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*Full Length Research Paper*

# Knowledge, Attitude and Practice of Female Condom use among Undergraduates of three selected Higher Institutions in Owerri, South-Eastern, Nigeria

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**Increase in sexual risk behaviors among students of higher institutions, which exposed them to negative consequences to unprotected sex such as STIs and unwanted pregnancy. Objective: This study therefore, aimed to investigate the knowledge, attitude and practice of female condom use among undergraduates of three higher institutions of learning in Owerri, Southeastern Nigeria. A cross-sectional survey was employed in the study in which well-structured questionnaires were developed and administered on the respondents. Data obtained were analyzed using descriptive and chi-square statistics. The result obtained showed that respondents had good knowledge of female condom (64.3%); through friend (50.8%) and (32.9%) of the respondents agreed that female condom can protect against STDs, HIV/AIDS etc. In conclusion, the knowledge of students in the study area on female condom was moderate. Therefore, efforts should be made by relevant bodies to encourage the use of female condom in order to ameliorate the negative consequences of unprotected sex.**

**Keywords:** Knowledge, Attitude, Practice, female condom, STI and HIV/AIDS

## INTRODUCTION

The conditional consequence of unsafe sex (unintended pregnancy and sexual transmitted infections) leads to introduction of preventive measures such as the female condom. The female condom is one of the very few currently available female- initiated methods that provide bi-directional protection to both partners (Gollub, 2000; Hoffman *et al.*, 2004).

Risky sexual behavior among Nigerian University students especially females who may not resist their sexual partner without protection, is a major contributing

factor to young adult morbidity and mortality (Shobha, 2014). With 86 million unintended pregnancies around the world every year and a young adults getting infected with HIV every minute, which remains a major threat to the public health and well-being of those living in low income countries, particularly those in Sub-Saharan Africa, a region with more than two-thirds (69%) of the world's HIV/AIDS caseload (UNFPA,2012).

The public health principles for introducing this method of prevention that provides protection against unintended pregnancy and STIs (eg HIV/AIDS) is the main reason for scientist to develop fertility regulation methods. The fertility regulation methods are to be safe and reversible under the control of the users, not systemic in action,

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protects the user against STIs and HIV and do not need to be provided by health services. Based on that female condoms are considered available, easy to use and less health effect among the users than any other contraceptive method (Hatzell *et al.*, 2003).

However, the female condom came into use for females as a public health prevention strategy and its use today remains low worldwide (UNFPA, 2006). The rate at which female condom is being used today globally as a barrier method was low due to cultural belief and cost relationship when compared to the male condom (Beksinska *et al.*, 2001). The female condom (FC) was developed as an alternative to male condom, and its usage depended on the willingness of both sexual partners (French *et al.*, 2003).

Female condom is applied to the female genital organ, it was hypothesized that women would find it easier to initiate the use than they would with a male condom. In that regards, it was thought that the FC would empower women who often lack decision-making power and control in sexual relationships, to take greater control of their sexual health (Gollub *et al.*, 2005).

The concept of female condom use is a transparent polyurethane sheath inserted into the vagina prior to sexual intercourse (either vaginal or oral) and has loose-fitting property. A FC is 17cm long (9.5inches), and has a flexible ring at each end. One end of the condom is closed and is a free-flowing ring and the closed end is inserted into the vagina to anchor the cervix and capture male semen during heterosexual intercourse while the other end of the condom is open where woman's partner inserts his penis into the open end of the condom during sexual activity. It remains outside the woman's vagina during sexual activity, partially covering the external genitalia (USDVA, 2008).

The knowledge of females on female condom use is all about "what someone knows about a particular subject" (Rundell, 2006). In this study, knowledge refers to what students know about the use of female condoms.

In a study conducted by Esther and Edward (2007), to examine the knowledge, attitudes and practices of condom use among undergraduates in a Polytechnic in Osun State, Nigeria, the study revealed 96.6% of the respondents know about both the male and female condoms, of these only 2.2% was not aware that female condoms existed. In the study, respondents claimed awareness through electronic media including sources like the radio, television, etc.

In a similar Study conducted by Okunola *et al* (2006), which assessed female condom awareness, usage and concerns among female undergraduates of the University of Ibadan in Nigeria, findings revealed that majority had knowledge of the female condom as a form of modern contraception and majority of them learnt about it through the mass media and health workers. However, only a few had ever used the female condom, with most using it to prevent both unwanted pregnancy and sexually

transmitted infections (STIs) including HIV. A major concern mentioned was its difficulty of inserting it into the vagina and lack of sexual satisfaction.

