Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

Knowledge of contraceptive use among adolescent girls and young women aged 10 - 24 years at Kiyindi landing site, Buikwe District, Uganda. A cross-sectional study.

Wamala Amir[1,*], Mabonga Habert[3], Margaret Joy Nalubega[2]
[1]Makerere University Walter Reed Program
[2]Faculty of Health Sciences, Uganda Martyrs University
[3]Faculty of Health Sciences, University of Kisubi

Abstract

Background

There have been several other efforts targeting adolescent girls and young women to foster their behavioural change by way of improving their knowledge, attitudes, and practices of contraceptive use. The objective of the study was to assess the knowledge of contraceptive use among AGYW (10-24Years) at Kiyindi landing site.

Methodology

A descriptive cross-sectional study design was employed, utilizing quantitative methods for data collection. Data were entered and analyzed using Stata statistical software version 14.0, Stata Corporation. Descriptive statistics were used for bivariate and multivariate logistic regression analysis.

Results

More than half of the respondents (55.7%, N = 377) were aged between 20 and 24 years. Bivariate Analysis of knowledge about contraception and Use by Respondents showed that Knowledge about the importance of leaving a space at the tip when putting on a condom ($\chi2$=54.887, p-value of .000), importance of the man to pull out right after ejaculation when using a condom (X2=21.073, p-value of .000), wearing two latex condoms to provide extra protection ($\chi2$=3.486, p-value of .041), Women "taking a break" from the pill every couple of years ($\chi2$=8.277, p-value of 0.003), women switching to another type or brand of pill when having side effects with one kind of pill, ($\chi2$=3.896, p-value of .032), a woman having a pelvic exam as a must to get a birth control pill ($\chi2$=4.743, p-value of .020), and a woman using an IUD even if she had never had a child ($\chi2$=4.135, p-value of .029) were significantly associated with respondents' use of contraception.

Conclusions

Respondents were found to be moderately knowledgeable about contraception.

Recommendations

Health workers should teach the community about family planning holistically to increase awareness, so that family planning utilization will be enhanced.

Keywords: *Knowledge, Adolescent Girls, Contraceptive use.*
Submitted: February 01, 2026 Accepted: February 18, 2026 Published: March 01, 2026

Corresponding author: *Wamala Amir*
*Email: **awwamalaamir25@gmail.com***
Makerere University Walter Reed Program

Background

An estimated 920 million adolescent girls and young women aged 10 - 24 years across the globe are at risk of child birth (UNFPA, 2014); with about 19.2 million of these giving birth every year in low and middle-income countries (Nsanya et al., 2019), which significantly contributes to morbidity and mortality, low educational attainment and socio-economic disadvantage of girls and their families (WHO, 2020). Uganda has an estimated 18% of its population comprising AGYW (UBOS, 2019b), while Buikwe district and Kiyindi area, respectively, have 78% and 80% of their populations below 30 years (UBOS, 2019a). It was reported that in Buikwe district, youths get involved in sexual intercourse at a very tender age of less than 15 years,

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

yet the use of contraception is very low or unknown among youths aged 10 - 24 years (Government, 2015). Among all women of reproductive age in the district, the use of modern contraception was estimated at 42% despite some interventions to increase awareness and access to contraceptive services (Government, 2015). Teenage pregnancies, which are obvious consequences of low contraceptive use, have persistently remained high in the Kiyindi area, evidenced by the reported 455 cases in 2018 (MOH, 2018). Studies documenting whether adolescent girls and young women at Kiyindi Landing Site had either heard of, let alone attempted to use, contraceptives were not found by our search. This suggested that the knowledge of contraceptive use, attitudes, and practices was sparsely distributed among AGYW at Kiyindi Landing site. Kiyindi area, the study's focus is a rural setting, a landing site, a fishing community, a beehive of sexual activity, and is categorised as Most At Risk Population (MARP) for HIV infection and unwanted pregnancies (Nanvubya et al., 2015).

There have been several other efforts targeting adolescent girls and young women to foster their behavioural change by way of improving their knowledge, attitudes, and practices of contraceptive use. For example, PEPFAR through the DREAMS Partnership has, for over 10 ten years in Uganda, been providing counselling and education to AGYW about the available contraceptive methods mix, condom promotion, and appropriate referral to where to access contraceptive services to prevent HIV and pregnancy (Saul et al., 2018). Additionally, the Ministry of Health, in its Costed Family Planning Implementation Plan, identified educating the population to improve access to family planning for all, with a focus on the youth, and to deliver a mix of commodities for contraceptive methods (MOH, 2014). Despite these interventions, a significant 35% of all women of reproductive age had not heard or seen family planning messages through any media sources (RHU, 2018). Hence, our study assessed knowledge, attitudes, and practices of contraception among AGYW, which is a risky age group at the Kiyindi landing site. It was against this backdrop that the researcher was desirous of assessing the knowledge, attitudes, and practices of contraceptive use among AGYW at Kiyindi landing site and trying to establish if there was any pattern and relationship between the findings in the foregoing studies and what was happening in the study area. The study aims to assess the level of knowledge of contraception among AGYW at Kiyindi landing site.

Methodology

Study Design

The study utilised a Cross-sectional quantitative approach to assess how knowledge, attitudes, and practices predicted the use of contraception by adolescent girls and young women aged 10 - 24 years at Kiyindi landing site. The study used a descriptive cross-sectional design, which enabled gathering of data from a relatively large number of different categories of respondents at a particular point in time without the need for follow-up of the same respondents.

Study Area

The study was conducted at Kiyindi landing site on the shores of Lake Victoria in Buikwe district. Kiyindi village is one of the biggest landing sites in the country and is renowned for its fishing business. Kiyindi is heavily populated with adolescent girls and young women (AGYW) involved in fish trading during the day and prostitution at night, which makes them vulnerable to unplanned/unwanted pregnancies. Buikwe District is bordered by Kayunga District to the north, Jinja District to the east, Buvuma District to the southeast, the Republic of Tanzania to the south, and Mukono District to the west. The district headquarters at Buikwe are located approximately 60 kilometres (37 mi), by road, east of Kampala, the capital of Uganda and the country's largest city. This location is approximately 14 kilometres (8.7 mi), by road, southeast of Lugazi, the nearest large town. The coordinates of the district are: 00 21N, 33 02E. In 2012, the population of the district was estimated at about 429,600. The Kiyindi area had approximately 25.3% of the 8,456 households in Najja Sub-County in 2011 (Ssebisubi, 2013). The sub-county further had an estimated female population of 20,500 with a male-to-female ratio of 1.10 (Ssebisubi, 2013).

