

Utilization of Sexual and Reproductive Health Services and Associated Factors Among the Youth in Lira City West, Northern Uganda: A Cross Sectional Study

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Abstract

Background:

The youth in Uganda, as in much of sub-Saharan Africa, face numerous sexual and reproductive health (SRH) challenges, from HIV infection, unsafe abortions to unwanted pregnancy. This study therefore assessed the utilization of sexual and reproductive health services and associated factors among the youth in Lira City West, Northern Uganda.

Methods:

This was a cross sectional study conducted among 403 young people (15–24 years) in Lira City West division, Lira City. Multi stage cluster sampling technique was used. Data was collected using an interviewer administered questionnaire. Data was analyzed using SPSS version 23.

Results:

Out of 422 youth, 386 participated obtaining a response rate of 91.5%. Less than half, (42.0%) of the youth in Lira City West had utilized SRH services. Family planning, VCT and general counseling services were the most utilized SRH services in the past 12 months. Predictors for the utilization of SRH services were, awareness on SRH (AOR (95% C.I): 0.24(0.08,0.74), being aware of a reproductive health facility (AOR (95% C.I): 4.24(1.62,11.09), discussion of SRH issues with peers/friends (AOR (95% C.I): 3.98(1.53,10.33), having a sexual partner (AOR (95% C.I): 10.00(4.05,24.69), having sexual intercourse (AOR (95% C.I): 4.59(2.18,9.69), access to SRH services (AOR (95% C.I): 2.68(1.12,6.40).

Conclusion:

Utilization of SRH services among the youth was low. Therefore, there is need to develop and strengthen sustainable multisector approaches aimed at increasing awareness as well as linking the young people to youth sexual and reproductive health services.

Introduction

Globally, there are 21 million pregnancies occurring among adolescents each year, of which 50% are unintended(1). HIV/AIDS has affected more than half of the world's population that is below 25years(2). In addition, the AIDS epidemic remains the leading cause of death among young people aged 10–24 years in Africa(3). Uganda's young population is 52% of the population and this is the age that is most affected by HIV/AIDs(2). Adolescent women aged 15–19 make up approximately one-quarter of the female population in Uganda and this age group accounts for 14% of all births(4). Half of the pregnancies among adolescents in Uganda are unintended, of which 30% end up in abortions(5). In low

and middle-income countries, out of the 32 million adolescent women who want to avoid pregnancy, 14 million have an unmet need for modern contraception(1).

The youth in Uganda, as in much of sub-Saharan Africa, face numerous sexual and reproductive health (SRH) challenges, from HIV infection, unsafe abortions to unwanted pregnancy(6, 7). Even those able to find accurate information about their health and rights may be unable to access the services needed to protect their health(8). Yet, these adolescents are most vulnerable to a range of reproductive health problems, such as teenage pregnancy and childbearing, unsafe abortion and sexually transmitted infections (STI), including HIV(9). Hence, adolescents' sexual and reproductive health must be supported through providing access to comprehensive sexuality education; services to prevent, diagnose and treat STIs; and counselling on family planning. In addition, young people need to be empowered to know and exercise their rights – including the right to delay marriage and the right to refuse unwanted sexual advances (8).

The Ugandan government in 2017 has since committed to improving access to contraception for adolescents by implementing the National Adolescent Health Policy and the National Sexuality Education Framework(10). Consequently, increased investment is essential to ensure that adolescents have access to the age-appropriate information and services they need to determine whether and when to become pregnant. Improving adolescents' sexual and reproductive health and rights, including preventing unintended pregnancy, is essential to their social and economic well-being.

Despite concerted effort to introduce and scale-up the Adolescent and youth sexual reproductive health (AYSRH), there is dearth evidence that suggests low uptake of sexual and reproductive health services among young people(11–13). Previous studies have shown the barriers to the utilization of sexual and reproductive health services to be, having a negative perception about counseling, about reproductive health services ,and about youth friendly service providers negatively, lack of knowledge on the advantages of the services, long queue, inconvenient location of health facilities among others(12–14). Other factors include education level, old age of adolescents ,youth out-of-school, sex, partner discussion about reproductive health issues, discussion of reproductive issues with family member or peers among others(15–17).