In a study conducted by Zondi *et al* (2006), explored knowledge, attitude and practices about the female condom use among South African male tertiary students through focus group. Although most of the male students were aware of the availability of the female condom, many had never seen one, and very few had used a female condom with their partners. The female condom was considered a good option for women as it is female initiated.

Also Charles *et al* (2011), examined awareness, acceptability and use of female condoms among undergraduates of the University of Port Harcourt in Nigeria, where findings revealed that majority of the students (89.3%) was aware of the female condoms.

Bull *et al* (2003), surveyed the knowledge, attitude and practices regarding female and male condoms. The findings suggested that African-American women were more likely to contemplate using female condoms.

Attitude refers to someone's opinion or feelings about something, expressed through behavior (Rundell, 2006). Oxford dictionary (2010) defines practice as the actual application or use of an idea, belief, or method, as opposed to theories relating to it or the customary, habitual or expected procedure or way of doing something. In this study, practice refers to the habit, custom surrounding female condom use.

Beksinska *et al* (2001), conducted a study to assess the acceptability of the female condom to different groups of women and their partners in South Africa. According to the research, acceptability and successful use depended on high rates of discontinuation and partner's reluctance to try the method as the main reason given for discontinuation. The main issues concerning women were over-lubrication (27%) and the device was too large (28%). The study opined that overcoming partner opposition is an important issue to address when introducing the method.

Bogart *et al* (2000), used the Theory of Planned Behaviour (TPB) augmented by AIDS knowledge to determine factors influencing the mind of Hispanic adults to use the female condom. The findings revealed that the TPB model had greater predictive utility for intentions to use female condom than male condom.

Hirky *et al* (2003) attempted describing attitudes towards the experiences with the female condom among eighty-nine (89) HIV-positive individuals. The findings underscored the need for comprehensive education effort aimed at both technical use and communication skills building in order to realize the potential of the female condom as an alternative barrier method.

In another study, Choi *et al* (1999), conducted in-depth interviews with 62 women recruited to elucidate strategies to promote the use of the female condom. The facilitators in health promotion used the female condom

as identified; mechanical barrier, psychosexual barrier, interpersonal and situational barrier. Specifically, the mechanical facilitators and barriers include positive and negative aspects of the device and difficulty with insertion. The psychosexual factors were female empowerment, more options for contraception and disease prevention, discomfort with vaginal insertion and condom use norms. The interpersonal factors include enhanced communication, relationship status, partner preferences and objections. In addition, the research suggested that the situations that made women decline to use the device were not access to the female condom when having sex.

The benefits of female condom uses are; it provides a high level of protection against different types of STI in sexually active individuals (Padian *et al.*, 2008). It reduces the risk of adverse health effects associated with sexual activity among sexually active with multiple partners. It offers a degree of sexual freedom to individuals living in a world characterized by numerous health risks stemming from sexual activity.

No significant effort has been made in Nigeria to widely promote and distribute the female condom in Nigerian higher institutions of learning, students are predisposed to high sexual risky behaviours, which expose them to negative consequences of unprotected sex. This then makes the study necessary. Also, lack of knowledge and positive attitudes toward the female condoms in this study suggest that programs should be design to raise awareness of female condoms use among females and males.

## RESEARCH METHODOLOGY

The study was conducted in three higher institutions of learning namely: Federal University of Technology, Federal Polytechnic Nekede and Alvan Ikoku Federal College of Education all situated in Owerri, Southeastern Nigeria. The three higher institutions of learning had approximately 6,075, 8,795 and 4,210 undergraduates respectively.

A cross-sectional study design was employed which adopted well-structured questionnaires that based on self-administration to the respondents in the study population from which data were derived.

Stratified random sampling technique was used to obtain the required number of respondents from the sampling frame. A sample size of 210 respondents was used for the study where 70 of them came from each of the three higher institutions.

The instrument was well-structured questionnaires. The questionnaire consisted of sections A and B. Section A elicits personal information about the respondents, Section B sought information on knowledge, attitude and practice of female condom use.

The instrument was validity by experts in reproductive health and health educator to ascertain that the contents of questionnaire achieved the study objective. The reliability of the instrument was approved after a pilot test with 10% of the study population to minimize error due to data collection.

Seventy (70) sample of the questionnaire were administered to each of the three higher institutions of learning; Federal University of Technology, Federal Polytechnic Nekede and Alvan Ikoku, Federal College of Education in Owerri, Southeastern Nigeria.

The completed questionnaires were sorted out and put in frequencies, Tables and Percentages. The generated data were plotted into charts, also analyzed using descriptive statistics and chi-square statistics.