Study Population

The study population was the adolescent girls and young women (AGYW) aged 10-24 years at Kiyindi landing Site, Buikwe District.

Eligibility Criteria

Inclusion Criteria

- AGYW aged 10-24 years

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

- AGYW who were residents of Kiyindi landing site, Buikwe district, at the time of the study.

Exclusion Criteria

- AGYW10-24years who were not residents of the Kiyindi landing site

Sampling Procedures

Selection of Study Area

The Kiyindi landing site was purposively selected.

Selection of Houses

First, a target of interviewing 6 participants per day was set by dividing the sample size (380 participants) by 64 working days (excluding weekends and public holidays) available for data collection. A mapping exercise was then undertaken in which households were assigned unique numbers that were used in a systematic sampling process to select households from which respondents were to be selected.

The sampling interval was determined by dividing the number of households in the Kiyindi area (N) by the study sample size (n)

Sampling Interval = Number of Households (N)

Sample Size (n)

Where the number of households having a young woman aged 10-24 years was estimated at 2,142 (Ssebisubi, 2013), and the sample size calculated was 380.

Therefore, sampling interval = 2,142/380

Sampling interval = 5.6, which was truncated to 5 households.

After obtaining the sampling interval, a simple random sampling method was used to select the first household from which the first respondent was got. In order to determine a random starting household, a probability of 1/5 was used, where five pieces of paper, each marked with numbers 1, 2, 3, 4, and 5, respectively, were placed in a box and mixed thoroughly before drawing one paper by an independent person to get a random household from which the first respondent was selected. From this first respondent, we selected the next one every 5 households, and the process was repeated by adding 5 to the previous number until the entire sample of 380 households was reached. At the household level, one adolescent girl and young woman aged 10-24 years was interviewed from their home at the most appropriate time for the individual. In cases where there was more than one AGYW of age 10-24 years in a household, simple random sampling was used to select one.

Sample Size Determination

The sample size for this study was determined by using the Kish and Lisle formula for cross-sectional studies as outlined by Kirkwood and Sterne (AC Sterne and R Kirkwood, 2003).

According to Kish and Lisle (1965), formula;

$$\mathbf{n} = \frac{\mathbf{Z}^2 \times \mathbf{p}\,\mathbf{(1-p)}}{\mathbf{d}^2}$$

n=required sample size

z= confidence level at 95% (standard value of 1.96)

p =prevalence of contraceptive use among adolescent girls and young women aged 10 - 24 years. According to UBOS and ICF (2018), 40.3% of unmarried adolescent girls (15 - 19 years) and 50.1% of young women (20 - 24 years) used a modern method of contraception. Calculation of an average rate of contraceptive use for 40.3% and 50.1% gave a contraceptive use rate of 45.2% among adolescent girls and young women. With **d** = margin of error at 5% (standard value of 0.05),

$$\mathbf{n} = \frac{1.96^2 \times 0.452\ (1-0.452)}{0.05^2} = 380$$

Therefore, the sample size of 380 adolescent girls and young women aged 10 - 24 years was used.

Data Collection Method

A structured interviewer-administered questionnaire was used to collect the data for the study. The completed questionnaires, after being administered, were collected by

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

research assistants. The research assistants were encouraged not to change any information.

Validity of instruments

Validity refers to the extent to which an instrument can measure what is supposed to be measured. It is the appropriateness of an instrument to measure what it was intended to measure (Polit and Beck, 2006). Face validity of the questionnaire was determined from pre-testing; the researcher got respondents who were not part of the sample population, gave them questionnaires, and measured inter-respondent agreement. In addition, the research assistants and the health staff at the Community Health Centre agreed that the questions and response options, on their face, were appropriate for measuring study objectives.

Content validity of the questionnaire was determined by judgments of a panel of Gynecologists who are experts in the subject of contraception (Singh, 2017). The questionnaires were given to ten gynaecologists for vetting before they were administered to the respondents in the field. Contributions from these experts were duly incorporated into the instrument, after which a content validity index (C.V.I) was computed by using the formula below:

$$C.V.I = \frac{\text{Number of items declared valid by experts}}{\text{Total number of items in the questionnaire}}$$

As reported by Polit and Beck (2006), when the overall computed C.V.I for an instrument is found to be≥ 0.7, that tool should then be considered valid.

From the tool, C.V.I=60/64= 0.9375, which was well over 0.7, implying that the tool was valid and was a measure that the items of the questionnaire would give the true picture of the knowledge, attitudes, and practices of contraceptive use among adolescent girls and young women.

Reliability of the data collection tool

Reliability is the extent to which data collection instruments can produce consistent results when administered to the same group of respondents under the same conditions (Singh, 2017). Data obtained from a pre-determined questionnaire was used to determine the Cronbach's coefficient alpha. An index of more than 0.7 is considered to indicate that the items of the questionnaire are reproducible and consistent.

The Cronbach Alpha Coefficient method of internal consistency was determined by the following formula;

The formula for Cronbach's coefficient alpha is

$$\alpha = \frac{k}{k-1} * \left(1 - \frac{\sum \sigma_i^2}{\sigma_X^2}\right),$$

where k is the number of items on the measure, σ_i^2 is the variance of each individual and σ_X^2 is the variance of the total of all items on the index.

If a researcher does not have population variances (for instance, σ_i^2 and σ_X^2) wi corresponding sample statistics variances (s_i^2 and s_X^2) may be substituted as unbiased e

On substitution, the Cronbach's alpha value was 0.87. The results from the pretest were then used to modify the questionnaire to further improve its internal consistency and its corresponding results. The result provided values > 0.7, and therefore, the instrument was considered reliable.