Lira District in Northern Uganda reported the highest rate of teenage pregnancy in Northern Uganda (18). In financial year that ended, 2018/2019, the district recorded 9,916 teenage pregnancies up from 5,178 in financial year 2017/2018 and at least 5000 teenagers are impregnated every year(19). This signifies the unmet need of sexual and reproductive health services in this area. And few studies have been done in this area to assess the level of utilization of sexual and reproductive health services in Lira City. Hence this study assessed utilization of sexual and reproductive health services and associated factors among the youth in Lira City West, Northern Uganda.

Methods

Study design

This was a cross-sectional study employing quantitative methods.

Study Setting

This study was conducted among the youth (15–24 years) in the communities of Lira City West. Lira City is located in Northern Uganda, Lango Sub region. Lira City West comprises of sub counties like Ojwina, Adyel and Lira. It has a population of about 127,100 people. Lira City is about 337 kilometers (209 mi), by road, away from Kampala, the capital city of Uganda. It is bordered by Dokolo district to the southeast, Pader district to the north, Alebtong district to the east, Otuke district to the northeast, Kole district to the west and Apac district to the southwest. The youth (15–24) years make up a population of 89155 in Lira City and district.

Study Population

The study was conducted among the youth aged between 15–24 years who were living in Lira City West division, Lira City during the time of data collection. In this study, the youth aged 15–24 years were included because the youth in Uganda are faced with a vast sexual and reproductive health challenges(8).

Sample Size Estimation

The sample size was calculated using Kish Leslie's, 1965, formula of sample size calculation.

Based on the assumptions that proportion of the youth who used the Sexual and reproductive health services was 50% ($p = 0.5$), proportion who did not use at 50% ($q = 1-p$), and margin of error ($e = 0.05$, and $z =$ standard normal deviation corresponding to 95% confidence level ($z = 1.96$).

$$n = z^2 * p * q / e^2$$

Hence, considering 5% non-responses, our sample size was = 422.

Data Collection Procedure

The researchers were trained for two days about the purpose of the study, the questionnaire in detail, the data collection procedure, the data collection setting, and the rights of study participants.

Following ethical clearance from Gulu University Research Ethics Committee (GUREC) and clearance from the Town Clerk of Lira City, young people were consecutively sampled. They were briefed about the purpose of the study and data was collected after gaining written informed consent. An interviewer-

administered pre-tested questionnaire, which was prepared in English was used to collect data. The data collection process was carried out by the researchers and interviews done in English. The data was collected in the quietest corner of young people's homes where there was no noise and disturbance. The data collection process took averagely 10 minutes. The collected data was checked for completeness and consistency after each day of data collection.

Sampling Criteria

The study participants were selected using a multistage sampling technique. Lira City west consists of 3 sub counties. At stage one, out of the 3 sub counties one was selected randomly. Then 2 wards from the selected sub county were selected using simple random sampling method. Then from the selected wards, 3 cells were selected from each ward using simple random sampling technique. Finally, the young people (with an age range of 15 to 24 years) were selected consecutively following their availability. Per each household, one young person was asked to participate in the study and data was collected in 14 days.

Data Management

The study tools were checked for completeness and consistency after each day of data collection. Data entry screen was created in Microsoft Excel and data was double entered. Cleaning involved the exclusion of data that was found inconsistent. The data on hard copies was kept under lock and key whereas data in soft copy was kept on a hard drive only accessible to the investigators.