## RESULTS

The result in **Table 1** showed the Socio-Demographic characteristics of respondents in the selected three higher institutions. Federal University of Technology, Owerri (FUTO), 30 males and 40 females were interviewed for the study. In Federal Polytechnic Nekede,(FPN) 18 males and 52 females took part in the study. In Alvan Ikoku Federal College of Education (AIFCE) 28 males and 42 females partook in the study. The level of study among the respondents; FUTO recorded the following: 100 level (10), 200 level (15), 300 level (14), 400 level (20) and 500 level (11) students participated in the study respectively. For FPN, 100 level (19), 200 level (17), 300 level (6), 400 level (14) and 500 level (14) students participated in the study respectively. For AIFCE, 100 level (7), 200 level (19), 300 level (29) and 400 level (18) students participated in the study.

Religion preference among students, in FUTO, 70 (100%) of the respondents were Christians. In FPN, 65 (92.9%) of the respondents were Christian while 5 (7.1%) of the respondents were Islamic respectively. In AIFCE, 70 (100%) of the respondents were Christian. For marital status of the respondents, 65 (92.9%) of them in FUTO were single while 5 (7.1%) were married. In FPN, 60(85.7%) were single and 10(14.3%) were married. In AIFCE, 66 (94.3) were single and 4(5.7%) were married.

The results in **Table 2** showed the respondents' know about female condom in the study area; in FUTO, 45 (64.3%) of respondents know about the female condom while 25 (35.7%) did not know. In FPN, 44(62.9%) respondents know about the female condom while 26(37.1%) did not know. In AIFCE, 40(57.1%) respondents were aware of female condom while 30(42.9%) were not.

Those who have seen female condom; in FUTO 25 (35.7%) of the respondents have seen a female condom while 45 (63.4%) have not. In FPN, 33 (47.1%) of the respondents have seen a female condom while 37

Table 1. Demographic data of respondents

Variables	Frequency		
	FUTO	FPN	AIFCE
<b>Gender</b>			
Male	30	18	28
Female	40	52	42
<b>Total</b>	<b>70</b>	<b>70</b>	<b>70</b>
<b>Level of study in the Higher Institution</b>			
100	10	19	7
200	15	17	19
300	14	6	29
400	20	14	15
500	11	14	0
<b>Total</b>	<b>70</b>	<b>70</b>	<b>70</b>
<b>Religion</b>			
Christianity	70	65	70
Islam	0	5	0
African Traditional Rel.	0	0	0
Atheism	0	0	0
<b>Total</b>			
<b>Marital Status</b>			
Single	65	60	66
Engaged	0	0	0
Married	5	10	4
Divorced	0	0	0
<b>Total</b>	<b>70</b>	<b>70</b>	<b>70</b>

FUTO = Federal University of Technology, Owerri; FPN = Federal Polytechnic Nekede; AIFCE = Alvan Ikoku Federal College of Education

(52.9%) of the respondents have not. In AIFCE, 20 (28.6%) have seen a female condom while 50 (71.4%) respondent have not. The respondents that know how to use the female condom in the study area; in FUTO, 22 (31.4%) of the respondents know how to use female condom while 48(68.6%) respondents do not know. In FPN, 21(30%) of the respondents know how to use the female condom while 49 (70%) respondents do not know. In AIFCE, 10(14.3%) know how to use the female condom while 60 (85.7%) do not. Respondents know about female condom, the results in FUTO, 15 (21.4%) of the respondents quoted Radio as source of female condom knowledge, 5 (7.1%) quoted Television, 19 (27.19%) said friends, 2(2.9%) read about it from a book while 2(2.9%) know from their schools.

Respondents learnt how to use the female condom as shown in table 2. In FUTO, 7 (10%) of the respondents learnt how to use the female condom from the radio, 5 (7.1%) said they learnt from television, 8(11.4%) learnt from friends, 1(1.4%) learnt from a book while 1(1.4%) learnt from school. In FPN, 4(5.7%) of the respondents learnt how to use from Radio, 7(10%) from television, 9 (12.9%) from friends and 2(2.9%) from school. In AIFCE, only 13 (18.6%) learnt from friends, 1(1.4%) from book and 1(1.4%) from school.

Thus given that  $X_{cal}$  was 58.96 as against  $X_{tab}$  of 9.21 at  $P < 0.01$  confidence interval,  $H_0$ -null hypothesis was therefore rejected while  $H_a$ - alternative hypothesis was accepted (Table 2).