Quality control techniques

To ensure quality, before field data collection, data collectors were trained and/or oriented about this research, the instruments, and the field procedures required for effective and efficient field data collection. Each data collector was given a sheet containing the basic field protocol. Field

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

testing of the data collection tool was done as part of the overall process of preparation for data collection in one of the villages. The principal researcher was assisted by his assistant in providing guidance for the data collectors.

Additionally, the principal investigator monitored and supervised the overall study to ensure that research procedures were adhered to by the research team. There were two teams of data collectors, and in each team, one person from the data collectors served as a supervisor. Furthermore, all completed forms from the field were reviewed daily, and on-the-spot feedback was provided with follow-up/callback undertaken, where necessary. Completed data collection instruments were signed by the supervisor and safely transferred to the principal investigator for data entry at the earliest time possible. Data collection instruments were coded with unique ID numbers to make them traceable. The principal investigator verified how the data was coded and entered into the computer.

Data analysis plan

Data from the paper questionnaires were entered once into a computer using EpiData software. Data was then exported to Stata (version MP 14.0, Stata Corporation) for cleaning and analysis. Frequencies and percentages of the respondents' characteristics were produced. At a descriptive level, these variables were compared between the entire study sample using Pearson's chi-square statistic. Statistical significance was considered where a variable had a p-value< 0.05.

Unadjusted odds ratios with their corresponding 95% CI were reported, with a variable considered significant in this analysis if it had a p<0.05.

All factors with a p-value <0.1 were considered in the multivariate analysis, which was performed to control confounding. Assumptions for the use of multiple logistic regressions, for example, the absence of multicollinearity among the independent variables, were explored. A manual backward stepwise selection method was used in establishing the final multivariate analysis model with factors that bore independent significant associations with the dependent variable. In this method, the researcher excluded variables that lost their meaningful association with the dependent variable after controlling for the effect of other variables in the model. The goodness-of-fit test was performed on the final model to assess its quality.

The factors in the final multivariate model were then reported together with their adjusted odds ratios and 95% confidence intervals. A variable was considered significant in this analysis if it had a p<0.05.

Analysis for knowledge and attitudes responses involved coding responses in two ways: (a) Those who answered "Yes" or "True" to questions assessing knowledge and attitudes were coded 1 while those who answered "No" or "False" were coded 0 to generate frequencies of those who agreed or disagreed, (b) Each rightly or correctly mentioned single response to knowledge and attitude related questions was scored 1 mark whereas an incorrect response was scored 0 marks to give a total score for the knowledge and the attitude of a particular participant. Based on total percentage scores for knowledge, participants were categorised into having good/adequate, fair/moderate, and poor knowledge. Similarly, total percentage scores for attitudes were used to categorise participants into having poor, fair, and good attitudes towards contraception. Regarding responses to practice-related questions, those who answered "Yes" were scored 1, and those who answered "No" were scored 0.

Measurement

The following criterion was used to measure the dependent and independent variables: Level of knowledge on contraception was assessed using various questions related to contraception; a correct answer was awarded one mark, while a wrong answer carried no mark. The total number of questions answered correctly was calculated, divided by the total number of questions asked, and multiplied by 100. Those who were found to be having 60% and above were said to have adequate knowledge on contraception, whereas those with scores 41 - 59 were grouped as having moderate knowledge, while those with scores less than 40% was categorized as having poor knowledge. The attitudes of the study participants towards contraception were also assessed similarly and were categorised as good, fair, or poor/unfavourable for contraceptive use. Contraceptive use by AGYW at Kiyindi landing site was measured by the percentage of those who reported current use or use within 12 months of any method of contraception.

Ethical considerations

The interviewers were trained to properly obtain informed consent from all study participants. Using the letter of information, the study protocol was explained verbally in the local language to participants who preferred their local

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

language and English to those participants who were literate. Written informed consent was obtained before the research assistant continued with the interview.

Permission to Conduct Research

The study was cleared to proceed by Uganda Martyrs University authorities, and a community introductory letter was issued to that effect. The study was approved by the Mulago National Referral Hospital Research and Ethics Committee, while a no objection to study data collection activities was obtained from Buikwe district health authorities before commencement of data collection.

Voluntary Participation

The right of the participants to participate in the research or not, as they choose, was respected. All participants participated freely after receiving information on the study and their right to answer questions or not, right to avoid being made uncomfortable, and the right to withdraw consent at any time during the interview process were emphasized.

Informed Consent

Participants were provided with adequate information on the research before the interview. Informed consent was obtained both in English and Luganda. Voluntary assent was obtained from participants below 18 years. It was further emphasised to respondents that any attempts to opt out of this study would not attract any punishment from the leaders within the community.

Confidentiality & Anonymity

The right of participants to anonymity and confidentiality was ensured by reporting research findings in a way that does not relate to participants. Anonymity was assured to the participant by using codes for identification instead of their names.

Results

Socio-Demographic Characteristics

Table 1 shows the socio-demographic characteristics of the respondents. More than half of the respondents (55.7%, N = 377) were aged between 20 and 24 years. The majority of the respondents (28.9%) were Catholics and Muslims, respectively. Almost half of the respondents (49.6%) attained a primary level of education, and slightly more than two-thirds (67.6%) of the respondents were from monogamous families. Majority of the respondents (80.1%) were from rural areas, 58.6% of the respondents were unemployed, and 26.3% stayed with their partners. Less than half (44.8%) of the respondents were able to discuss sexual issues freely with their siblings, and the majority of the respondents 89.9% were in a relationship.

