

AWARENESS AND UTILIZATION OF EMERGENCY CONTRACEPTIVES AMONG FEMALE UNIVERSITY UNDERGRADUATES IN RIVERS STATE, NIGERIA

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ABSTRACT

This study was carried out to determine the awareness and utilization of emergency contraceptives among female university undergraduates in Port Harcourt, Rivers State. The study was guided by six objectives and related literature reviewed. The study was designed as a cross sectional study and sample size of 688 female students were drawn from a total population of 991 female university undergraduates residing in the university of Port Harcourt hostels and Rivers state university hostels respectively. A structured, validated and reliable questionnaire was used as the instrument for data collection and data analysis was done using Chi-square test and significance was tested at $P < 0.05$. The results showed that 600 (87.2%) out of 688 female university undergraduates had knowledge of emergency contraceptives while 88 (12.8%) had no knowledge of emergency contraceptives. More so, 510 (74.1%) out of 600 female university undergraduates who were aware of emergency contraceptives used it, while 90 (13.1%) did not use emergency contraceptives. Furthermore, four forms of E.C were used among the female university undergraduates, these were levonorgestrel (58%) which was predominantly used among the students, and others were: combined pills (5%), combined pills and Intrauterine Copper Device (IUCD) (10%) and IUCD only (1%) while 26% of the students did not use E.C. A significant relationship was recorded between age and forms of E.C utilized among the students ($X^2 = 158.0$, $P < 0.001$ d.f =6). However, no age significant relationship was found between awareness and utilization of E.C among the female university undergraduates in Port Harcourt, Rivers State ($X^2 = 0.625$, $P = 0.731$). The study showed adequate awareness and utilization of E.C among the female university undergraduates. It was recommended that female university undergraduates should rely on prescription given by health professionals and seek professional counseling on issues of contraceptives.

Keywords: Awareness, Utilization, Emergency contraceptives, Levonorgestrel Pills and Intrauterine Copper Device (IUCD).

INTRODUCTION

Background to the Study

The environment in higher institutions of learning is characterized by high levels of personal freedom and social interaction. This social interaction often translates to sexual interaction (Alexander, Garda, Kanade, Jejeebhoy, and Ganatra, 2007). Permissive sexual lifestyle in higher educational institution in Nigeria and a number of other countries have been documented as featuring a high level of risky sexual behaviors such as transactional sex, multiple sexual partners, and unprotected casual sex (Katjaviri and Otaala, 2003). Such reproductive health behavior is prone to consequences of unwanted pregnancies, unsafe abortions, disruption of education and secondary infertility (Malhotra, 2008; Akingba, 2002 and Adegoke, 2003).

Given the increasing level of sexual activities among young people and decreasing age at first sex in developing countries, the use of contraceptives to prevent unwanted pregnancy and unsafe abortion is especially important (Adedoyinand Adegoke, 1995; Okonkwo, Fatusi, Ilika, 2005 and Uthman, 2008). It has been reported by the Nigerian Population Commission (NPC) that knowledge of contraception is lowest among women with no education and greatest among women with more than secondary education (NPC and ICF Macro, 2009).

According to Cleland, Zhu, Goldstuck, Cheng and Trussell (2012), Emergency contraception is a birth control method used after having an unprotected sex, that is, if no birth control method was used or if the regular birth control failed. Depending on the type of emergency contraception, emergency contraception can be used within 3 days or within 5 days after unprotected sex to prevent pregnancy (Cleland *et al.*, 2012). Stewart, Trussell and Van Look (2007) defines Emergency Contraception as a therapy for women who have had unprotected sexual intercourse, including sexual assault and known or suspected contraceptive failure, and want to avoid pregnancy. The two most common reasons for seeking EC are failure of a barrier method (usually condoms) and failure to use any contraceptive method (Stewart *et al.*, (2007). Emergency contraception is the contraception administered to a woman after unprotected intercourse. In the past it has also been known as postcoital contraception or morning after pills.

Emergency contraception is needed when intercourse is unexpected and without prior contraceptive coverage. Other indications include failure of barrier methods like the slipping or breakage of condoms, and after rape.

This emergency contraception may be an effective way to reduce the number of unwanted pregnancies and induced abortions (Haspels, 1994).

Emergency contraception is essentially female-driven, so its use and success rests mainly on how women perceive and practice it.

Levonorgestrel-only pills and combined oral contraceptives are the mostcommon emergency contraceptive methods available in Nigeria; they can be obtained over the counter from patent medical and pharmaceutical shops. Unconventional techniques of emergency contraception are common among young women in our setting. As much as 75% of sexually active (14-19years) teenage girls have been reported to have some form of perceived contraception device such as laxatives, local potash, “white quinine” and menstrogen pills in the South-West geopolitical zone of the country (Haspels, 1994).