Data Analysis Plan

Data was exported to SPSS version 23.0 for analysis. Descriptive statistics were used to describe the study population in relation to relevant variables such as sociodemographic characteristics (age, level of education, religion, marital status). At univariate level, data was summarized in percentages, proportions and frequencies and it enabled us to determine the level of utilization. Bivariate and multivariable models were run to assess any relationship between each independent variable (sociodemographic characteristics, health system, and individual factors) and the outcome variable (young people sexual and reproductive health service utilization, i.e., at least once SRH service used in 12 months). Crude and adjusted odds ratios were used to ascertain any associations between the dependent and independent variables while significance was determined using 95% confidence intervals. Independent variables found to be significant with a p-value less than 0.05 at the bivariate level were included in a multivariable logistic regression model for the dependent variable to control potential confounding variables. Multivariate analysis enabled the researchers to come up with a final model of predictors of SRH utilization.

Ethical Consideration

Ethical approval was obtained from Gulu University Research Ethics Committee (GUREC-2022-269) and thereafter from the Town Clerk of Lira City before conducting the study. Written informed consent was obtained after providing consent forms to all participants stating the terms and conditions of the study of which they are meant to understand before being recruited into the study. Also, assent was obtained from parents of minors that is to say, youth below 18 years of age. The researchers used unique identifiers instead of real names of participants to ensure confidentiality. Furthermore, participants were assured that their information is not going to be discussed with any other person.

Results

Socio demographic characteristics of participants

Out of 422 youth, 386 participated obtaining a response rate of 91.5%. Half, 195(50.5%), of the respondents were females and most, 262(67.9%) were in the age group of 20-24 years. In regards to marital status, three quarters, 277(71.8%) of the respondents were single. Nearly one third, 141(36.5%) of the respondents had completed Advanced level of education and majority, 235(60.9), were living with their parents or relatives. **(Table 1)**

Table 1: Sociodemographic characteristics of participants.

Variable	Frequency(n)	Percentage(%)	p-value
Age			0.008
15-19	124	32.1	
20-24	262	67.9	
Sex			0.204
Female	195	50.5	
Male	191	49.5	
Marital status			<0.001
Single	277	71.8	
Cohabiting	71	18.4	
Married	38	9.8	
Level of Education			0.028
No formal education	19	4.9	
Completed primary level	55	14.2	
Completed O'level	103	26.7	
Completed A 'level	141	36.5	
Completed tertiary level	68	17.6	
Who do you live with?			<0.001
Alone	84	21.8	
Parents/relatives	235	60.9	
Friends/spouse	67	17.4	

4.2. Level of utilization of sexual and reproductive health services

Out of 386 respondents, more than a third, 162(42.0%), had ever utilized sexual and reproductive health services in the last 12 months. **(Figure 1)**

Figure 1: Showing the level of utilization of sexual and reproductive health services among the youth.

In this study, 79(50.0%) had used family planning, 80(50.6%) had used voluntary counseling and testing, 25(6.5%) had used antenatal care services, 44(27.8%) had used sexually transmitted disease diagnosis

and treatment, 55(34.8%) had used general counseling services, few 8(5.1%) had used post abortion care services and very few, 6(3.8%) had used safe abortion in the past 12 months. **(Figure 1)**

Figure 2: Showing sexual and reproductive health services used by the youth.

4.3. Bivariate analysis for the factors associated with the utilization of sexual and reproductive health services.

4.3.1. Individual related factors associated with the utilization of SRH services among the youth.

Out of 10 variables under individual related factors, 7 variables emerged to be significantly associated with the utilization of sexual and reproductive health services.

Those **significantly associated** with utilization of SRH services were; being aware of SRH services, aware of any reproductive health facility, ever discuss SRH issues with peers/friends, ever had a sexual partner, ever had sexual intercourse, ever participated in peer education and feeling embarrassed while seeking SRH services.

Those which were **not significant** were discussion of SRH issues with parents, ever received sex education and fear of being seen by parents while seeking SRH services. **(Table 2)**

Table 2: Showing Individual related factors associated with the utilization of SRH services among the youth.