Table 1: Socio-Demographic Characteristics of the Respondents

Variable	Frequency, n	Percentage, %
Age		
10-19 years	167	44.3
20-24 years	210	55.7
Religion		
Anglican	93	24.7
Born Again	53	14.1
Catholic	109	28.9
Muslim	109	28.9
SDA	13	3.4
Education		
A' Level	16	4.2
None	16	4.2
O' Level	150	39.8
Pre-University & Diploma+	8	2.1
Primary	187	49.6

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

Type of family		
Monogamy	255	67.6
Polygamy	122	32.4
Area of Residence		
Rural	302	80.1
Urban	75	19.9
Current Employment Status		
Employed	156	41.4
Unemployed	221	58.6
Whom do you stay with		
Alone	47	12.5
Both Parents	74	19.6
Father	68	18.0
Guardian	12	3.2
Mother	77	20.4
With partner	99	26.3
Ability to discuss sexual issues with freely		
Parents	44	11.7
Peers	135	35.8
Sibling	169	44.8
Social Media	19	5.0
Teachers	10	2.7
Currently in a relationship		
No	38	10.1
Yes	339	89.9

Source: Primary data

Table 2: Bivariate Analysis of Socio-Demographic Characteristics of the Respondents and Contraceptive Use

Variable	**Contraceptive use**		χ^2	**P-value**
	No , %	Yes, %		
Age			20.026	**.000**
10-19 years	37(30.1%)	130(51.2%)		
20-24 years	86(69.9%)	124(48.8%)		
Religion			6.739	.150
Anglican	25(20.3%)	68(26.8%)		
Born Again	23(18.7%)	30(11.8%)		
Catholic	30(24.4%)	79(31.1%)		
Muslim	41(33.3%)	68(26.8%)		
SDA	4(3.3%)	9(3.5%)		
Education			10.435	**.034**
A'Level	2(1.6%)	14(5.5%)		
None	7(5.7%)	9(3.5%)		
O'Level	48(39.0%)	102(40.2%)		
Pre-University & Diploma+	6(4.9%)	2(.8%)		
Primary	60(48.8%)	127(50.0%)		
Type of family			13.769	**.000**
Monogamy	99(80.5%)	156(61.4%)		
Polygamy	24(19.5%)	98(38.6%)		

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

Area of Residence			31.727	**.000**
Rural	119(96.7%)	183(72.0%)		
Urban	4(3.3%)	71(28.0%)		
Current Employment Status			21.723	**.000**
Employed	30(24.4%)	126(49.6%)		
Unemployed	93(75.6%)	128(50.4%)		
Whom do you stay with			30.890	**.000**
Alone	25(20.3%)	22(8.7%)		
Both Parents	35(28.5%)	39(15.4%)		
Father	25(20.3%)	43(16.9%)		
Guardian	3(2.4%)	9(3.5%)		
Mother	18(14.6%)	59(23.2%)		
With partner	17(13.8%)	82(32.3%)		
Ability to discuss sexual issues with freely			12.067	**.017**
Parents	22(17.9%)	22(8.7%)		
Peers	39(31.7%)	96(37.8%)		
Sibling	58(47.2%)	111(43.7%)		
Social Media	2(1.6%)	17(6.7%)		
Teachers	2(1.6%)	8(3.1%)		
Currently in a relationship			9.852	**.002**
No	21(17.1%)	17(6.7%)		
Yes	102(82.9%)	237(93.3%)		

Source: Primary data

From table 2, the age (χ^2=20.026, p-value of .000), education (χ^2=6.739, p-value of .034), family type (χ^2=13.769, p-value of .000), area of residence (χ^2=31.727, p-value of .000), employment (χ^2= 21.723, p-value of .000), the person one stays with (χ^2=30.890, p-value of .000), ability to discuss sexual issues freely with someone (χ^2=12.067, p-value of .017), and being in a relationship (χ^2=9.852, p-value of .002) were significant factors among the socio-demographic characteristics affecting uptake of contraception in this population.

Table 3: Knowledge of Respondents about Contraception

Variable	Frequency, n	Percentage, %
Have you ever heard about contraceptive methods?		
No	9	2.4
Yes	368	97.6
If yes, which contraceptive methods have you heard about		
Oral Pills	106	28.8
Injectables	202	54.9
IUD	96	26.1
Condom	195	53.0
Implant	86	23.3
Female Sterilization	50	13.6
Male Sterilization	16	4.3
Emergency contraception	10	2.7
Rhythm method	14	3.8
What was the source of information about contraceptive methods		
Mass media (T.V/Radio)		
Health Workers	115	31.3
Family and Friends	216	58.7

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

Formal education	152	41.3
Health Institution	173	47.0
	88	23.9
Is it okay to use the same condom more than once?		
No	351	93.1
Yes	26	6.9
Do condoms have an expiration date		
No	39	10.3
Yes	338	89.7
When putting on a condom, is it important to leave a space at the tip		
No		
Yes	134	35.5
	243	64.5
When using a condom, it is important for the man to pull out right after ejaculation		
No	132	35.0
Yes	245	65.0
Wearing two latex condoms will provide extra protection.		
True	263	69.8
False	114	30.2
Birth control pills are effective even if a woman misses taking them for two or three days in a row		
True	211	56.0
False	166	44.0
Women should "take a break" from the pill every couple of years.		
True		
False	178	47.2
	199	52.8
If a woman is having side effects with one kind of pill, switching to another type or brand might help		
True	136	36.1
False	241	63.9
Birth control pills reduce the chances that women will get certain types of cancer		
True		
False	322	85.4
	55	14.6
After a woman stops taking birth control pills, she is unable to get pregnant for at least two months		
True	193	51.2
False	184	48.8
In order to get the birth control pill, a woman must have a pelvic exam.		
True	217	57.6
False	160	42.4
A woman can use an IUD even if she has never had a child.		
True	265	70.3
False	112	29.7
Women who use IUDs cannot use tampons		
True	173	45.9
False	204	54.1
To obtain an IUD, a woman must undergo a surgical operation		

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

True	215	57.0
False	162	43.0
Can an IUD be felt by a woman's partner during sex		
No	172	45.6
Yes	205	54.4
Can IUDs move around in a woman's body		
No	180	47.7
Yes	197	52.3
Women using the birth control shot, Depo-Provera, must get an injection every three months		
True	59	15.6
False	318	84.4
Even if a woman is late to getting her birth control shot, she is still protected from pregnancy for at least three more months		
True	285	75.6
False	92	24.4
Negative effects that a woman has from Depo-Provera can last for the rest of her life.		
True	301	79.8
False	76	20.2
Women using the vaginal ring, NuvaRing, must have it inserted by a doctor or health care provider every month		
True	188	49.9
False	189	50.1
Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant		
True		
False	201	53.3
	176	46.7