The result in Table 3 showed the respondents attitudes towards female condom; in FUTO, 30 (42.9%) respondents strongly agreed that female condom can protect against STDs, 20 (28.6%) agreed, 18 (25.7%) of them were neutral, 1 (1.4%) of the respondents had no difference in disagreed and strongly disagreed of the female condom protection. In FPN, 14(20%) strongly agreed, 26 (37.1%) agreed, 19 (27.1%) were neutral, 7 (10%) disagreed and 5 (7.1%) strongly disagreed that the female condom can protect against STDs. In AIFCE, 14 (20%) strongly agreed 23 (32.9%) agreed, 21 (30%) were neutral 10(14.3%) disagreed and 2(2.9%) strongly disagreed that the female condom can protect against STDs.

Female condom can prevent unplanned pregnancy as table 3 indicated; in FUTO, 28(40%) strongly agreed, 21(30%) agreed, 18(25.7%) were neutral, 2(2.9%) disagreed while 1(1.4%) strongly disagreed of the view. In FPN, 14 (20%) respondents strongly agreed, 23(32.9%) were neutral, 7(10%) strongly disagreed that the female condom can prevent unplanned pregnancy. In

**Table 2.** Respondents' knowledge of female condom

<b>Know about female condom; <math>\chi^2=58.96 &gt; X_{tab}= 9.21</math></b>								
	<b>Yes</b>	<b>NO</b>						
FUTO	45(64.3%)	25(35.7%)						
FPN	44(62.9%)	26(37.1%)						
AIFCE	40(57.1%)	30(42.9%)						
<b>Have seen the female condom</b>								
	<b>Yes</b>	<b>NO</b>						
FUTO	22(31.4%)	48(68.6%)						
FPN	33(47.1%)	37(52.9%)						
AIFCE	20(28.6%)	50(71.4%)						
<b>Know how to use the female condom</b>								
	<b>Yes</b>	<b>NO</b>						
FUTO	22(31.4%)	48(68.6%)						
FPN	21(30%)	49(70%)						
AIFCE	10(14.3%)	60(85.7%)						
<b>Know about female condom from</b>								
	<b>Radio</b>	<b>TV</b>	<b>Friend</b>	<b>Newspaper</b>	<b>Book</b>	<b>Parents</b>	<b>School</b>	<b>PS</b>
FUTO	15	5	19	0	2	0	2	0
FPN	11	7	18	0	2	0	4	0
AIFCE	3	1	29	0	0	0	4	0
<b>Learnt how to use female condom from</b>								
	<b>Radio</b>	<b>TV</b>	<b>Friend</b>	<b>Newspaper</b>	<b>Book</b>	<b>Parents</b>	<b>School</b>	<b>PS</b>
FUTO	7	5	8	0	1	0	0	0
FPN	4	7	9	0	0	0	2	0
AIFCE	0	0	13	0	1	0	1	0

FUTO=Federal University of Technology Owerri; FPN=Federal Polytechnic Nekede; AIFCE=Alvan Ikoku Federal College of Education; TV=Television; PS=Place of worship

AIFCE, 21(30%) respondents strongly agreed, 33(47.1%) agreed, 9(12.9%) disagreed, 14(20%) were neutral, while 3(4.3%) strongly disagreed that the female condom can prevent unplanned pregnancy. In FUTO, 22 (31.4%) respondents were neutral, 16(11.4%) disagreed and 32(45.7%) strongly disagreed that students prefer female condom to male condom. In FPN, 5(7.1%) respondents strongly agreed, 3(4.3%) agreed, 25(35.7%) were neutral, 20(28.5%) disagreed, 17(24.2%) strongly disagreed that student prefer female condom to male condom. In AIFCE, 1(1.4%) respondent strongly agreed, 9(12.9%) disagreed, 26(37.1%) were neutral 21(30%) disagreed and 13(18.6%) strongly disagreed that student prefer female condom to male condom.

**Table 3** also showed that students feel shy buying female condom; in FUTO, 58 (82.9%) of the respondents feel shy buying female condom while 12 (17.1%) do not. In FPN 32(45.7%) of the respondents do not feel shy buying the female condom while 38(54.3%) do. In AIFCE, 54(77.1%) of the respondents feel shy buying the female condom while 16(22.99%) do not.

In FUTO, 61(87.1%) of the respondents claimed that their religion bans the use of female condom while 9(12.9%) said that its use was not. In FPN, 49(70%) of

the respondents agreed that their religion bans the use of female condom while 21(30%) disagreed. In AIFCE, 36(51.4%) of the respondents claimed that their religion bans the use of female condom while 34(48.6%) said it was not banned.

Thus, given that  $X_{cal}$  was 198.7 as against  $X_{tab}$  of 20.09 at  $P \leq 0.01$  confidence interval,  $H_0$ -null hypothesis was therefore rejected, while  $H_a$ -alternative hypothesis was accepted.

