

Exploration of the Factors Contributing to Under Utilization of Artificial Contraceptives in Female Nursing Students of KIU

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ABSTRACT

Family planning is a basic human right for an individual/couple to exercise control over their fertility, make informed decision on the number of children they want to have. The purpose of this study was to assess the factors contributing to the underutilization of artificial contraceptive methods among female nursing students of KIU Ishaka-Bushenyi. The study employed a descriptive cross-sectional design, a simple random sampling technique was used to get a total of 189 students who participated in the study, a self-administered questionnaire was used for data collection, data was analyzed using quantitative methodology where it was entered in analysis software, analyzed and presented using tables, frequencies, columns and pie charts using SPSS version 20.0. The results showed that majority of the respondents (65.0%) reported not having used artificial contraceptive methods. The majority (63.4%) of the respondents who reported not having utilized artificial contraceptives were between the age of 28 and 32 years. Also, majority of the respondents (66.7%) were in first and fourth year and culture (43.4%) were among the major contributing factors to underutilization of artificial contraceptive methods, also fear of side effects whereby (64.6%) of the respondents reported that fear of side effects made them not to use artificial contraceptives and having one sexual partner contributed to underutilization of artificial contraceptives. Majority of the respondents reported having not used artificial contraceptive methods. In conclusion, age, religion, year of study and culture were among the major contributing factors to underutilization of artificial contraceptive methods also fear of side effects and having one sexual partner contributed to underutilization of artificial contraceptives.

Keywords: Family planning, Couple, Fertility, Artificial contraceptive, Children.

INTRODUCTION

Family planning means the preventing of unwanted pregnancies by safe methods [1, 2]. Family planning is a basic human right for an individual/couple to exercise control over their fertility, and make informed decisions on the number of children they want to have, [1]. The following are the common artificial contraceptive methods available for females; Combined oral contraceptive pills, the progesterone-only preparation, both pills and injectable, Intrauterine device (IUD), two types of copper intrauterine and hormone-releasing intrauterine system (IUS) and Barrier methods like female condoms [1]. It can

prevent unwanted pregnancies and unsafe abortions, and some contraceptive methods like condom usage can protect individuals from STIs including HIV/AIDs. Family planning has also been found to promote gender equality as well as promote educational and economic empowerment for women. Family planning Services help to reduce on population growth [3, 4, 5]. Similarly, women who use contraceptives tend to have better quality of life, higher social status and greater autonomy [6, 7, 8]. This association has been highlighted in a study in Nigeria which emphasized that contraceptive use has the power to reduce fertility

considerably and ultimately to improve maternal health [9, 10, 11]. Throughout the world, female adolescents are exposed to the risk of unplanned pregnancies as a result of ineffective or non-use of contraceptives. This may result in failure to complete their education, inability to maintain gainful employment and making independent marital decisions [12]. Young females joining universities often become sexually active partly due to peer pressure, and alcohol consumption / as a result of perceived sense of being in control of their social lives, [6, 13, 14]. In research studies conducted worldwide amongst university students, several factors were identified as contributing to the non-utilization of contraceptive methods.

Statement of Problem

Globally, use of artificial contraception has risen slightly from 54% in 1990 to 57.4% in 2015 [1]. Artificial contraceptive methods are a public health concern in developing countries yet contraceptive use has increased in many parts of the world, especially in Asia and Latin America but continues to be low in sub-Saharan Africa [1]. In Africa, 24.2% women of reproductive age have an unmet need for contraception. In addition to that, only 40% of African women use artificial contraceptive methods [15-20]. In Uganda the limited use of contraceptives has led to a high incidence of unwanted pregnancies among female adolescents which approximates 1.2 million women having unintended pregnancies and 26% end into abortions [18-24]. It also leads to high maternal and infant mortality rate, and increased spread of sexually transmitted diseases and increased number of school dropouts [20-28], The contraceptive use prevalence rate of Uganda is 26% [29-30]. The unmet need for artificial contraceptives was 25% as per a study done among 33 university students of Uganda [31-34]. In the Ankole region where the Bushenyi district is located, the unmet need for artificial contraception is 23.0% [35-38]. At KIU, an estimate 10% of unmarried female nursing students become pregnant each year according to school of nursing records. This indicates the underutilization of artificial contraceptive methods. Since the factors

for this underutilization are not known, the researcher would like to conduct a study about factors contributing to the underutilization of artificial contraceptive methods among KIU nursing students.