A high level of knowledge and concomitant utilization of contraception is desirable among adult women, a significant proportion of which is in tertiary institutions. The current

contraceptive prevalence rate in Nigeria is about 15% (NPC and ICF Macro, 2009). This low rate underlies the population explosion and other reproductive health challenges being currently experienced in the country. Women in tertiary educational institutions are included in the over 200 million women worldwide who have an unmet contraceptive need (MacPhail, Pettifor, Pascoe, and Rees, 2007).

OBJECTIVES OF THE STUDY

General Objective

The general objective of this study is to determine the awareness and utilization of emergency contraceptives among female university undergraduates in Port Harcourt, Rivers State.

Specific Objectives

In order to achieve the general objectives, the specific objectives are:

1. To determine the socio-demographic characteristics of the female university undergraduates in Port Harcourt, Rivers State.
2. To determine the awareness of emergency contraceptives among female university undergraduates in Port Harcourt, Rivers State.
3. To determine the utilization of emergency contraceptives among female university undergraduates in Port Harcourt, Rivers State.
4. To determine the forms of emergency contraceptives used by the female university undergraduates in Port Harcourt, Rivers State.
5. To determine the age relationship between awareness and utilization of E.C among female university undergraduates in Port Harcourt, Rivers state.
6. To determine the relationship between age and forms of E.C used among female university undergraduates in Port Harcourt, Rivers State.

MATERIALS AND METHODS

Study Design

This is a cross-sectional descriptive study; a cross-sectional study analysis data collected from a population at a specific time. The present cross-sectional study analyzes data on the use of emergency contraceptive among female undergraduate students in tertiary institutions in Rivers State. As an analytical study, it seeks to know the awareness of E.C. and measures the prevalence of the use of emergency contraceptive among female students Port Harcourt, Rivers state.

Study Population

The study populations were 533 female university undergraduates residing in the University of Port Harcourt school hostels and 458 female university undergraduates residing in the Rivers State University of Science and Technology currently Rivers State University (RSU) Hostels. The students in Uniport came from three campuses: the Abuja campus hostel, 183 female students; Delta campus hostel, 250 female students and Choba campus hostels, 100 female students (sources: Field work, August 2017). Furthermore, the distribution of the female university undergraduates in RSU hostels was such that, 170 students resided in hostel B, 180 were in hostel C and 108 were in hostel D.

Sampling Size and Sampling Method

Sample size

The sample size was determined with Taro Yamane sample size formula. Taro Yamane (1973) sample size formula was used in a study where the population is finite (a known population). The formula determines a sample size at 95% confidence interval. In this study, six hundred and eighty-eight (688) female students were drawn from a population of 991 female students. The selection was such that 126 students were selected from 183 female students at Abuja campus hostel (Uniport), 153 students were drawn from 250 female students at Delta campus hostel (Uniport) and 80 students were drawn from 100 female students at Choba campus hostel (Uniport).

Also at RSU, the selection was such that, 120 students were selected from 170 students at Hostel B, 124 were selected from 180 students at Hostel C and 85 students were selected from 108 students at Hostel D.

Sampling Method

❖ University of Port Harcourt

Stratified simple random sampling method was used to select the hostels.

Firstly, University of Port Harcourt was stratified into three campuses; Abuja Campus, Delta Campus and Choba Campus. Thereafter, all the female hostels were listed for each campus. One hostel each was selected from each campus using balloting. The hostels in each campus were listed on ballot papers and the papers were picked at random. Any paper picked represented a hostel, which means the hostel has been selected. This process was carried out for all the campuses.

Furthermore, female students in each of the three selected hostels were selected using simple random sampling method. Again, balloting was used. Ballot papers were written YES or NO and were picked by the female students. Those who picked YES were selected while those who picked NO were not.

This was done for each selected hostel until the required numbers of students were selected.

❖ Rivers State University (R.S.U).

Female students in Rivers State University (RSU) were selected using simple random sampling.

There are three female hostels out of five hostels in Rivers State University. Ballot papers were written “Yes or No” and were picked by the female students in each of the three hostels. Those who picked “Yes” were selected while those who picked “No” were not.

Instrument for Data Collection

A structured questionnaire was constructed for collecting data for the study.

