of respondents on Birth control options ever used and currently used

Variables	Options ever used						Option currently used					
	Best		Safer		Less side effects		Best		Safer		Less side effects	
	N	%	N	%	N	%	N	%	N	%	N	%
Injectable	104	27.1	105	27.3	63	25.8	44	11.5	44	11.5	27	12.0
None	35	9.1	34	8.9	99	16.4	11	6.5	11	7.0	46	7.0
Norplant/Implant	35	9.1	37	9.6	24	6.3	25	6.5	24	6.3	14	6.5
Oral pills	26	6.8	27	7.0	22	5.7	15	3.9	14	3.6	11	3.6
Natural methods	25	6.5	22	5.7	21	5.5	25	2.9	27	3.1	25	2.9
Emergency pills	14	3.6	14	3.6	9	3.9	8	2.9	8	2.9	5	2.9
Condoms	12	3.1	14	3.6	15	2.3	11	2.1	12	2.1	11	1.3
Don't know	2	.5	0	0	0	0	1	.5	0	0	1	.5
IUD	2	.5	2	.5	2	.5	2	.3	2	.5	2	.3
Female sterilization	1	.3	1	.3	1	.3	1	.3	1	.3	1	.3

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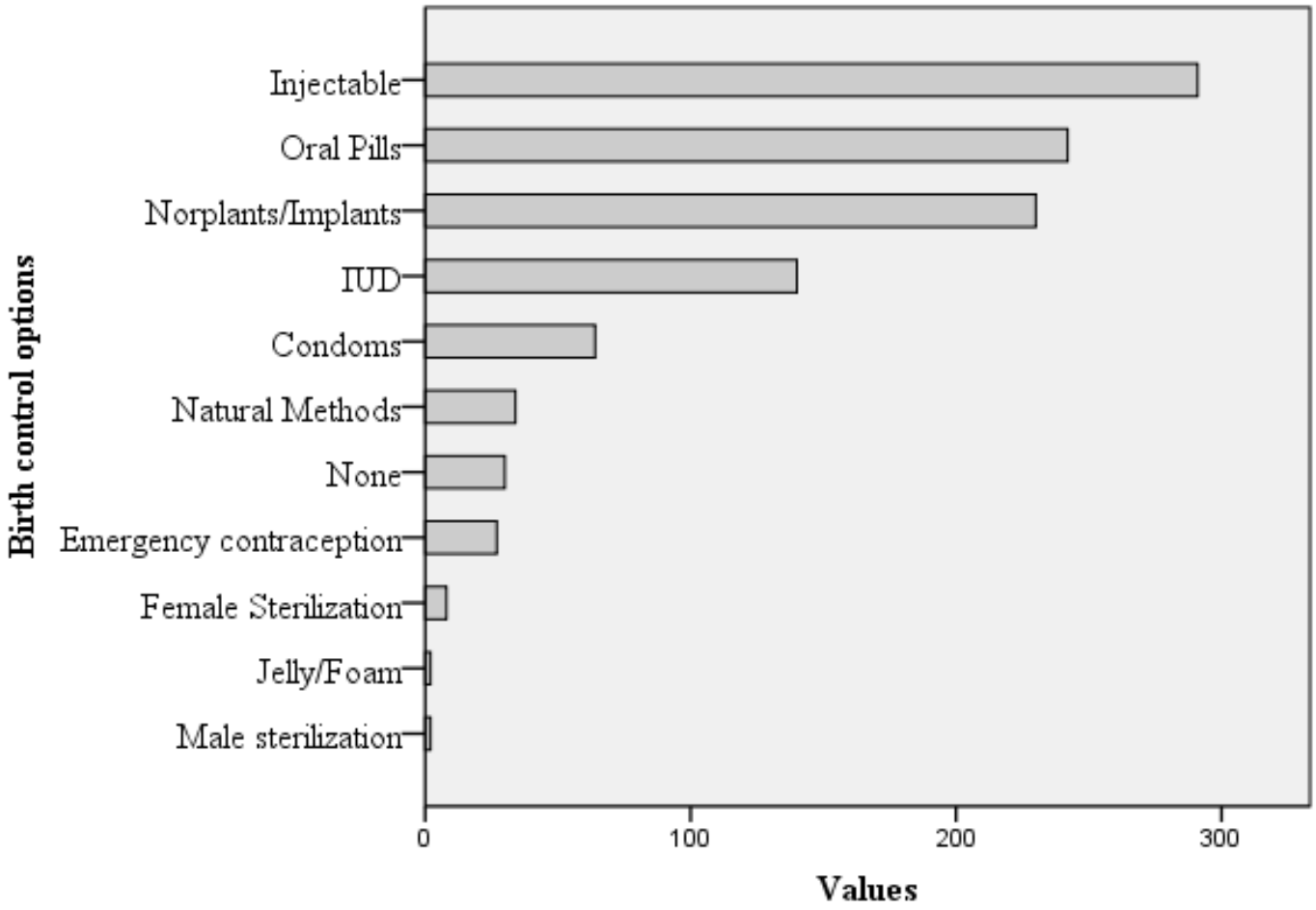