Aim of the Study

To assess the factors contributing to underutilization of artificial contraceptive methods among female nursing students at Kampala International University.

Specific Objectives

- To assess the socio-demographic factors contributing to underutilization of artificial contraceptive methods among female student nurses at Kampala International University.
- To assess the behavioral factors contributing to underutilization of artificial contraceptive methods among female student nurses at Kampala International University.
- To assess the risk factors contributing to underutilization of artificial contraceptive methods among female student nurses at Kampala International University.

Research Questions

- ✚ What are the risk factors contributing to underutilization of artificial contraceptive methods among female nursing students at Kampala International University?
- ✚ What are the social factors contributing to underutilization of artificial contraceptive methods among female nursing students at Kampala International University?
- ✚ What are the behavioral factors contributing to underutilization of artificial contraceptive methods among female student nurses at Kampala International University?

Significance of the study

To Nursing Practice.

The results of this research will be shared with nurses and other stakeholders involved in promoting and preserving the lives of youths by avoiding early pregnancy.

To Nursing Education.

The study findings may be incorporated into nursing curriculum to enhance teaching and learning of student nurses

about factors contributing to underutilization of artificial contraceptive methods.

The study findings will help the student nurses to continue with their academics.

To Ministry of Health.

The study findings will help in the achievement of the strategic development goal of health promotion among students of higher institutions of learning. It will identify the areas of concerns for the reproductive health programs to take action and for the wellbeing of a girl child.

METHODOLOGY

Area of Study

The study was conducted at school of nursing at KIU Western campus located in Ishaka-Bushenyi Municipality in Bushenyi district, Bushenyi district is found in the south western of Uganda, it is located approximately 6 kilometers by road from Mbarara town, the largest town in the region and 360kms from Kampala the capital city of Uganda. The main language spoken in the Bushenyi district is Runyankole. KIU’s western campus is situated on about 70 acres of land along Mbarara- Kasese road. The students at the university come from Uganda and other African countries. The university is licensed to teach undergraduate and postgraduate courses in Human medicine, dentistry, pharmacy and Nursing. The university maintains the following faculties: Faculty of Clinical Medicine and Dentistry, Pharmacy, Nursing, and Education, business and management, and information technology. The faculty of nursing also called the school of nursing oversees the training of various levels of nurses (bachelor’s degree in nursing science, diploma in nursing science and certificate in nursing science).

Study Population

The study involved students at the school of nursing pursuing a bachelor’s, diploma and certificate in Nursing.

Study Design

A descriptive, cross-sectional design was used. A descriptive study involves the systematic collection and presentation of data to give a clear picture of a situation under study [25]. The cross-sectional design aims at quantifying the distribution

To Research:

The study finds will act as a basis of knowledge for other researcher that is for reference.

Also identifying the gaps for further related studies thereby improving nursing research.

of certain variables in a study population at a special point in time.

Sample Size Determination

The sample size for student nurses was calculated using Yamane’s formula [26], in which the sample size is given by the expression:

$$n_o = \frac{Z^2 P(1 - P)N}{Z^2 P + (1 - P)Ne^2}$$

Where Z=the standard Normal Deviation set at 1.96 and it corresponds to a 95% confidence level

P= proportion of the population with particular characteristics estimated at 50% =0.5

N= the population sample=500 students

e= expected error estimated at 0.05

n_o=desired sample size

$$n_o = \frac{1.96^2 * 0.5(1 - 0.5)500}{1.96^2 * 0.5 + (1 - 0.5)500 * 0.05^2}$$

$$n_o = \frac{1.9208(0.5)500}{1.9208 + (0.5)1.25}$$

$$n_o = \frac{480.2}{2.5458}$$
$$n_o = 188.62$$

Therefore, the number of respondents will be 189 students.