Female condom is cheap and affordable in FUTO; 1(1.4%) of the respondents agreed, 57(81.4%) disagreed while 12(17.9%) said no idea. In FPN, 1(1.4%) said female condom was affordable in school, 17(24.3%) said it was not 52(74.3%) reported no idea. In AIFCE, 5(7.1%) agreed that female condom was cheap and affordable, 14(20%) said it was not while 16(22.9%) had no idea.

Government makes female condom available in schools; in FUTO, 69(98.6%) of the respondent said that government does not provide female condom in their school and only 1(1.4%) agreed they do. In FPN, 69(98.6%) of the respondents said that government does not make female condom available in school while 1(1.4%) agreed. In AIFCE, 63(90%) said that government does not provide female condom in their school and

**Table 3.** Respondents Attitudes towards female condom**Female condom can protect against STDS**

School	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly Disagreed
FUTO	30(42.9%)	20(28.6%)	18(25.7%)	1(1.4%)	1(1.4%)
FDN	14(20%)	26(37.1%)	19(27.1%)	7(10%)	5(7.1%)
AIFCE	14(20%)	23(32.9%)	21(30%)	10(14.3%)	2(2.9%)

**Female condom can prevent unplanned pregnancy**

FUTO	28(40%)	21(30%)	18(25.7%)	1(1.4%)	1(1.4%)
FPN	14(20%)	23(32.9%)	23(32.9%)	3(4.3%)	7(10%)
AIFCE	21(30%)	33(47.1%)	14(20%)	9(12.9%)	3(4.3%)

**Students prefer female condom to male condom**

FUTO	0(0.00%)	0(0.00%)	22(31.4%)	16(11.4%)	32(45.7%)
FPN	5(7.1%)	3(4.3%)	25(35.7%)	20(28.5%)	17(24.2%)
AIFCE	1(1.4%)	9(12.6%)	26(37.1%)	21(30%)	13(18.6%)

**Students feel shy buying female condom**

SCHOOL	YES	NO
FUTO	58(82.9%)	12(17.1%)
FPN	38(54.3%)	32(45.7%)
AIFCE	54(77.1%)	16(22.9%)

**Religious belief bans female condom use**

FUTO	61(87.1%)	9(12.9%)
FPN	49(70%)	21(30%)
AIFCE	36(51.4%)	34(48.6%)

$\chi^2$  cal=198.7 as against X tab=20.09 at P≤0.01

7(10%) said they do. In all, no of the respondents have answer in no idea option.

NGOs give female condom free of charge in my school; 69(98.6%) of students from FUTO said that NGOs do not give female condom free of charge in their school. In FPN, 70(100%) of the students said that NGO's do not give female condom free of charge in their school. In AIFCE, 65(92.9%) of them said that NGO's do not give female condom free of charge in their school. Only few of the students in the three schools agreed that the NGOs do give as recorded 2(2.9%) in FUTO and FPN while 3(4.3%) of them came from AIFCE.

In FUTO, FPN and AIFCE, students said they do not use female condom every time they have intercourse had the following; 68(97%), 68(97%) and 67(92.9%) respectively while those that use in every sexual intercourse were 2(2.9%), 2(2.9%) and 3(4.3%). In FUTO, 5(7.1%) said they have used female condom once, 65(92.8%) of the respondents said they have not. In FPN, 21(30%) said they have used it once. In AIFCE, 7(10%) also said they have used once while 63(90%) said never used it.

In FUTO, FPN and AIFCE; 5(7.1%), 11(15.7%) and 7(10%) said that the female condom was difficult to

insert. 2(2.9%) of the respondents answer were the same in FUTO and AIFCE and 10(14.3%) of students in FPN said it was not. 63(90%), 49(70%) and 61(87.1%) (FUTO, FPN and AIFCE) of the respondents said they had no idea.

The table 4 showed results of students on partner's enjoyment in use of female condom during sexual intercourse. In FUTO, 3(4.3%) said their partners enjoy using female condom, 6(8.6%) said no while 61(87.1%) said no idea. In FPN, 4(5.7%) said their partner(s) enjoy using female condom, 7(10%) said their partners do not while 12(84.3%) had no idea. In AIFCE, 4(5.7%) said their partner(s) enjoy using female condom, 2(2.9%) said their partner(s) did not while 64(91.4%) said no idea.

Tear or Slip female condom during use; in FUTO, 5(7.1%) respondents said the female condom do tear or slip during use, 60(85.7%) said not always while 5(7%) said no idea. In FPN, 7(10%) of respondents said it tears or slips during use, 6(8.2%) said it does not tear or slip, 63(90%) said no while 2(2.9%) said they had no idea. In AIFCE, 9(12.9%) said it slips or tears during use while 61(88%) said not always.