Variables (n=386)	SRH utilization		COR (95% C.I)	P-value
	No	Yes		
Aware of Youth SRH services				
No	59(15.3%)	12(3.1%)	1.00	<0.001
Yes	165(42.7%)	150(38.9%)	4.47(2.31,8.64)	
Aware of any RH facility				
No	72(18.7%)	14 (3.6%)	1.00	<0.001
Yes	152 (39.4%)	148 (38.3%)	5.01(2.71,9.27)	
Discuss SRH issues with peers				
No	51 (13.2%)	15(3.9%)	1.00	0.001
Yes	173 (44.8%)	147 (38.1%)	2.89(1.56,5.35)	
Ever had a sexual partner				
No	125 (32.4%)	10 (2.6%)	1.00	<0.001
Yes	99(25.6%)	152(39.4%)	19.19(9.61,38.34)	
Ever had sexual intercourse				
No	175 (45.3%)	39 (10.1%)	1.00	<0.001
Yes	49 (12.7%)	123(31.9%)	11.26(6.97,18.19)	
Discuss SRH with parents				
No	130 (33.7%)	81(21.0%)	1.00	0.118
Yes	94 (24.4%)	81 (21.0%)	1.38(0.92,2.08)	
Participated in Peer education				
No	99 (25.6%)	51 (13.2%)	1.00	0.012
Yes	125(32.4%)	111 (28.8%)	1.72(1.13,2.63)	
Ever received sex education				
No	43 (11.1%)	22 (5.7%)	1.00	0.147

Yes	181(46.9%)	140(36.3%)	1.51(0.86,2.64)	
Fear of being seen by parents				
No	107 (27.7%)	86(22.3%)	1.00	0.303
Yes	117 (30.3%)	76 (19.7%)	0.81(0.54,1.21)	
Feel embarrassed				
No	138 (35.8%)	120 (31.1%)	1.00	0.011
Yes	86 (22.3%)	42 (10.9%)	0.56 (0.36,0.87)	

Significant at P-value <0.05

4.3.2. Health system factors associated with the utilization of SRH services among the youth.

Out of 6 variables under the health system related factors, 4 variables were significantly associated with the utilization of SRH services. Those which were **significant** were; able to access SRH services, judgmental attitude of service providers, long waiting hours at the SRH clinics and time for provision of SRH services being inconveniencing. Those which were **not significant** were lack of privacy/confidentiality at the clinics and unwelcoming attitude of health workers. **(Table 3)**

Table 3: Showing bivariate analysis for the health system factors associated with the utilization of SRH services.

Variables (n=386)	SRH utilization		COR (95% C.I)	P-value
	No	Yes		
Lack of privacy/confidentiality				
No				
Yes	50(13.0%)	45 (11.7%)	1.00	0.220
	174 (45.1%)	117 (30.3%)	0.75(0.47,1.19)	
Unwelcoming attitude of health workers				
No				
Yes	85 (22.0%)	67 (17.4%)	1.00	0.499
	139(36.0%)	95 (24.6%)	0.87(0.57,1.31)	
Able to access SRH services				
No				
Yes	65(16.8%)	14(3.6%)	1.00	<0.001
	159(41.2%)	148(38.3%)	4.32(2.33,8.03)	
Judgmental service providers				
No				
Yes	126 (32.6%)	110(28.5%)	1.00	0.021
	98 (25.4%)	52 (13.5%)	0.61(0.40, 0.93)	
Long waiting hours at the clinics				
No				
Yes	76 (19.7%)	79 (20.5%)	1.00	0.003
	148(38.3%)	83 (21.5%)	0.54(0.36,0.82)	
SRH service hours are inconveniencing				
No				
Yes	92 (23.8%)	87 (22.5%)	1.00	0.014
	132(34.2%)	75(19.4%)	0.60(0.40,0.90)	

Significant at P-value <0.05

4.4. Predictors for the utilization of sexual and reproductive health services among the youth

On Multivariate analysis, 15 variables were included in the logistic regression model and 6 variables emerged significant at 95% level of confidence. Those that were significant were; being aware of SRH services, aware of any reproductive health facility, ever discuss SRH issues with peers/friends, ever had a sexual partner, ever had sexual intercourse and access to SRH services. (Table 4)