Sampling Method

Simple random sampling was used and participants who subsequently consented to participate in the study were selected randomly until the required sample size was attained. This method was used because it enables the researcher to collect

first-hand information and it was simple to use by the respondents.

Sampling Procedure

A simple random sampling method was used where pieces of papers written on yes and no were given to participants and every person with a yes piece of paper was chosen to participate. This was applicable for all the 189 participants in the study. This procedure was used because it is cheap and time saving.

Study Variables

Dependent Variables

Artificial contraceptive underutilization

Independent Variables

Age, year of study, religion, level of training, culture, residence, inadequate health facilities, knowledge about artificial contraceptives.

Inclusion and Exclusion Criteria

Inclusion Criteria

Only female students at KIU western campus offering nursing course (certificate, diploma and bachelors) were recruited for the study. Only non-married female nursing students who were between 18 and 35 years of age were recruited for the study. Only female nurses who consented were recruited for the study.

Exclusion Criteria

Non-KIU students were excluded from the study.

KIU students who were not females were excluded from the study.

Data Collection Instruments

KIU female students who were not nurses were excluded from the study.

KIU Female nursing students below 18 years of age were excluded from the study.

KIU female nursing students above 35 years of age were excluded from the study.

KIU female students who were married were excluded from the study.

KIU female nurses who did not consent were excluded from the study.

A questionnaire comprising of both closed and open-ended questions was used as a tool for gathering information. It was divided into 3 sections; section A involved assessment of the social demographic factors, section B involved assessment of the risk factors and section C involved assessment of the behavioral factors

contributing to underutilization of artificial contraceptive methods.

Data Collection Procedure

Data was collected using pre-tested questionnaires which were written in English and writing material like pens were provided to the respondents. Completed questionnaires were checked for accuracy, any missing information and completeness on a daily basis after data collection at the end of each day [25].

Data Management and Quality Control

For reliability, the questionnaire was pre-tested with 10 volunteer nursing students of Ishaka Adventist nursing school. This enabled the researcher to assess the clarity of the questionnaire items so that those found inadequate were modified to improve the quality of the research instrument. The pre-testing helped to improve the validity of the instrument. The validity of the study was guaranteed because the research tool that was used in the study was designed to capture all the relevant information to fulfill the objectives of the study. Completed questionnaires were checked for accuracy, missing data and completeness.

Data Analysis

This was coded and entered into SPSS version 20.0 software for analysis and presented in tables, pie charts and bar graphs. The proportions of social-demographic, behavioral and risk factors were calculated as a percentage.

Ethical Consideration

- Clearance was obtained from Kampala International University ethics and research committee.
- Permission to conduct the study was sought from the School of Nursing sciences and a letter signed by the dean school of nursing was given.
- All study participants were informed about the purpose, method and anticipated benefits of the study during the process of data collection as well as their voluntary choice of participation.
- An informed consent form was given to each participant for signing prior to data collection.

- All data was handled with strict confidentiality.

RESULTS

Table 1: shows respondents' utilization of artificial contraceptives. (n=189)

Ever used artificial contraceptives	Frequency(n)	Percentage (%)
Yes	66	35.0
No	123	65.0
Total	189	100.0

Majority 123 (65.0%) of the respondents reported not having used while the

minority 66(35.0%) reported having used artificial contraceptives.

Table 2: shows the number and percentages of how the respondents' social demographic factors affect contraceptive utilization. (n=189)