Source: Primary data

Knowledge about Contraception among the Respondents

Table 3 shows that nearly all of the respondents (97.6%) had ever heard about methods of contraception, and 54.9% of them had ever heard about injectables. For most of the respondents (58.7%), health workers were the source of information about contraceptive methods. An overwhelming majority (93.1%) of the respondents did not agree with using the same condom more than once, and 89.7% said that condoms had an expiration date, while 64.5% agreed that it was important leave a space at the tip when putting on a condom. Close to two thirds (65.0%) of the respondents agreed that it was important for a man to pull out right after ejaculation when using a condom, 69.8% said it was true to wear two latex condoms to provide extra protection, 56.0% agreed that birth control pills were effective even if women missed taking them for two or three days in a row, and 52.8% of the respondents disagreed that women should not take a break from the pill every couple of years. Furthermore, 63.9% of the respondents disagreed that if a woman had side effects with one kind of pill, switching to another type or brand would help, while 85.4% of the respondents agreed that birth control pills reduced the chances of women getting certain types of cancer. Slightly more than half (51.2%) of the respondents agreed that after a woman stopped taking birth control pills, she was unable to get pregnant for at least two months, 57.6% of the respondents agreed that a woman needed to have a pelvic exam as a must in order to get the birth control pill, and 70.3% agreed that a woman could use an IUD even if she had never had a child. Most (54.1%) of the respondents disagreed that women who used IUDs could not use tampons, 57.0% agreed that to obtain an IUD, a woman must have undergone a surgical operation, 54.4% of the respondents agreed that an IUD could be felt by a woman's partner during sex, 52.3% agreed that IUDs could move around in a woman's body while, a bigger majority (84.4%)

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

disagreed that women who used the birth control shot, Depo-Provera, must get an injection every three months. Over three-quarters of the respondents (75.6%) said that even if a woman was late to getting her birth control shot, she could still be protected from pregnancy for at least three more months, whereas 79.8% of the respondents agreed that the negative effects that a woman had from Depo-Provera could last for the rest of her life. Half (50.1%) of the respondents disagreed that women who used the vaginal ring, NuvaRing, as a must needed a doctor or health care provider to have it inserted every month, and lastly 53.3% agreed that long-acting methods like the implant or IUD could not be removed early, even if a woman changed her mind about wanting to get pregnant.

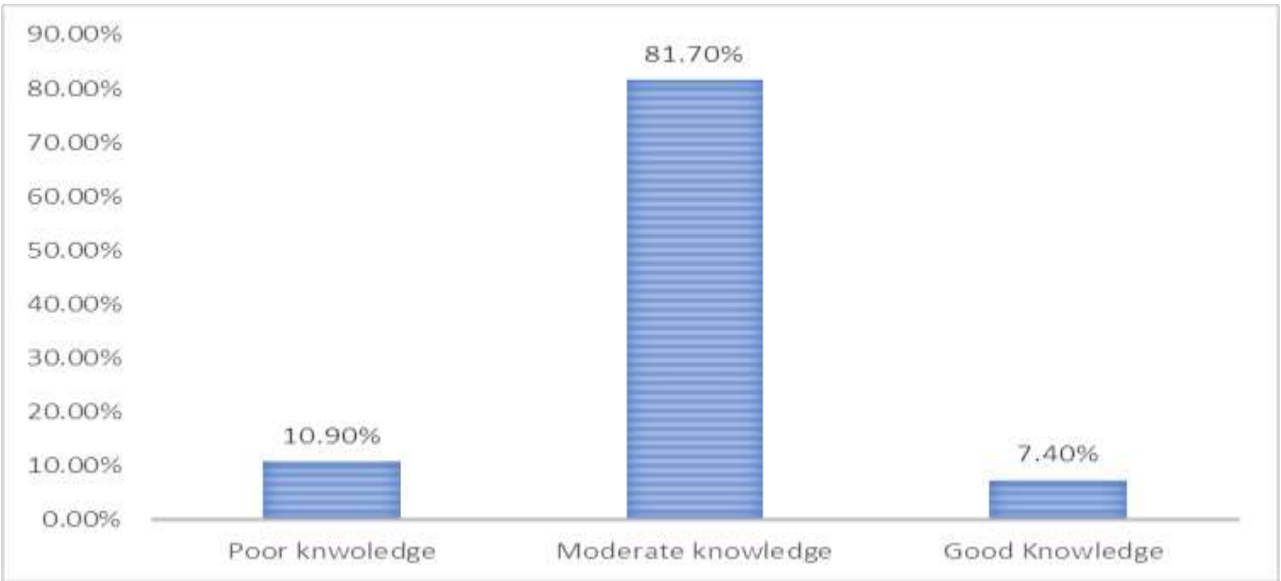

Figure 1: Scores of Knowledge Responses on contraceptives from the Respondents

When responses to 22 questions on knowledge were scored, where a scores of less than 40% were coded as poor knowledge, 41-60% were scored as moderate knowledge and scores of 61% and above were considered good knowledge, majority (81.7%) of the respondents were found to have moderate knowledge, 10.9% having poor knowledge and a mere 7.4% of the respondents had good knowledge about contraception as shown in figure 2. The average knowledge score among the respondents was 49.1%.

Table 4A: Bivariate Analysis of knowledge about contraception and Use by Respondents

Variable	Contraceptive use		χ^2	P-value
	No, %	Yes, %		
Have you ever heard about contraceptive methods?				
No			2.205	.131
Yes	5(4.1%)	4(1.6%)		
	118(95.9%)	250(98.4%)		
Is it okay to use the same condom more than once?				
No			.050	.488
Yes	114(92.7%)	237(93.3%)		
	9(7.3%)	17(6.7%)		
Do condoms have an expiration date			2.379	.088
No	17(13.8%)	22(8.7%)		
Yes	106(86.2%)	232(91.3%)		
When putting on a condom, is it important to leave a space at				