Figure 1: Birth control options known

Table 5. Reason for currently using, decision taken and partner's awareness

Variables	Frequency (n)	Percent (%)
Reason for using it currently		35.9
Birth control	138	.5
Economic	2	.8
Well-being (Health)	3	
Decision taken		
Mutually (Couple)	90	23.4
Individually	52	13.5
Other family members	1	.3
Partner aware of birth control option use		
Yes	110	28.6
No	24	6.3
Don't have a partner	9	2.3

4. Discussion:

4.1. Knowledge on birth control options and their use

Knowledge of family planning is regarded as the first step toward the adoption of a birth control option. In this study, participants had a high level of knowledge about birth control (99.7 %). Each woman was aware of at least 2.7 birth control options on average, with 91.4 knowing at least one option and 86 % knowing at least one advantage of using birth control. Health workers were the primary source of information on birth control. This agrees with the findings of a study in Uganda, which showed almost the same percentage of knowledge of birth control but a difference in the percentage of women who knew at least one option (97% in Kira and 91.4 in Bwaise) (District *et al.,* 2021). However, the average number of options known found in this study is far less than what was found in the informal Kira municipality (10 family planning methods). This dif-

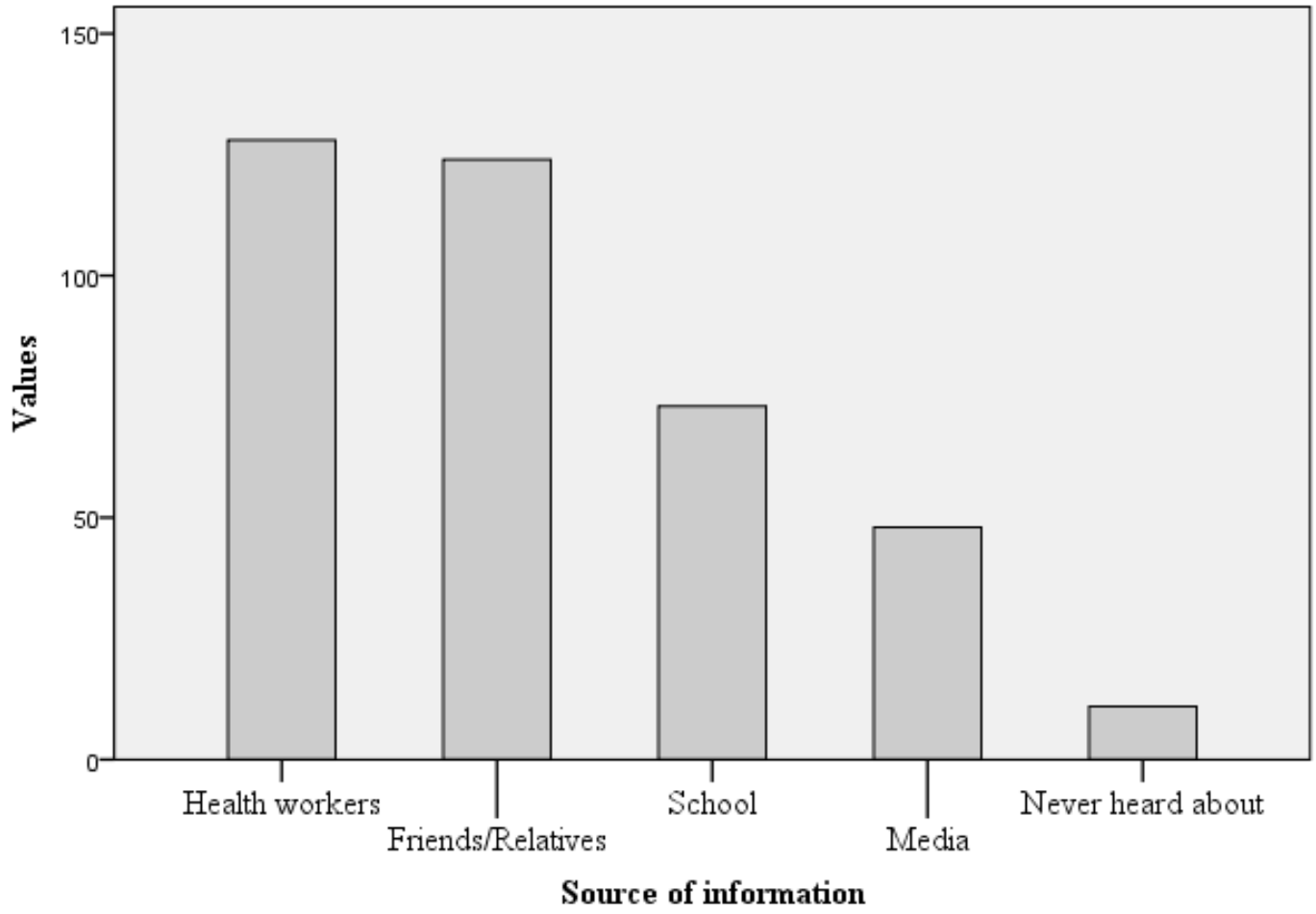

Figure 2: Source of information about birth control options

ference may be due to the difference in sample sizes and methodology used. A study conducted in Nigeria showed that the main source of information on birth control is health workers from health facilities (Afolabi *et al.,* 2015), and also in Uganda Government and private health facilities, friends and media were the main sources of information (Alege *et al.,* 2016b). This agrees with the present study with 33.3% of respondents who reported having heard about birth control from health workers, followed by friends/relatives with 32.3%. The most frequently mentioned options were injectable 75.8 %, oral pills 63.0 %, Norplant 59.9 %, and IUD 36.5 %. While the least known method were spermicides 0.5 %, Male sterilization 0.5 %, female sterilization 2.1 %, emergency contraception 7.0 %, natural methods 8.9 %, condoms 16.7 % and 7.8 % who did not know any options. A similar study in Nigeria showed that Condom use was the most widely known and used method of contraceptive regardless of marital status and reproductive age status (Afolabi *et al.,* 2015). Most women have much knowledge of injectable is because most of the respondents are married and want to use long-term methods, low knowledge of spermicides is due to the vagueness around its mode of utilization and effectiveness. For male vasectomy, it is due to the cost, which is high for the respondents willing to use it, and limited health facilities conducting the male va-