Variable	Ever utilized artificial contraceptives			
	Yes	No	Total	
Tribe	Munyankole	16 (29.0%)	39 (71.0%)	55 (29.1%)
	Muganda	11(34.4%)	21 (65.6%)	32 (16.9%)
	Musoga	14 (41.2%)	20 (58.8%)	34 (18.0%)
	Munyoro	10 (52.6%)	9 (47.4%)	19 (10.1%)
	Mukiga	5 (41.7%)	7 (58.3%)	12 (6.3%)
	Itesot	2 (12.5%)	14 (87.5%)	16 (8.5%)
	Langi	5 (35.7%)	9 (64.3%)	14 (7.4%)
	Others	3 (42.9%)	4 (57.1%)	7 (3.7%)
	Total	66 (35.0%)	123 (65.0%)	189 (100.0%)
Level of education	Certificate	43 (35.8%)	77 (64.2%)	120 (63.5%)
	Diploma	12 (28.6%)	30 (71.4%)	42 (22.2%)
	Bachelor	11 (40.7%)	16 (59.3%)	27 (14.3%)
	Total	66 (35.0%)	123 (65.5%)	189 (100.0%)
Year of study	First Year	26 (33.3%)	52(66.7%)	78 (41.2%)
	Second Year	26 (34.2)	50 (65.8%)	76 (40.2%)
	Third Year	13 (40.6%)	20 (60.4%)	32 (16.9%)
	Forth Year	1 (33.3%)	2 (65.7%)	3 (1.6%)
	Total	66 (35.0%)	123 (65.0%)	189 (100.0%)
Religion of respondents	Catholic	24 (35.8%)	43 (64.2%)	67 (35.4%)
	Protestant	22 (31.0%)	49 (69.0%)	71 (37.6%)
	Muslim	4 (28.6%)	10 (61.4%)	14 (7.4%)
	SDA	5 (38.5%)	8 (61.5%)	13 (6.9%)
	Born Again	11 (45.8%)	13 (54.2%)	24 (12.7%)
	Total	66 (35.0%)	123 (65.0%)	189 (100.0%)
Age of respondents	18-22	38 (32.8%)	78 (67.2%)	116 (61.4%)
	23-27	27 (39.1%)	42 (60.9%)	69 (36.5%)
	28-32	1 (25.0%)	3 (75.0%)	4 (2.1%)
	Total	66 (35.0%)	123 (65.0%)	189 (100.0%)
Status of the respondents	Single	44 (37.9%)	72 (62.1%)	116 (61.4%)
	In a relationship	20 (29.9%)	47 (70.1%)	67 (35.4%)
	Cohabiting	2 (33.3%)	4 (66.7%)	6(3.2%)
	Total	66 (35.0%)	123 (65.0%)	189 (100.0%)

Majority 14 (87.5%) of the respondents who reported not having used artificial contraceptives were Itesots while the minority 9 (47.4%) were Banyoro. Majority 30 (71.4%) of the respondents who reported not having used artificial contraceptives were diploma whereas the least 16 (59.4%) were bachelor students. Majority 52 (66.7%) of the respondents who reported not having used artificial contraceptives were in first year while the minority 20 (59.4%) were in third year. Majority 49 (69.0%) of the respondents who

reported not having used artificial contraceptives were Protestants while the minority 13 (54.2%) were born again. Majority 3 (75.0%) of the respondents who never used artificial contraceptives were between the age of 28 and 32 years whereas the minority 42 (60.9%) were between the ages of 23 and 27 years. Majority 47 (70.1%) of the respondents who reported not having used artificial contraceptives were in relationship whereas the minority 72 (62.1%) were single.