Table 4: Showing predictors of utilization of sexual and reproductive health services

Variables (n=386)	SRH utilization		AOR (95% C.I)	P-value
	No	Yes		
Aware of Youth SRH services				
No	59(15.3%)	12(3.1%)	1.00	0.013*
Yes	165(42.7%)	150(38.9%)	0.24(0.08,0.74)	
Aware of any RH facility				
No	72(18.7%)	14 (3.6%)	1.00	0.003**
Yes	152 (39.4%)	148 (38.3%)	4.24(1.62,11.09)	
Discuss SRH issues with peers				
No	51 (13.2%)	15(3.9%)	1.00	0.005**
Yes	173 (44.8%)	147 (38.1%)	3.98(1.53,10.33)	
Ever had a sexual partner				
No	125 (32.4%)	10 (2.6%)	1.00	0.000***
Yes	99(25.6%)	152(39.4%)	10.00(4.05,24.69)	
Ever had sexual intercourse				
No	175 (45.3%)	39 (10.1%)	1.00	0.000***
Yes	49 (12.7%)	123(31.9%)	4.59(2.18,9.69)	
Able to access SRH services				
No	65(16.8%)	14(3.6%)	1.00	0.026*
Yes	159(41.2%)	148(38.3%)	2.68(1.12,6.40)	

Level of significance *p<0.05, **p<0.01, ***p<0.001

Discussion

Understanding the factors affecting SRH service utilization is pivotal to the attainment of good health for all especially in Northern Uganda where the youth face radical SRH challenges. Findings from this study indicate that less than half (42.0%) of the youth in Lira City West had utilized sexual and reproductive health services. Family planning, voluntary counseling and testing services and general counseling were the most utilized SRH services in the past 12 months.

This study showed that only 42.0% of the youth had utilized any sexual and reproductive health services in the past 12 months. This finding differs from those obtained in Kampala and Amudat at 61.99% and 66.7% respectively(12, 17). This difference could be attributed to variations in awareness, accessibility as well as sociodemographic characteristics of participants from both studies. Similar findings were obtained from studies done among young people in Awabel district, Northwest Ethiopia, 41.2%, in Addis Ababa, 40%, and Jimma City ,41%.(16, 20, 21). However, this finding was greater than that from the previous studies conducted in Bahir Dar University,32%, Hadiya zone, 29.4% and Debre Tabor Town, 28.8%, in Ethiopia(11, 13, 22). This could also be due to sociocultural variations, differences in service provision and accessibility.

Family planning, VCT and general counseling services were the most utilized SRH services. Comparably, a study among street youth in Kampala showed that 18.13% had used contraception/family planning, 58.67% had tested for human immunodeficiency virus (HIV) and knew their status(12). This finding is also consistent with those from previous studies in Ethiopia(23, 24). This could be justified by the mass availability of family planning services and many testing opportunities in the area which the youth can utilize. This is supported by the fact that Uganda is committed to scale up the use of modern family planning methods to ensure that every Ugandan woman can choose when and how many children to have(25).

Safe abortion and post abortion care services were the least utilized services. This finding somewhat goes in line with the finding in Nekemte town, Ethiopia(24). This indicates that many youths could be opting for traditional birth attendants for these services. Evidence in Uganda suggests that women are unable to utilize safe abortion and post abortion care services due to unaffordability credited to the high costs incurred in a hospital compared to traditional birth attendants(26, 27).

The youth who were aware of sexual and reproductive health services were more likely to utilize them compared to their counterparts. This could be explained by the fact that most youth discussed SRH issues with their peers that could have been a useful source of information to them. Evidence from previous studies suggests that lack of awareness of some aspects of SRH are responsible for low uptake of SRH services among the youth (28, 29).