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

the tip No Yes	 76(61.8%) 47(38.2%)	 58(22.8%) 196(77.2%)	54.887	**.000**
When using a condom, it is important for the man to pull out right after ejaculation No Yes	 63(51.2%) 60(48.8%)	 69(27.2%) 185(72.8%)	21.073	**.000**
Wearing two latex condoms will provide extra protection. True False	 78(63.4%) 45(36.6%)	 185(72.8%) 69(27.2%)	3.486	**.041**
Birth control pills are effective even if a woman misses taking them for two or three days in a row True False	 65(52.8%) 58(47.2%)	 146(57.5%) 108(42.5%)	.722	.230
Women should "take a break" from the pill every couple of years. True False	 45(36.6%) 78(63.4%)	 133(52.4%) 121(47.6%)	8.277	**.003**
If a woman is having side effects with one kind of pill, switching to another type or brand might help True False	 53(43.1%) 70(56.9%)	 83(32.7%) 171(67.3%)	3.896	**.032**
Birth control pills reduce the chances that women will get certain types of cancer True False	 100(81.3%) 23(18.7%)	 222(87.4%) 32(12.6%)	2.475	.080
After a woman stops taking birth control pills, she is unable to get pregnant for at least two months True False	 60(48.8%) 63(51.2%)	 133(52.4%) 121(47.6%)	.425	.294
In order to get the birth control pill, a woman must have a pelvic exam. True False	 61(49.6%) 62(50.4%)	 156(61.4%) 98(38.6%)	4.743	**.020**
A woman can use an IUD even if she has never had a child. True False	 78(63.4%) 45(36.6%)	 187(73.6%) 67(26.4%)	4.135	**.029**

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

Table 4 B: Bivariate Analysis of knowledge about contraception and Use by Respondents

Women who use IUDs cannot use tampons			22.345	**.000**
True	35(28.5%)	138(54.3%)		
False	88(71.5%)	116(45.7%)		
To obtain an IUD, a woman must undergo a surgical operation			6.117	**.009**
True	59(48.0%)	156(61.4%)		
False	64(52.0%)	98(38.6%)		
Can an IUD be felt by a woman's partner during sex?				
No			3.838	**.032**
Yes	65(52.8%)	107(42.1%)		
	58(47.2%)	147(57.9%)		
Can IUDs move around in a woman's body			.250	.348
No	61(49.6%)	119(46.9%)		
Yes	62(50.4%)	135(53.1%)		
Women using the birth control shot, Depo-Provera, must get an injection every three months				
True			17.284	**.000**
False	33(26.8%)	26(10.2%)		
	90(73.2%)	228(89.8%)		
Even if a woman is late to getting her birth control shot, she is still protected from pregnancy for at least three more months				
True			.266	.352
False	95(77.2%)	190(74.8%)		
	28(22.8%)	64(25.2%)		
Negative effects that a woman has from Depo-Provera can last for the rest of her life.			1.325	.155
True	94(76.4%)	207(81.5%)		
False	29(23.6%)	47(18.5%)		
Women using the vaginal ring, NuvaRing, must have it inserted by a doctor or health care provider every month				
True			2.598	.066
False	54(43.9%)	134(52.8%)		
	69(56.1%)	120(47.2%)		
Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant			4.448	**.023**
True	56(45.5%)	145(57.1%)		
False	67(54.5%)	109(42.9%)		

Source: Primary data

From table 4, the importance of leaving a space at the tip when putting on a condom (χ^2=54.887, p-value of .000), importance of the man to pull out right after ejaculation when using a condom (X^2=21.073, p-value of .000), wearing two latex condoms to provide extra protection (χ^2=3.486, p-value of .041), Women "taking a break" from the pill every couple of years (χ^2=8.277, p-value of 0.003), women switching to another type or brand of pill when having side effects with one kind of pill, (χ^2=3.896, p-value of .032), a woman having a pelvic exam as a must in order to get a birth control pill (χ^2=4.743, p-value of .020), and a woman using an IUD even if she had never had a child (χ^2=4.135, p-value of .029) were significantly associated with respondents' use of contraception. Additionally, women's inability to use tampons when using IUDs (χ^2=22.345, p-value of .000), undergoing a surgical operation as a must to obtain an IUD (χ^2=6.117, p-value of .009) and a woman's partner feeling an

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

IUD during sex (χ^2=3.838, p-value of .032) were also significantly associated with contraceptive use. Other individual knowledge factors that were significantly associated with contraceptive use were: women getting "Depo-Provera" birth control shot every three months as a must (χ^2=17.284, p-value of .000), and the knowledge that Long-acting methods like the implant or IUD could not be removed early, even if a woman changed her mind about wanting to get pregnant (χ^2=4.448, p-value of .023).

Table 5: The Association between Knowledge and Contraceptive Use

Variables	OR (95% CI)	p-value
Knowledge scores		
Poor knowledge	1.195(0.429-3.330)	0.734
Moderate knowledge	1.393(0.620-3.131)	0.422
Good knowledge	1.0	

Source: Primary data; OR: Odd Ratio; CI: Confidence Interval

Discussion

This study found that 81.7% of the respondents had moderate knowledge (scores of 41 – 60%), 10.9% had poor knowledge, and 7.4% having good knowledge, while the average knowledge score was 49.1%. This is probably because knowledge and use of contraceptives among adolescent girls and young women showed very wide variations. On the contrary, however, Nanvubya et al. (2015) reported that knowledge about modern family planning methods in the fishing communities of Lake Victoria was high. The difference in findings could have resulted from the different methods of measurement of knowledge used in the two studies. In line with our findings, a past study found that overall knowledge of any method was somewhat higher among young men than young women, and knowledge levels were generally higher in countries outside Sub-Saharan Africa (Dangat and Njau, 2013). Similarly, Munakampe et al. (2018) found that adolescent girls and young women had poor, limited, incomplete, and sometimes wrong knowledge/information about contraception and abortion, had poor sexuality or sexual and reproductive health information about how conception occurred. This could have been the cause of misconceptions or incorrect information regarding contraception. A study in Nigeria revealed that knowledge about contraception had increased from under 10 per cent to over 40 per cent among adolescent girls and young women over the past decade, but over half of the adolescent population still lacked proper knowledge, with more awareness among boys than girls (Cortez et al., 2016). However, it was reported in an East African study in Kenya that approximately 90% of high school students knew at least one method, indicating very high knowledge about contraception (Ugwu, 2017), while Kemigisha et al. (2018) found that knowledge about natural methods of contraception was very limited among very adolescents. The majority of respondents did not know any natural methods of family planning. There was no major variation by sex on knowledge about natural methods of contraception between males and females. About modern contraception, however, 56% of the very young adolescent boys and girls were knowledgeable about at least condoms, intrauterine devices, implants, or injections. This finding is similar to Moyo and Rusinga (2017), who found that Knowledge about modern contraception was universal among adolescent girls and young women.