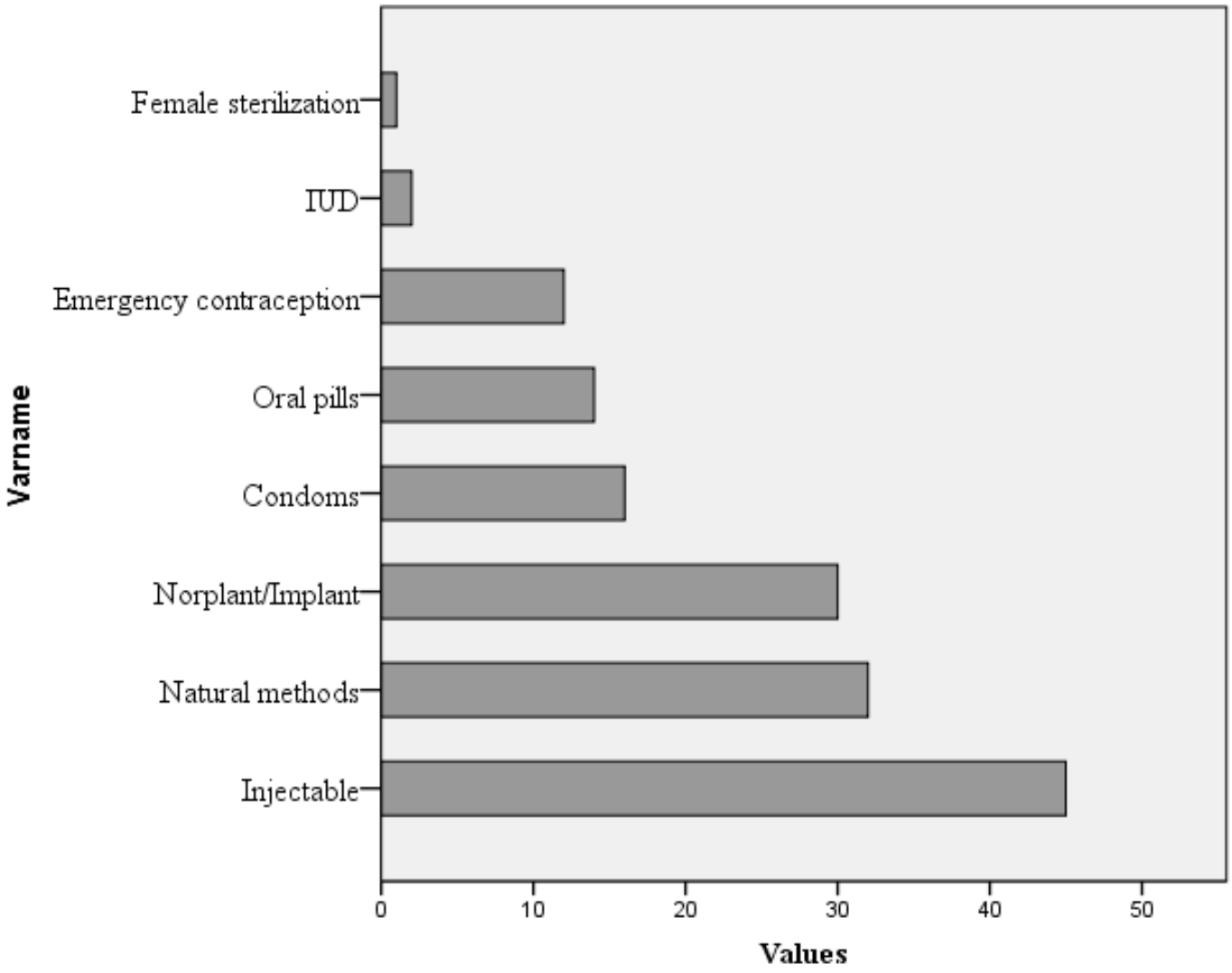

Figure 3: Birth control options currently used

sectomy. Tubal ligation is not also well known to respondents most probably because it is expensive and women do not know where to get the services.

At the time the survey was conducted only 37% of participants were using a birth control option while 66.4% have ever used a birth control option in their life. Injectable 45.1%, followed by oral pills 18.5%, Norplant/implant 16.7%, natural methods 6.5%, emergency contraception 6.3%, condom 6.0%, while the least used were female sterilization 0.3% and IUD 1.3%. A study in Kenya almost had similar findings, that the most used methods were injectable followed by oral pills and natural methods (Flood, 2012). In this study, most women currently using a birth control option viewed injectable as the best and very safe option to use while a study conducted and the most intended to be used in future by participants. Short-term methods are shown to be preferred when the intention to use long-term methods is higher for a major portion of Ugandan women (District *et al.,* 2021). In another study conducted in India, tubal ligation was the most commonly used followed by oral pills, condoms, intra-uterine devices, traditional methods, injectables, emergency contraception, and vasectomy respectively (Lal, 2015). In a study conducted in Tanzania long-term modern contraceptive methods have been increased and preferred,