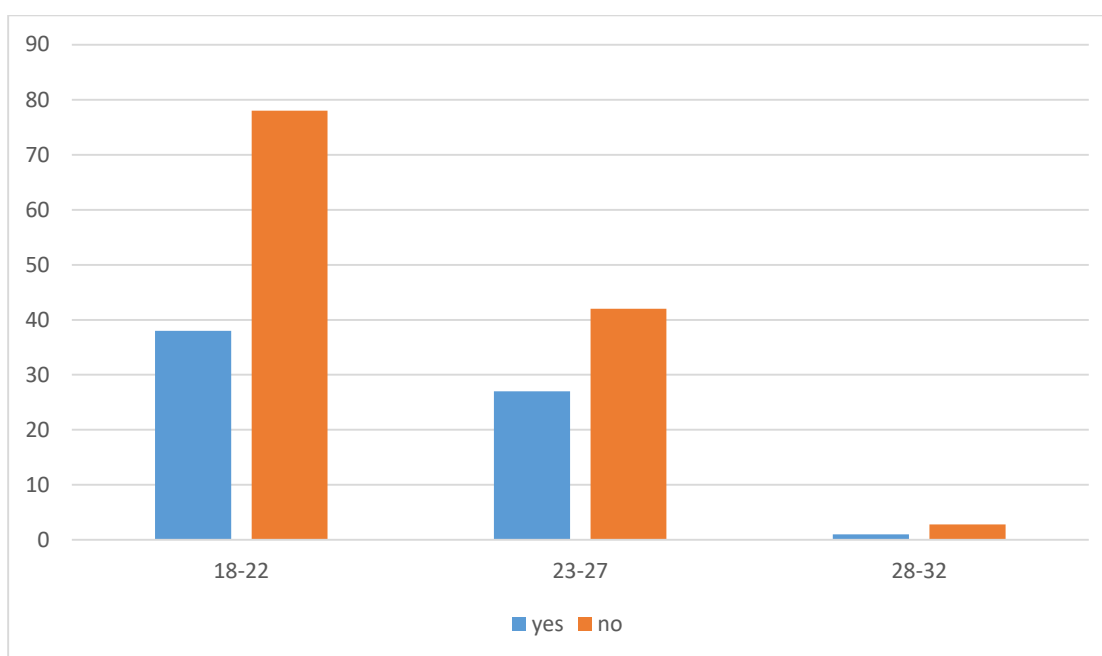


Figure 1: shows how the respondents' age affect utilization of artificial contraceptives.

Majority 78 (61.4%) of the respondents who never utilized artificial contraceptives were between the age of 18-22 years

compared to the least 4 (2.5%) who were between 28-32 years.

Table 3: shows the respondents' culture, religious and peer view about artificial contraceptives. (n=189)

Social character		Frequency(n)	Percentage (%)
Culture's view	Good	81	42.9
	Bad	82	43.4
	I don't know	26	13.8
	Total	189	100.0
Religious view	Yes	66	35
	No	123	65
	Total	189	100.0
Peer's view	Good	91	48.1
	Bad	84	44.4
	Nothing	14	7.4
	Total	189	100.0

Majority 82(43.4%) of the respondents' culture did not allow use of the artificial contraceptives, whereas 26(13.8%) of the respondents did not know whether their culture accepted the use or not.

More than a half 123 (65%) of the respondents' religion did not allow the use of artificial contraceptives while 66 (35%)

of the respondent's religion accepted artificial contraceptive use. Majority 91 (48.1%) of the respondents' peers reported that the use of artificial contraceptive methods were good, whereas the minority 14 (7.4%) of the respondents reported nothing.

Table 4: Shows the risk factors contributing to underutilization of artificial contraceptives. (n=189)

Risk Factors	Responses	Frequency (n)	Percentage (%)
Have side effects	Yes	187	98.9
	No	2	1.1
	Total	189	100.0
Side effects reported	Nausea and vomiting	28	14.8
	Heavy bleeding	58	30.7
	Absence of periods	27	14.3
	Back pain	34	18.0
	infertility	42	22.2
	Total	189	100.0
Side effects hinder me from using artificial contraceptive methods	yes	122	64.6
	No	67	35.4
	Total	189	100.0
Ever heard about artificial contraceptives.	No	0	0.0
	Yes	189	100.0
Ever heard of artificial contraceptive from,	Radio	25	13.2
	Television	7.0	4.7
	Hospital	66	34.9
	Friend	55	19.0
	School	36	19.0
	Total	189	100.0

Almost all the respondents 187 (98.9%) reported that artificial contraceptives had side effects whereas only 2 (1.1%) of the

respondents reported absence of side effects about artificial contraceptives. Majority 58 (30.7%) of the respondents reported that artificial contraceptives

caused heavy bleeding, whereas the minority 27 (14.3%) of the respondents reported absence of periods. Majority 122 (64.6%) of the respondents reported that side effects hinder them from using artificial contraceptives while the minority 67(35.4%) of the respondent reported that side effects do not hinder them from using

artificial contraceptives. All the respondents 189 (100%) had ever heard of artificial contraceptive methods. Majority 66 (34.9%) of the respondents reported having heard of artificial contraceptives from hospital, while the minority 7 (3.7%) of the respondents heard of artificial contraceptives from television.