In this study, almost all (97.6%) of the respondents had heard about contraceptives, with most of them 53% knowing about condoms and 54.9% knowing about injectables. This is probably because of the diverse information about contraception disseminated in the different media in various languages. This is comparable to Masood and Alsonini (2017) who reported that that close to 95.6% of the respondents knew about contraception methods with the major source of information being television, but higher than the reported knowledge about contraception among very young adolescents in western Uganda where only 56% mentioned at least one modern method of preventing pregnancy like the condoms, pills, intrauterine devices, implants, or injections (Kemigisha et al., 2018). However, Costa et al. (2014) also found that the majority of respondents in their study (over 53%) did not know any contraceptive method. The few who knew a little had knowledge in condom use; hormonal contraception was least known, reported at 5.9%, and those who knew about both condoms and hormonal contraception were only 18.5% of the respondents. The difference in results in the two studies could be due to time difference or the different locations, but it could also be due to technological advancement, with more people being able to access information widely available online.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

In this study, the condom was one of the commonly known contraceptive methods among the study respondents. This is probably because a condom is used as both a method of contraception and for the prevention of STIs. This is similar to findings by an Indian study quoted by Costa et al. (2014) that revealed that most women knew about condoms, pills, vasectomy, and even tubal ligation. Similarly, Kashyap and Prasad (2018) found that, among the contraceptive methods, the best known among the majority of the participants were condoms, oral, and injectable contraceptives. Likewise, in a study in the United States of America, among young adults on Contraceptive knowledge, norms, and attitudes, it was found that subjective knowledge about condoms, the pill, the injectable, and the IUD was also low. More than half of young men and one in four young women reported that they knew only a little or nothing about contraception (Frost et al., 2012).

In our study, health workers were the main source of information at 58.7%, followed by formal education, family and friends, and the media. This is probably because health community outreaches are conducted at the landing site by community health facilities. In addition, a bigger proportion of study respondents had attained a primary level of education, which might have increased their chance of coming across information about contraception in school. Television and radio programs also have great potential for disseminating sexual information. This is similar to a study in Iran that found that Television is not the only source of sexual information available to adolescents (Yazdi-Feyzabadi et al., 2019). In our opinion, once television is accessible, it is a very compelling source of sexual information. Television can portray human sexuality in a socially responsible manner or as degrading and high-risk behaviours. Television can also make irresponsible sex behaviours appear glamorous or without any negative consequences for the parents and/or children. Quite inconsistent with our findings, though, very few Chinese adolescent female sex workers reported ever receiving SRH information from a health service, although most of them relied on condoms, emergency contraception, or traditional methods (Lim et al., 2015).

Conclusions

Respondents were found to be moderately knowledgeable about contraception.

Limitations of the Study

The study was limited to one particular area of the Kiyindi landing site, which limits the generalisation of its findings, since other girls in different settings are affected by differing conditions.

Although the study participants were heterogeneous in terms of Kiyindi, the majority of the girls were not educated, with the highest-level being UCE.

The study was purely quantitative and therefore did not elicit the personal feelings and reasons of the participants regarding the objectives of the study. This could have caused a bias in the findings reported.

The time available for conducting the study was limited in light of the fact that the researcher had to work full-time and study and conduct the study at the same time, amidst the COVID-19 movement restrictions.

Recommendations

Health workers should teach the community about family planning holistically to increase awareness, so that family planning utilization will be enhanced.

Besides, more studies are needed to thoroughly investigate the different reasons affecting the non-utilization of contraception and how these can be addressed.

More information on human sexuality, conception, and contraception should be made available early, at the primary school level of a child's education, to eliminate misconceptions about contraceptives. Girls should be empowered to take responsibility for the use of contraceptives by enlightening them with proper and adequate information about their function, usage, and methods.

Acknowledgement

First and foremost, my sincere gratitude goes to Almighty God for life, health, and guardianship all this far. This

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

work's conception and design, as well as the various thought processes in putting it up, were beyond my expectations.

I would like to thank the University authorities at Uganda Martyrs University for giving me the opportunity to carry out this research study.

I thank my supervisor Ms. Nalubega Joy Margaret, who took time to guide and assist me in every way possible to enable me to produce this work.

My sincere gratitude to the Faculty of Health Sciences lecturers, your touch and impact on me are for the life time.

I thank the Mulago Hospital Research and Ethics Committee for reviewing and approving this research study. I also thank Buikwe District Health Authorities, the community of Kiyindi landing site, especially Mr. Wamala David, LCIII Chairman of Kiyindi Town Council, for his assistance, Dr. Semwogerere Justine, the In-Charge of Makonge Community Health Centre, and her staff, who played a part in reaching out to the study participants.

Thanks go to colleagues on the programme and my friends who gave me advice and encouragement throughout the course of my studies.

Finally, thanks also go to my mum, dad, and elder siblings, Mr. Sanya Ngira, my dear wife Jannat Kironde, and my children. Your contribution is inestimable! My joy, happiness, pride, and confidence in all of you are really eternal. May the Almighty God reward all of you abundantly!

List of abbreviations

AGYW Adolescent Girls and Young Women
DREAMS Determined, Resilient, Empowered, AIDS free, Mentored, and Safe
HIV Human Immune Deficiency Virus
IUDs: Intra-Uterine Devices
MOH Ministry of Health
PEPFAR President's Emergency Plan For AIDS Relief
RHU Reproductive Health Uganda
SRH Sexual and Reproductive Health
STI/D Sexually Transmitted Infection/Disease
UBOS Uganda Bureau of Statistics
UCE Uganda Certificate of Education
UN United Nations
UNFPA United Nations Fund for Population Activities
WHO World Health Organisation

Source of funding

The study was not funded.