Participants who were aware of any reproductive health facility were 4.24 times more likely to utilize SRH services than their counterparts. This could be accredited to the fact that those who know the reproductive health facilities, are well informed about the services offered as well as know where to

access these services leading to utilization. Same results were obtained from studies in Kampala and Ethiopia(12, 13).

Furthermore, young people who discussed SRH issues with their peers and friends were 3.98 times more likely to use SRH services compared to those who didn't. This might be due to prior sharing of experiences and opportunities on SRH among the youth hence increasing utilization. This finding is in conformity with the findings from studies in Ethiopia(13, 21, 30). However, participants in this study did not prefer discussing SRH issues with their parents as opposed to findings from a study in Nakivaale refugee settlement in Uganda(31). Hence this calls for the development of interventions to strengthen the communication links between parents and youth(32).

Concerning sexual behavior, those who ever had a sexual partner were 10.00 times more likely to utilize SRH services compared to their counterparts. Similarly, a substantial number of previous studies have supported the same claim(23, 33). This might be due to sexual partners having discussions on SRH issues and plans of protection before intercourse. As a way of finding solutions to their sexual and reproductive health problems, thus they are likely to utilize SRH services. In addition, this study found out that the youth who had ever had sexual intercourse were 4.59 times more likely to utilize SRH services than their counterparts. Likewise, previous studies have shown that having sexual intercourse and being sexually active predict utilization of SRH services(11, 23, 34, 35). This could be due to perceived risk of having unintended or negative sexual outcomes related to engaging in sexual intercourse.

The youth who were able to access SRH services were 2.68 times more likely to utilize these services compared to their counterparts. Due to the implementation of the national guidelines on adolescent sexual and reproductive health, a significant number of youth are able to access SRH services they need for their health. Though, about 28% of women and girls in Uganda are unable to access the SRH services they need including contraception(36). It is evident that limited access to adolescent and youth friendly services is responsible for low utilization of SRH services(17).

Study limitations.

Due to the cross-sectional nature of this study, it was difficult to establish causal relationship between the dependent and independent variables. This was overcome by employing logistic regression at multivariate level to remove confounding variables.

Conclusions

The level of utilization of sexual and reproductive health services in this study was 42.0%. Predictors for utilization of SRH services were awareness on SRH services, awareness of reproductive health facilities, discussion of SRH issues with peers, having sexual intercourse and a sexual partner as well as access to SRH services.

Therefore, there is need to strengthen sustainable multisector approaches aimed at increasing awareness as well as linking the young people to sexual and reproductive health services. Open dialogue between the service providers, the youth and the community should be held to address the barriers to access and use, which will later improve on the utilization of SRH services and promote good health.

Recommendations

Future research

1. Future researchers should also assess the reasons as to why the youth were not utilizing SRH services, more so, using a qualitative approach. In addition, studies should also explore the perspectives of the parents and the service providers to get a wider base of information.

Implications for practice

2. The Ministry of Health should ensure community engagement and establish working relationships in the sexual and reproductive health programs brought about by the government to ensure sustainability of any interventions.
3. This study has shown that youths are more likely to have SRH discussions with their peers leading to utilization. Hence the primary health care system should empower peer educators to be able to disseminate accurate SRH information to the youth.
4. The health system of Uganda should also ensure service integration for all SRH services in one package with constant supply and availability so that clients can access these services at one visit/outreach. This guideline has not been optimally implemented in most parts of Uganda.

Declarations

Author contribution

TM, DB and IM developed and conceptualized the study, TM, JA, DB, IM and EK developed the proposal. All authors participated in data collection and analysis. TM, DB, CN and EK drafted the manuscript. All authors revised the manuscript TM, DB, and EK guided the necessary revisions and adjustments in the manuscript which all the authors agreed upon for publication.

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Availability of materials and methods

The study tools and the data set will be made available on request by the corresponding author.

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Conflict of interest

The authors declare that they have no conflict of interest.