Table 5: Shows how number of sexual partners affects utilization of artificial contraceptives.

Number Of Sexual Partner	Ever Used Artificial Contraceptives				Total
	Yes	Percentage (%)	No	Percentage (%)	
None	13	6.9	46	24.3	59
One	25	13.2	82	43.4	107
Two	7	3.7	9	4.8	16
more than two	6	3.2	1	0.5	7
Total	66	35.0	123	65.0	189

Majority 82 (43.4%) of the respondents who never utilized artificial contraceptives had one sexual partner in the past 12 months. While the minority 1 (0.5%) of the

respondents who never utilized artificial contraceptives had more than two sexual partners in the past 12 months.

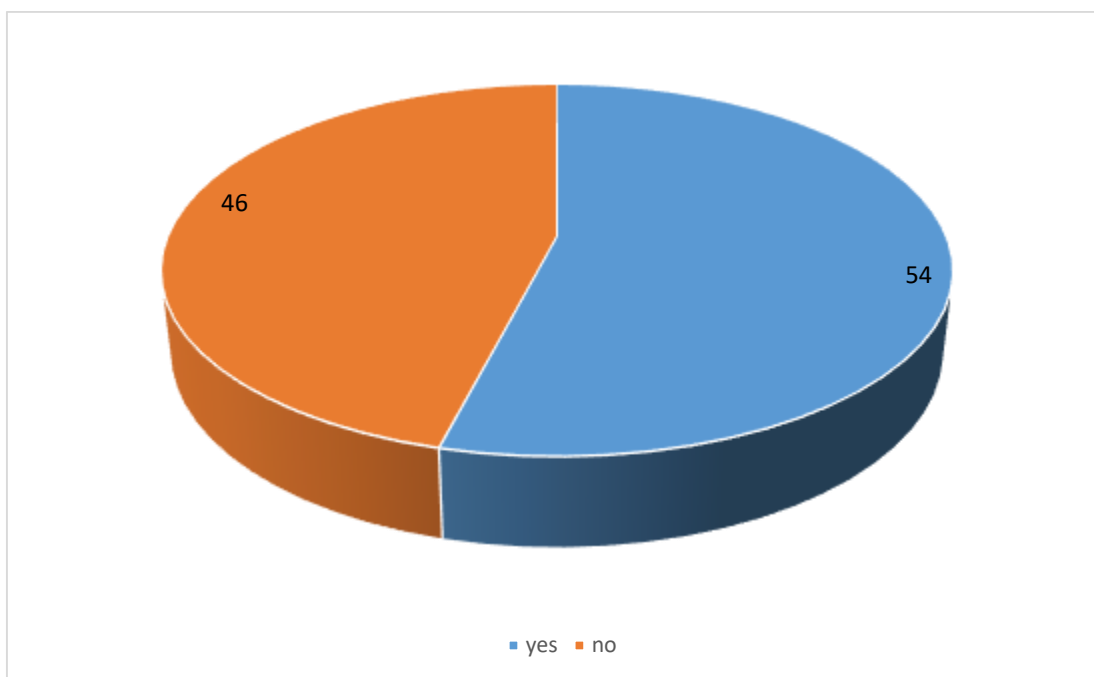


Figure 2: shows the respondents' need for permission from sexual partner to use artificial contraceptives in the past 12 months

DISCUSSION

According to the study results, majority 123 (65.0%) of the respondents reported not having used artificial contraceptives while only 66 (34.0%)

reported having used artificial contraceptives. This result is higher than that of a study done in Lesotho about the contraceptive utilization, which results

showed that only (50%) had ever used contraceptives [27]. Also, the study result is higher than that of a study done among university students in 22 countries about contraceptive utilization, which results showed that only (42.6%) never used contraceptives in the past 12 months [28].