Conflict of interest

The author did not declare any conflict of interest.

Data availability

Data is available upon request.

Author contribution

Wamala Amir collected data and drafted the manuscript of the study.
Mabonga Habert drafted the manuscript of the study.
Margaret Joy Nalubega supervised the study.

Author biography

Wamala Amir is a student of a master's degree in public health - Population and reproductive health at Uganda Martyrs University.
Mabonga Habert is a lecturer at the University of Kisubi.
Margaret Joy Nalubega is a supervisor at Uganda Martyrs University.

References

1. CORTEZ, R., SAADAT, S., MARINDA, E. & ODUTOLU, O. 2016. Adolescent fertility and sexual health in Nigeria.

2. COSTA, G. P. O., COSTA, G. P. O., DE PAULA FARIAS, M. & DE ARAÚJO, A. C. P. F. 2014. Contraception knowledge, attitudes and practices of adolescents at risk of pregnancy in northeastern Brazil. *Open Journal of Obstetrics and Gynaecology,* 4**,** 300.

3. DANGAT, C. M. & NJAU, B. 2013. Knowledge, attitudes and practices on family planning services among adolescents in secondary schools in Hai District, northern Tanzania. *Tanzania journal of health research,* 15.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

4. FROST, J. J., LINDBERG, L. D. & FINER, L. B. 2012. Young adults' contraceptive knowledge, norms and attitudes: associations with risk of unintended pregnancy. *Perspectives on Sexual and Reproductive Health,* 44**,** 107-116.

5. GOVERNMENT, B. D. L. 2015. District Development Plan (DDP II) 2015/16 - 2019/20. Government of Uganda.

6. KASHYAP, P. & PRASAD, S. 2018. Assessing the Knowledge, Attitude and Practice of Contraception in Semi-Urban Area in India: A Qualitative Assessment of Contraceptive Usage. *International Journal of Medical Research & Health Sciences,* 7**,** 150-154.

7. KEMIGISHA, E., BRUCE, K., NYAKATO, V. N., RUZAAZA, G. N., NINSIIMA, A. B., MLAHAGWA, W., LEYE, E., COENE, G. & MICHIELSEN, K. 2018. Sexual health of very young adolescents in South Western Uganda: a cross-sectional assessment of sexual knowledge and behavior. *Reproductive health,* 15**,** 148.

8. LIM, M. S., ZHANG, X.-D., KENNEDY, E., LI, Y., YANG, Y., LI, L., LI, Y.-X., TEMMERMAN, M. & LUCHTERS, S. 2015. Sexual and reproductive health knowledge, contraception uptake, and factors associated with unmet need for modern contraception among adolescent female sex workers in China. *PloS one,* 10.

9. MASOOD, M. S. & ALSONINI, N. A. 2017. Knowledge and attitude about reproductive health and family planning among young adults in Yemen. *International Journal of Population Research,* 2017.

10. MOH 2014. Uganda Family Planning Costed Implementation Plan, 2015 - 2020. Kampala: Ministry of Health, Uganda.

11. MOH 2018. District Health Information System (DHIS) 2. Ministry of Health.

12. MOYO, S. & RUSINGA, O. 2017. Contraceptives: adolescents' knowledge, attitudes and practices. A case study of rural Mhondoro-Ngezi district, Zimbabwe. *African journal of reproductive health,* 21**,** 49-63.

13. MUNAKAMPE, M. N., ZULU, J. M. & MICHELO, C. 2018. Contraception and abortion knowledge, attitudes and practices among adolescents from low and middle-income countries: a systematic review. *BMC health services research,* 18**,** 909.

14. NANVUBYA, A., SSEMPIIRA, J., MPENDO, J., SSETAALA, A., NALUTAAYA, A., WAMBUZI, M., KITANDWE, P., BAGAYA, B. S., WELSH, S. & ASIIMWE, S. 2015. Use of modern family planning methods in fishing communities of Lake Victoria, Uganda. *PloS one,* 10.

15. NSANYA, M. K., ATCHISON, C. J., BOTTOMLEY, C., DOYLE, A. M. & KAPIGA, S. H. 2019. Modern contraceptive use among sexually active women aged 15–19 years in North-Western Tanzania: results from the Adolescent 360 (A360) baseline survey. *BMJ open,* 9**,** e030485.

16. RHU. 2018. *FAMILY PLANNING IN UGANDA Saving Lives, Saving Money* [Online]. Reproductive Health Uganda. Available: https://www.rhu.or.ug/wp-content/uploads/2018/11/ImpactNow-Family-Planning-in-Uganda-Brief.pdf [Accessed 15 March 2020].

17. SAUL, J., BACHMAN, G., ALLEN, S., TOIV, N. F., COONEY, C. & BEAMON, T. A. 2018. The DREAMS core package of interventions: a comprehensive approach to preventing HIV among adolescent girls and young women. *PLoS One,* 13.

18. UBOS 2019a. Central Region - Parish Level Profiles. *In:* CENSUSES, P. A. (ed.). Uganda Bureau of Statistics.

19. UBOS 2019b. STATISTICAL ABSTRACT 2019.

20. UBOS & ICF 2018. Uganda Demographic and Health Survey 2016. Kampala, Uganda: UBOS and ICF.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2025): March 2026 Issue
https://doi.org/10.51168/sjhrafrica.v7i3.2462
Original Article

21. UGWU, N. H. 2017. *Knowledge and use of Contraceptive Methods Among Youth in Abuja Metropolis.*

22. UNFPA 2014. State of the World Population 2014. *The Power of 1.8 Billion Adolescents, Youth and the Transformation of the Future.*

23. WHO. 2020. *Adolescent pregnancy* [Online]. World Health Organisation. Available: https://www.who.int/en/news-room/fact-sheets/detail/adolescent-pregnancy [Accessed 3 February 2020 2020].

24. YAZDI-FEYZABADI, V., MEHROLHASSANI, M. H., ZOLALA, F., HAGHDOOST, A. & OROOMIEI, N. 2019. Determinants of risky sexual practice, drug abuse and alcohol consumption in adolescents in Iran: a systematic literature review. *Reproductive health,* 16**,** 1-10.

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