IUCD was inaccessible due to the lack of skilled workers and facilities. Short-term methods are shown to be preferred when the intention to use long-term methods is higher for a major portion of Ugandan women (District *et al.,* 2021). The injectable option is preferred for several reasons one being the time factor i.e., that one can have an injection that keeps them free from pregnancy for a maximum of three months or more without having to worry. The method is said to be effective only if properly used and the beauty of it is that it can be used only when needed and discontinued easily. In addition to that, pills were said to be readily available mainly on market and fairly cheap although when not used consistently one could have to buy a new dose and that makes them expensive at times. Most married women who use modern contraceptive methods rely on short-acting methods, particularly contraceptive injectables, which are not as cost-effective as long-acting methods, such as implants and intrauterine contraceptive devices (Lives and Money, 2020). The contraceptive Norplant/implant provides effective protection against pregnancy for 5 years. Norplant allows women and men to engage in intercourse without taking contraceptive action before, during, or after it. It is practical. The use of condoms and IUDs is tainted by numerous myths and misconceptions, both among health workers and the general population (Health, 2020). Alege et al. found that at the time of the survey, among the users, the majority intended to use injectables, followed by those who intended to use implants, pills then male condoms. They also note that slightly more than half of the non-users did not intend to use any method in the future(Alege *et al.*, 2016b). It seems to be opposing the findings of this study, almost 60.2% of respondents, currently using or not, intended to use one or a different one in the future.

Association between Socio-Demographic characteristics, birth control knowledge, and use Women aged between 20 and 29 were the most represented and these are represented in the three levels of knowledge, with a high number with a moderate level of knowledge, respectively, 19.5% with low level, 72.2% moderate level, and 8.3% with high level. Those between 30 and 39 followed and 82.1% of them with moderate level while 7.7% with a high level of knowledge and these two age groups represent respectively the first and second users of birth control compared to others. Results revealed a statistically significant difference between age groups and level of knowledge of birth control options, $p<0.001$. Marital status with married/cohabiting women was most represented in the high-level knowledge group and the most users of birth control among participants. Women with either incomplete or complete secondary school or tertiary education had a high level of birth control knowledge compared to other levels. Occupation and having a source of income had a significant association with the level of knowledge. There was also a statistically significant difference between age groups and marital status with the current use of birth control options. We also used knowledge of a facility with birth control services and having been formally taught about birth control in the past to evaluate knowledge, and we found that there is also a statistically significant difference between the two in the level of knowledge of birth control options, $p<0.001$. A study conducted in sub-Saharan countries, revealed higher levels of use are observed among unmarried sexually active than married females (Foundation, 2017). In another study conducted in Saudi Arabia, there was a significant increase in contraceptives used among working women, 30 years and older, with a high level of education, and those having a large number of children (Elgharabawy and Ahmed, 2015). It is consistent with this study as in testing the association between the socio-demographic characteristics and the knowledge of contraceptives, there statistically significant difference at $p<0.001$ except for belonging to a certain religion, $p=0.950$.

5. Conclusion

The study concluded that knowledge of birth control is high. Women of reproductive age in Bwaise know of some of the available options. Though knowledge was high not all birth control options were known to the women. Knowledge of

the negative effects of birth control like the side effects and medical complications was high among study respondents than knowledge of the benefits. The findings show that birth control use was poor in Bwaise amidst the high reported knowledge. The study found that women of childbearing age in the Bwaise slums used contraceptives below the national target of 50%. Injectable, oral pills, Norplant/implant, and natural methods were the most commonly used method. Emergency pills, IUDs, vasectomy, and tubal ligation are not commonly used.

6. Limitations of the study

Information bias may occur because of participants not responding truthfully and Limited resources like funds and time.

Recommendation

1. Findings reveal high knowledge of injections, oral pills, and Norplant. Therefore, we recommend, that the government health agencies, to conducted active outreaches to relay comprehensive information about birth control options such as tubal ligation, vasectomy, emergency medication, and the IUD involving women of childbearing age, religious and cultural leaders in Bwaise slum. This should include detailed knowledge of how the method works, benefits, expected side effects of using each of the options, and their costs. Government health agencies should also ensure that local health centers have a supply of contraceptives and that the medical staff at these health centers are adequately trained in reproductive health.

2. Findings also revealed that women's high knowledge of birth control in Bwaise slums does not translate into usage as there is a low level of birth control use in Bwaise slums. We, therefore, recommend women of reproductive age in Bwaise connect with any health facilities that provide birth control services, as nearby medical centers do not provide, to attend at least one SRH counseling session annually, to be updated with relevant news.

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List of Abbreviations.

BCO Birth Control Option
CPR Contraceptive Prevalence Rate
IUD Intrauterine Device
IRB Institutional Review Board
mCPR Modern Contraceptive Prevalence Rate
SDGs Sustainable Development Goals
SRH Sexual and Reproductive Health

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Conflict of interest

We declare no conflict of interests.

Appendix A. References:

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