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Figures

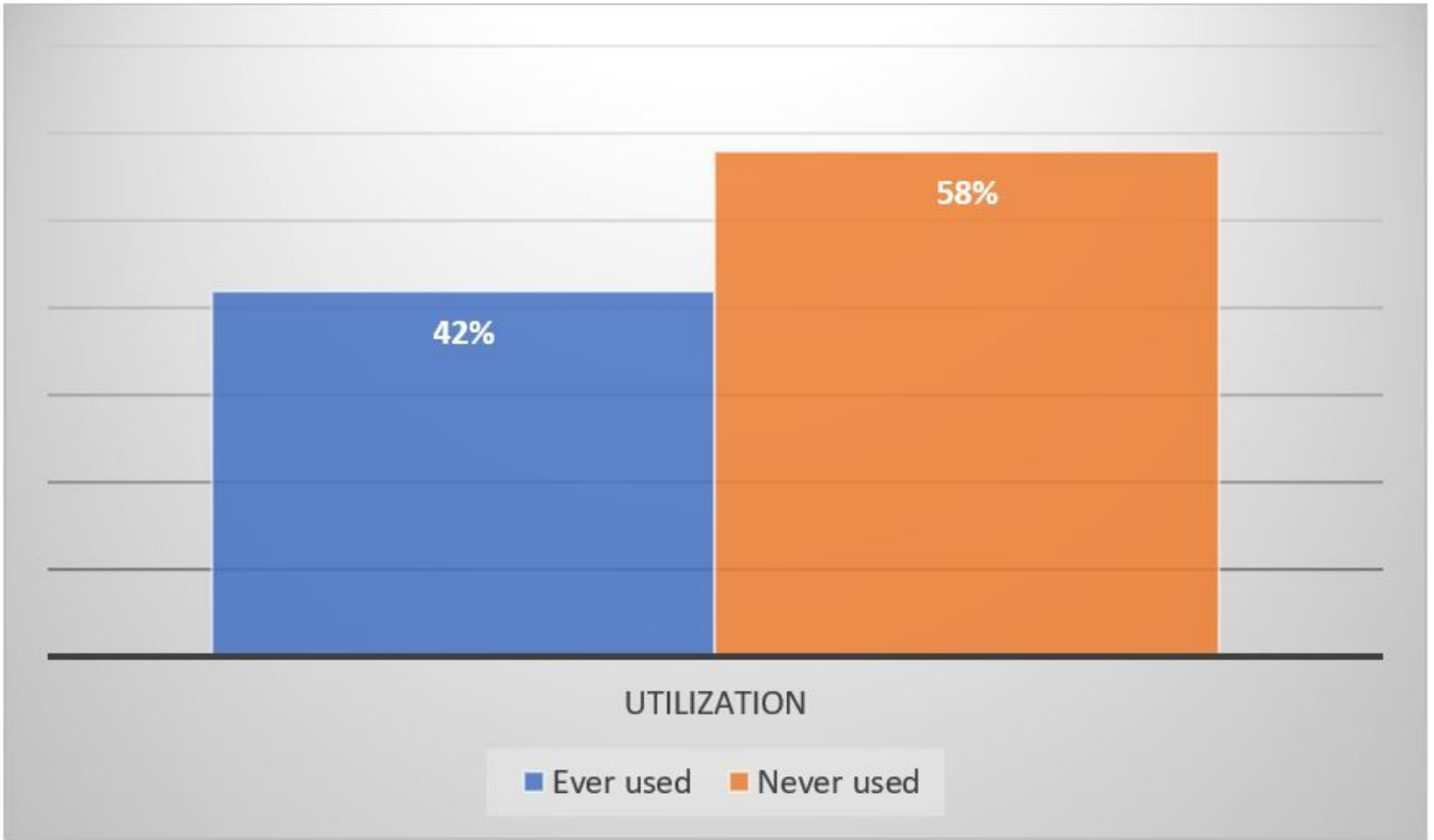


Figure 1

Utilization of SRH services by the youth in