Encourage people to use female condom; in FUTO, 46(65.7%) of the respondents said they do encourage

**Table 4:** Practice of female condom use

<b>Female condom is cheap and available in my school</b>			
<b>SCHOOL</b>	<b>YES</b>	<b>NO</b>	<b>No Idea</b>
FUTO	1(1.4%)	57(81.4%)	12(17.9%)
FPN	1(1.4%)	17(24.3%)	52(74.3%)
AIFCE	5(7.1%)	14(20%)	16(22.9%)
<b>Government makes female condom available in my school.</b>			
FUTO	1(1.4%)	69(98.6%)	0(0.00%)
FPN	1(1.4%)	69(98%)	0(0.00%)
AIFCE	7(10%)	63(90%)	0(0.00%)
<b>NGOs give female condom free of charge in my school</b>			
FUTO	1(1.4%)	69(98.6%)	0(0.00%)
FPN	0(1.4%)	70(100%)	0(0.00%)
AIFCE	5(7.1%)	65(92.9%)	0(0.00%)
<b>Use female condom every time I have sexual intercourse</b>			
FUTO	2(2.9%)	68(97.1%)	0(0.00%)
FPN	2(2.9%)	68(97.1%)	0(0.00%)
AIFCE	3(4.3%)	67(92.9%)	0(0.00%)
<b>Have used a female condom at least once</b>			
FUTO	5(7.1%)	65(92.8%)	0(0.00%)
FPN	21(30.0%)	49(70.0%)	0(0.00%)
AIFCE	7(10.0%)	63(90.0%)	0(0.00%)
<b>Female condom is difficult to insert</b>			
FUTO	5(7.1%)	2(2.9%)	63(90%)
FPN	11(15.7%)	10(14.3%)	49(70%)
AIFCE	7(10%)	2(2.9%)	61(87.1%)
<b>Partner(s) enjoy using female condom.</b>			
FUTO	3(4.3%)	6(8.6%)	61(87.1%)
FPN	4(5.7%)	7(10%)	59(84.3%)
AIFCE	4(5.7%)	2(2.9%)	64(91.4%)
<b>Tear or slip during use</b>			
FUTO	5(7.1%)	60(85.7%)	5(7%)
FPN	7(10%)	63(90%)	2(2.9%)
AIFCE	9(12.9%)	61(88%)	0(0.00%)
<b>Encourage people to start using female condom</b>			
FUTO	46(65.7%)	24(34.3%)	0(0.00%)
FPN	55(78.5%)	15(21.5%)	0(0.00%)
AIFCE	64(91%)	6(9%)	0(0.00%)

*X<sup>2</sup>cal was 0.32 as against Xtab =5.99 at P ≤0.05 confidence*

people to use condom, 24(34.3%) said they do not. In FPN, 55(78.5%) said they would encourage, 15(21.4%) said they would not. In AIFCE, 64(91%) said they would and 6(8.6%) said they would not.

Thus given that Xcal was 0.32 as against Xtab of 5.99 at P<\_0.05 confidence, interval Ho-null hypothesis was

therefore accepted while Ha-alternative hypothesis was rejected.

**Figure 1** depicts the students that know about the female condom in all the selected three higher institution, 61.4% of them said, they know about the female condom, while 38.6% said they do not.