The questionnaire has four (5) sections and sought information to address the objectives. The first section sought information on socio-demographic characters of the female undergraduate students. The second section sought information on their knowledge of emergency contraceptive. The third section sought information on practice of emergency contraceptives among female undergraduate students in Rivers state. The fourth section sought information on the forms of

E.C used by female undergraduate students in Rivers State and the fifth section sought information on the association between sexual habits and E.C utilization.

Validity of the Instrument

Face validity: Face validity was used in validating the questionnaire. The questionnaire was carefully prepared by the researcher and was vetted by the supervisor and two experts in Public Health in relevance to the topic, contents, objectives and appropriateness of language. The corrections were used to modify the instrument and the final draft was approved.

Reliability of Instrument

Parallel reliability test was used to test the reliability of the instrument. Two sets of copies of the questionnaire of equivalent contents were administered to 10 students that were not part of the study at the same time (five from Imo State University and five from Federal Polytechnic, Nekede). The two sets of results were ranked and Spearman's rank co-relation was used to calculate the co-relation co-efficient. The Spearman's rank co-relation co-efficient takes values between -1 and +1 (i.e. 0.1 to 1.0). Co-efficient of 0.70 – 1.0 is most acceptable and the co-efficient co-relation reliability of the instrument was 0.88.

Method of Data Collection

Before the study started, permission was obtained from heads of institutions. Thereafter a team of researchers sensitized the selected female students on the aim and importance of the study.

Four research assistants trained for the work administered the copies of questionnaire to the respondents. The students filled the questionnaires themselves and were cleared of doubts where they were confused. The questionnaire administration lasted between 3-5 minutes for each respondent.

Method of Data Analysis

Descriptive method was used to summarize the data characteristics. Frequency distribution table was constructed for all class variables and data were expressed as percentage of distribution. Pie Chart was constructed for data obtained on the forms of E.C used by the female university undergraduates and chi-square test was used to analyse the level of significance which was interpreted as calculated value > tabulated value > 0.05.

Ethical Consideration

Ethical clearance was obtained from:

1. FUTO School of Health Technology, Research Ethics Committee.
2. Verbal informed consent was obtained from the students before being allowed to participate in the study.

RESULTS

Socio-Demographic Characters of the Female University Undergraduates in Port Harcourt, Rivers State.

The age distribution of the female university undergraduates was such that 228 (33.1%) were Teenagers (16-20 years), 425 (61.7%) were young Adults (21- 30 years), and 35 (5.3%) were Older Adults of (>30 years) (table 1). Also, the marital status (table 4.1) of the female

university undergraduates was such that 608 (88.3%) female university undergraduates were single while 80 (11.7%) female undergraduate students were married.

Furthermore, data on their level of study showed that 300 (43.6%) were in first year, 38 (5.5%) were in second year, 20 (2.9%) were in third year, 200 (29.0%) were in fourth year, 30 (4.3%) were in fifth year and 100 (14.7%) were in sixth year studying various courses in their respective schools.

The sexual habits of the female university undergraduates were such that 58 (8.5%) never had sex, 200 (29.0%) had sex daily, 180 (26.1%) students had sex between 2-3 times a week, 150 (21.8%) students had sex between 1-5 times in a month, 80 (11.6%) female students had sex between 6-10 times in a month and 20 (3.0%) students had sex more than 11 times in a month.

Table 1: Socio-demographic characters of the female undergraduate students of selected tertiary institutions in Rivers State.

Variables	Frequency (N=688)	Percentage (%)
Age (years)		
Teenagers	228	33.1
Younger Adults	425	61.7
Older Adults	35	5.2
Total	688	100
Marital Status		
Single	608	88.3
Married	80	11.7
Total	688	100
Level of study		
First year	300	43.6
Second year	38	5.5
Third year	20	2.9
Fourth year	200	29.0
Fifth year	30	4.3
Sixth year	100	14.7
Total	688	100
Sexual habits		
Never had sex	58	8.5
Daily sex	200	29.0
2-3 times in a week	180	26.1
1-5 times in a month	150	21.8
6-10 times in a month	80	11.6
>11 times in a month	20	3.0
Total	688	100

Teenagers - 16-20 years

Young Adults - 21- 30 years

Older Adults - >30 years

The Awareness of Emergency Contraceptives among Females of University Undergraduates in Port Harcourt, Rivers State.

Table 2 presents the female university undergraduates awareness of emergency contraceptives. 600 (87.2%) female university undergraduates were aware of E.C., while 88 (12.8%) were not aware of E.C. Furthermore, their awareness of brands of E.C were such that 220 (31.9%) female university undergraduates were aware of only one brand of E.C, 200 (29.2%) were

aware of two brands of E.C, 180 (26.2%) were aware of more than two brands of E.C. and 88 (12.9%) were not aware of any brand of E.C.