the last 12 months in Lira City

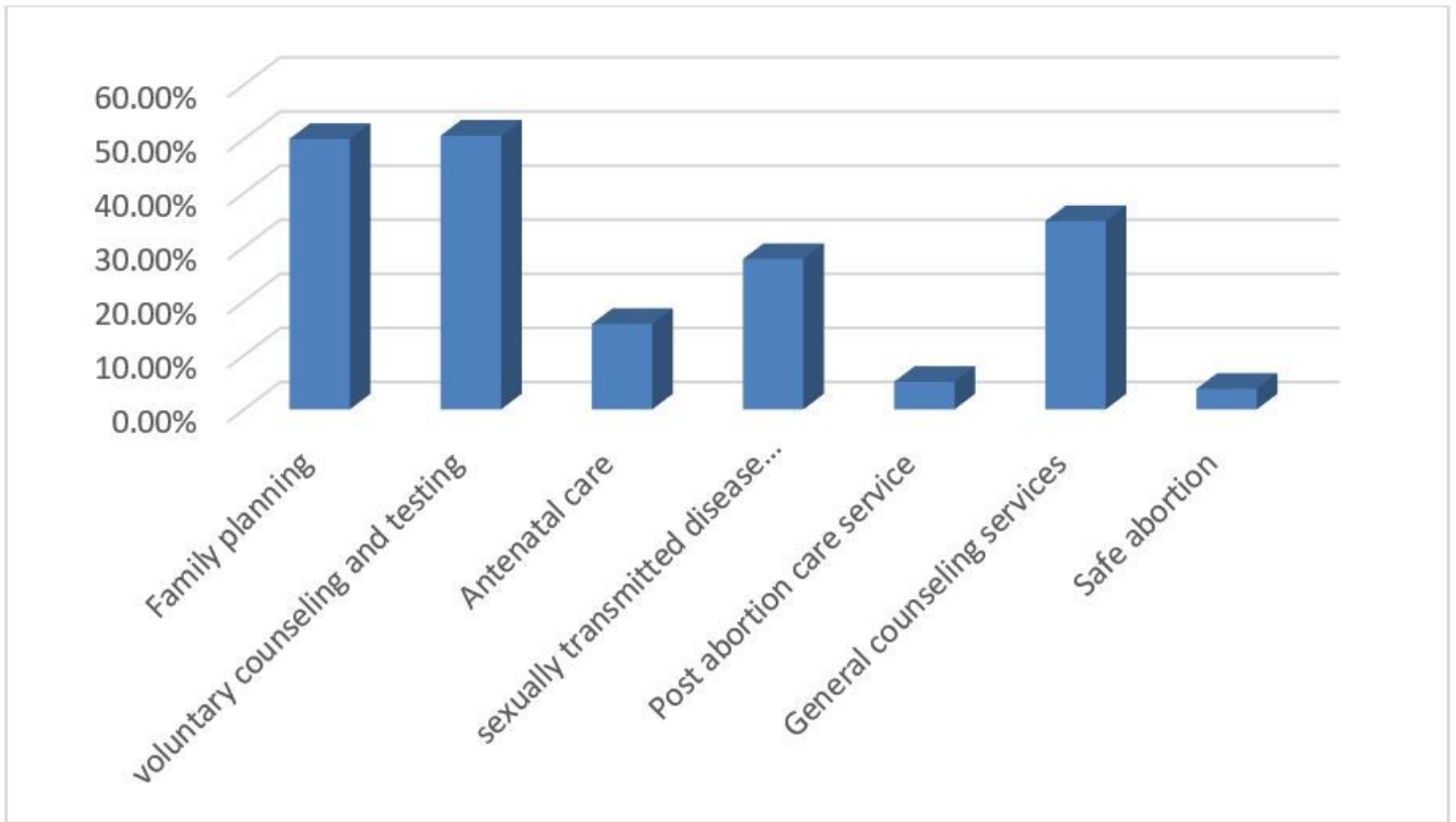


Figure 2

SRH services used by the youth in the last 12 months, in Lira City West