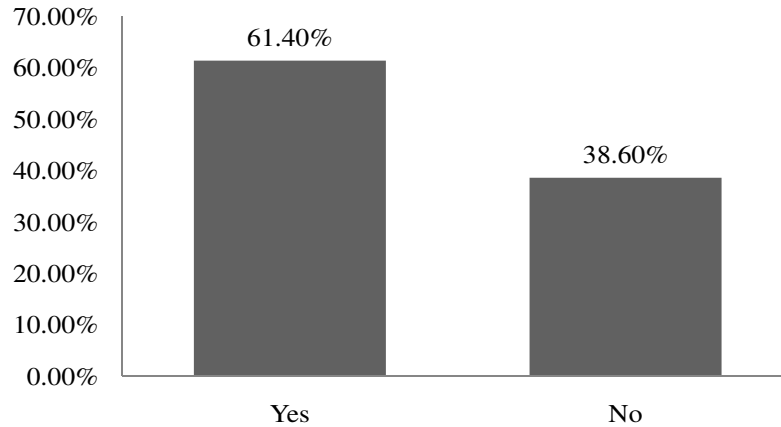


Figure 1. Percentage respondents who know about female condom

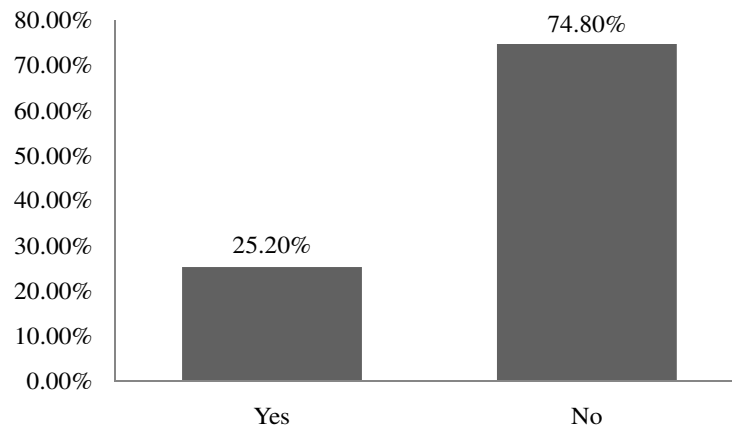


Figure 2. Percentage respondents' knowledge on how to use Female condom

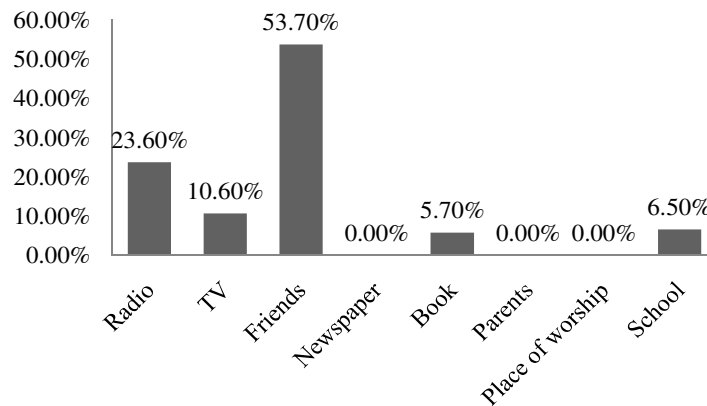


Figure 3. Percentage respondents' sources of knowledge female condom

In all the schools, 25.2 % said they know how to use female condom while 74.8% do not know how to use female condom (Figure 2).

In all, 23.6% know female condom from Radio, 10.6% from Television, 5.7% from book, 6.5% from school. The

most quoted source was from friends (53.7%) Figure 3 indicated.

In all, 18.6% learnt how to use female condom from radio, 20.3% from television, 3.4% from book, 6.8% from school while friends were the most quoted source



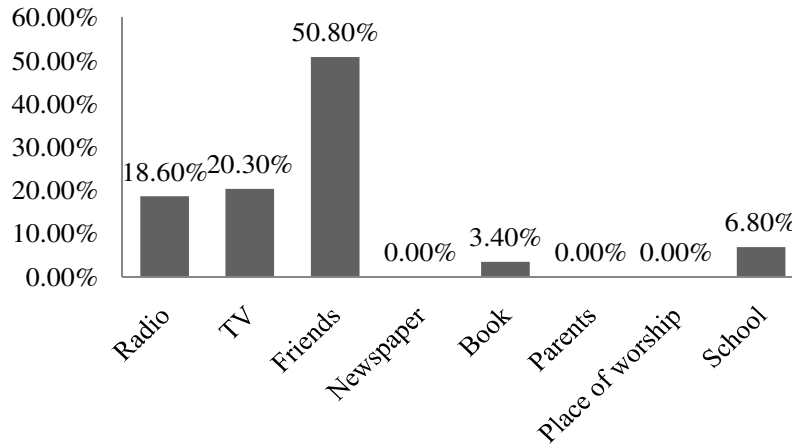


Figure 4. Percentage respondents' sources on how they learnt to use female condom

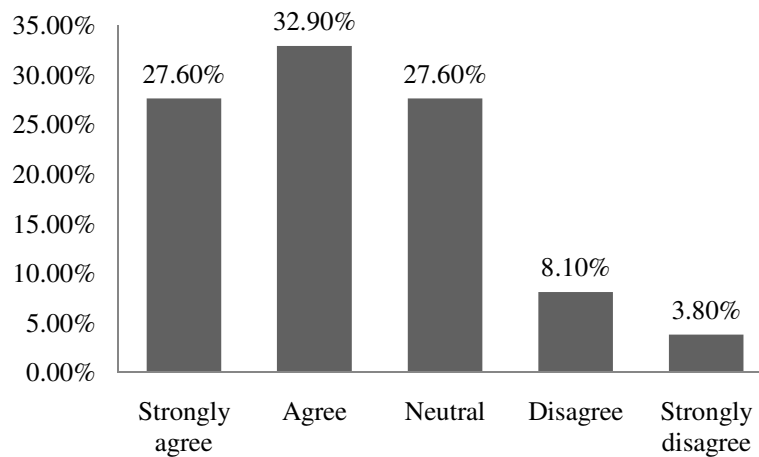


Figure 5. Percentage respondents' opinion on whether female condom can protect against STDs, HIV/AIDS, etc.