Social demographic factors contributing to underutilization of artificial contraceptive methods

Majority 14 (87.5%) of the respondents who reported not having used artificial contraceptives were it sots this could be due to strong cultural beliefs. Majority 30 (71.4%) of the respondents who reported not having used artificial contraceptives were diploma. Majority 52 (66.7%) of the respondents who reported not having used artificial contraceptives were in first year this could be due to the little knowledge they have acquired about artificial contraceptives. Majority 3 (75.0%) of the respondents who did not use artificial contraceptives were between 28 and 32 years of age this might be associated to a belief that they are still young, this result contradicts with that of a study conducted in the United States of America about contraceptive use and attitudes among female college students whose results showed that ages between 20 and 24 had one of the highest rates of unplanned pregnancies, it was indicated that 53.3 % did not use contraception [29]. Majority 49 (69.0%) of the respondents who did not use artificial contraceptives were Protestants this could be due to strong beliefs that God created human to fill the world, this result contradicts with a study done at Makerere University in Uganda, which results showed that being evangelical / seventh day Adventist was associated with lower contraceptive use [6]. Majority 52 (66.7%) of the respondents who reported not having used artificial contraceptives were in first year this could be due to the little knowledge they have acquired about artificial contraceptives. This result is in agreement with a study done at Makerere University in Uganda which result showed that Contraceptive use was 3%higher if a student was one year older than their counterpart [6]. Majority 47 (70.1%) of the respondents who reported not having used

artificial contraceptives were in relationship this could be due to a feeling that use of artificial contraceptives caused mistrust by the partner this result contradicts with a study done at Makerere University in Uganda which showed that contraceptive use was (75%) among the married than the unmarried [6]. Majority 82 (43.4%) of the respondents' culture did not allow use of the artificial contraceptives, this could be due to strong cultural beliefs. Majority of the respondent's religion 61% did not allow the use of artificial contraceptives this is attributed to a belief that artificial contraceptives will kill children, this research finding is in correspondence with those of a study done in Uganda, which findings showed that religious practices where they believed that children are given by God and use of artificial contraceptives is likened to the killing of unborn children [30]. 48.1% of the respondent's peers said the use of artificial contraceptive methods was good, while 42.3% said it was bad.

Risk factors contributing to underutilization of artificial contraceptive methods

According to research findings, majority of the respondents 64.6% reported that side effects make them not to use artificial contraceptives, this could be due to fear of becoming barren in future, this finding agrees with that of the study conducted in Kenya about barriers to artificial contraceptive methods uptake among young women which showed that myths and misconceptions fear of side effects especially the fear that a particular method causes infertility and adverse reactions [31]. A study done in Nigeria reported that a high proportion of students perceived contraceptive use as bad because they believed it causes infertility [32]. In addition, all the respondents (100%) had ever heard of artificial contraceptive methods, this contradicts with the findings of Studies done in Nepal and in South Africa [33], which reported that lack of awareness and knowledge of effective contraceptive use amongst higher educational female students, results in the non-utilization of contraceptives. Also, a study done about social- cultural

inhibitors of contraceptive techniques among young women in rural areas of Uganda reported that misconception like prolonged bleeding, the birth of abnormal children and tumors in the womb. They also added that existence of traditional family planning methods like safe days and tying of herbs around the waist contributed to the underutilization of the artificial contraceptives [30].

Behavioral factors contributing to underutilization of artificial contraceptive methods

Majority of the respondents 43.4% who never utilized artificial contraceptives had

All the respondents 100% had ever heard about artificial contraceptives. Majority of the respondents reported having not used artificial contraceptive methods and someone's age, level of education, religion and culture were among the major contributing factors to underutilization of artificial contraceptive methods also fear of side effects and having one sexual

CONCLUSION

Nawana one sexual partner in the past 12 months. This could be due to a belief that use of contraceptives caused mistrust by the sexual partner. This research finding contradicts with that of a study done among university students, which reported that not being pregnant and having more than one sexual partner contributed to low contraceptive use [34]. Additionally, more than a half 54.0% of the respondents needed permission from their partners to use artificial contraceptives and since it was based on someone's status contributing to the underutilization.

partner contributed to underutilization of artificial contraceptives.

Recommendations

Sensitization about the myths and misconceptions of side effects about artificial contraceptive methods in order to solve the problem of fear of side effects. There is also need for religious students' sensitization about artificial contraceptives.

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