(50.8%) as **Figure 4** shown. Percentage of the respondents' opinion on whether condom can protect against STDs, HIV/AIDS etc; In all, 27.6% were the same for strongly agreed and neutral, 32.9% agreed, 8.1% disagreed while 3.8% strongly disagreed (**Figure 5**).

**DISCUSSION**

Generally, the findings showed that majority of the students know about female condom. The result obtained in this study was in line with the study done by Okunola *et al* (2006), where majority of respondents had knowledge of the female condom. The average mean (36.7%) of students have seen a female condom. This study corroborates with previous study of Zondi *et al* (2006), where not large number of students had ever seen a female condom. The most quoted source of knowledge in majority of respondents (53.7%) was

friends. The least quoted source was from print media. School and electronic media such as radio and television were quoted as the source of knowledge in this study. Parents and place of worship were not quoted at all, this could be as a result of low sex education on students from parents and religion do not support condom use. Learning how to use female condom from friends had the highest percentage (50.8%) of respondents. A chi-square statistical analysis of undergraduates knowledge of female condom gave a high significance difference at  $p \leq 0.01$ , thus indicating that respondent had good knowledge of female condom.

Attitude of students towards female condom, the findings showed greater percentage (71.5%) of students in the selected institutions agreed that female condom could protect against STDs and HIV included. Preference of female condom to male condom was reported by very few respondents and contradicts the study carried out by Bankole *et al* (2011); Fernandez *et al*

(2006) and Heignere *et al* (2000), where the respondents gave preference for male condom than the female condom. They gave reason as why they do not like it. The average percentage (71.4%) of the respondents opined that they feel shy buying the female condom. Majority of respondents (69.8%) said that their religion bans the use of female condom, which is more common in rural areas where culture is fully practice. The use of female condom was normally seen as a taboo to both male and female. A chi-square statistical analysis of attitude of undergraduates to female condom use gave a high significant difference at  $p \leq 0.01$ , thus indicating the respondents have good attitude towards female condom use.

Practice of Female Condom Use, the findings proved that majority of students (54.8%) had no idea whether is cheap or affordable in their school. Greater number of the respondents (92.4%) claimed that the female condom was not readily available in their schools. The results showed (95.7%) of the respondents opined that the government does not make female condom available in their schools while similar percentage claimed that NGOs do not give female condom free of charge in their schools. This study is consistent with the study findings of Charles *et al* (2011), Hirky *et al* (2003) and Heignere *et al* (2000), where majority of respondents had never used a female condom once due to non-availability and cost. Some of the students reported that female condom is difficult to insert and majority of respondents (82.3%) had no idea about the difficulty with insertion. The study was in line with findings of Charles *et al* (2011), who opined that most respondents had difficulty with insertion of the female condom. According to Buck *et al* (2005), who reported that female condom detracts from sexual pleasure and was similar to the findings of this study where some of them claimed that the female condom interferes with sexual pleasure. Majority of respondents that reported they would encourage people to use female condom was in agreement with previous study findings of Beksinka *et al* (2001), where large portion of the respondents agreed to educate others on the use of female condom.

An  $X^2$  statistical analysis of practice of undergraduate towards female condom use gave a high significance difference at  $p \leq 0.05$ , thus indicating that respondents have poor practice of female condom use.

## CONCLUSION

Knowledge of female condom in this study was moderate. However, knowledge on good use and actual use of the female condom was low despite general awareness. Respondents' attitudes towards female condom use were favorable, although practice of female condom use was poor. This was as a result of factors that affect female condom use such as aesthetics, difficulty

with insertion, unavailability, high cost, inaccessibility, preference for male condoms, male partner reaction, lack of training on how to use, myths and misconception, interference with sexual pleasure, social stigma.

## RECOMMENDATIONS

There is need for extensive and comprehensive education on female condom use especially for women.

Mass campaigns should be organized to ameliorate knowledge on the use of the female condom and the campaigns should be extended to schools in addition to publicity on the media.

Deliberate efforts using social –marketing strategies, appropriate youth-friendly publicity and peer education must be exerted to provide affordable female condom and promote usage.

Parents and religious leaders should endeavor to teach their children on sex education and contraceptive use in order to prevent them from getting wrong information from friends.

Female condom should be presented to youths as a contraceptive method that complements the male condom rather than substitute it.

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