Results on knowledge of dosage showed that 500 (72.7%) female university undergraduates had knowledge of the correct dosage of E.C to be taken.

Also, 600 (87.2%) female university undergraduates had knowledge of time of use of E.C and 108 (15.7%) had knowledge of the side effects of E.C.

The result on sources of knowledge showed that bill boards and posters were the sources of knowledge of 38 (5.5%) female university undergraduates. 20 (2.9%) female university undergraduates had their knowledge through radio and television adverts, 70 (10.2%) had their knowledge through newspaper and magazines, 360 (52.3%) had their knowledge through friends, 180 (26.2%) had their knowledge through health personnel and 20 (2.9%) had their knowledge in class lectures.

TABLE 2: The female undergraduate students' knowledge of emergency contraceptives.

Variables (%)	Frequency (n=688)	Percentage
Knowledge of E.C		
Yes	600	87.2
No	88	12.8
Total	688	100
Knowledge of E.C Brands		
Knowledge of one brand	220	31.9
Knowledge of two brands	200	29.0
Knowledge of more than two brands	180	26.2
No knowledge of anyBrand	88	12.9
Total	688	100
Knowledge of E.C Dosage		
Yes	500	72.7
No	188	27.3
Total	688	100
Knowledge of time of use		
Yes 600 87.2		
No 88 12.8		
Total	688	100
Knowledge of side effects of E.C		
Yes	108	15.7
No	580	84.3
Total	688	100
Sources of Knowledge of E.C		
Bill Boards and posters	38	5.5
Radios and television adverts	20	2.9
News Papers and Magazines	70	10.2
Through Friends	360	52.3
Through health Personnel	180	26.2
Class Lectures	20	2.9

Utilization of E.C. Among Female University Undergraduates in Port Harcourt, Rivers State.

The results of showed that 510 (74.1%) female university undergraduate students used E.C out of which 500 (72.6%) used one brand while 10 (1.5%) use more than one brand. However, 178 (25.9%) do not use E.C at all. Furthermore, data on mode of utilization shows that 208 (30.2%) female university undergraduates used E.C after every unprotected sex, 302 (43.9%) use E.C once in a menstrual cycle, 178 (25.9%) never used E.C. Also, data on prescription of E.C showed that health personnel prescribed E.C for 80 (11.6%) female undergraduates, friends prescribed E.C for 330 (47.9%) female undergraduates, while 100 (14.6%) female undergraduate students used E.C on self-prescriptions.

Results on timing of use of E.C shows that 310 (45.0%) female undergraduates take E.C immediately after unprotected sex, 70 (10.2%) female undergraduate students take E.C within 24hours of unprotected sexual intercourse, 30 (4.3%) female undergraduates take E.C within 48hours of the unprotected sexual intercourse, 60 (8.7%) female undergraduate students take the E.C within 72 hours of unprotected sexual intercourse and 40 (5.9%) female undergraduates take E.C after 72 hours of unprotected sexual intercourse.

Table 3: Utilization of E.C among female university undergraduates in Port Harcourt, Rivers State.

Variables (%)	Frequency(n-688)	Percentage
E.C Utilization		
Yes	510	74.1
No	178	25.9
Total	688	100
Number of brands used:		
Used only one brands	500	72.6
Used more than one brand	10	1.5
Do not use at all	178	25.9
Total	688	100
Mode of utilization		
After every unprotected sex	208	30.2
Once in a menstrual cycle	302	43.9
Never used it	178	25.9
Total	688	100
E.C prescribed by.		
Health personnel	80	11.6
Friend	330	47.9
Self	100	14.6
None/never used it	178	25.9
Total	688	100
Timing on use of E.C		
Immediately after sex	310	45.0
Within 24 hours	70	10.2
Within 48 hours	30	4.3
Within 72 hours	60	8.7
After 72 hours	40	5.9
Do not take E.C	178	25.9
Total	688	100

Forms of E.C used by the female undergraduate students of selected tertiary institutions in Rivers State.

As seen in Figure 1, levonorgestrel pill 400 (58.1%) were the predominant E.C used by the female undergraduate students in Rivers State. Combined pills (progesterone/estrogen pills) another form of E.C was used by 30 (4.4%) female undergraduate students. 70 (10.2%) used combined pills and copper IUD while 10 (1.4%) female undergraduate students used only copper IUD. However, 178 (25.9%) female undergraduate students do not use E.C., IUCD (1%).

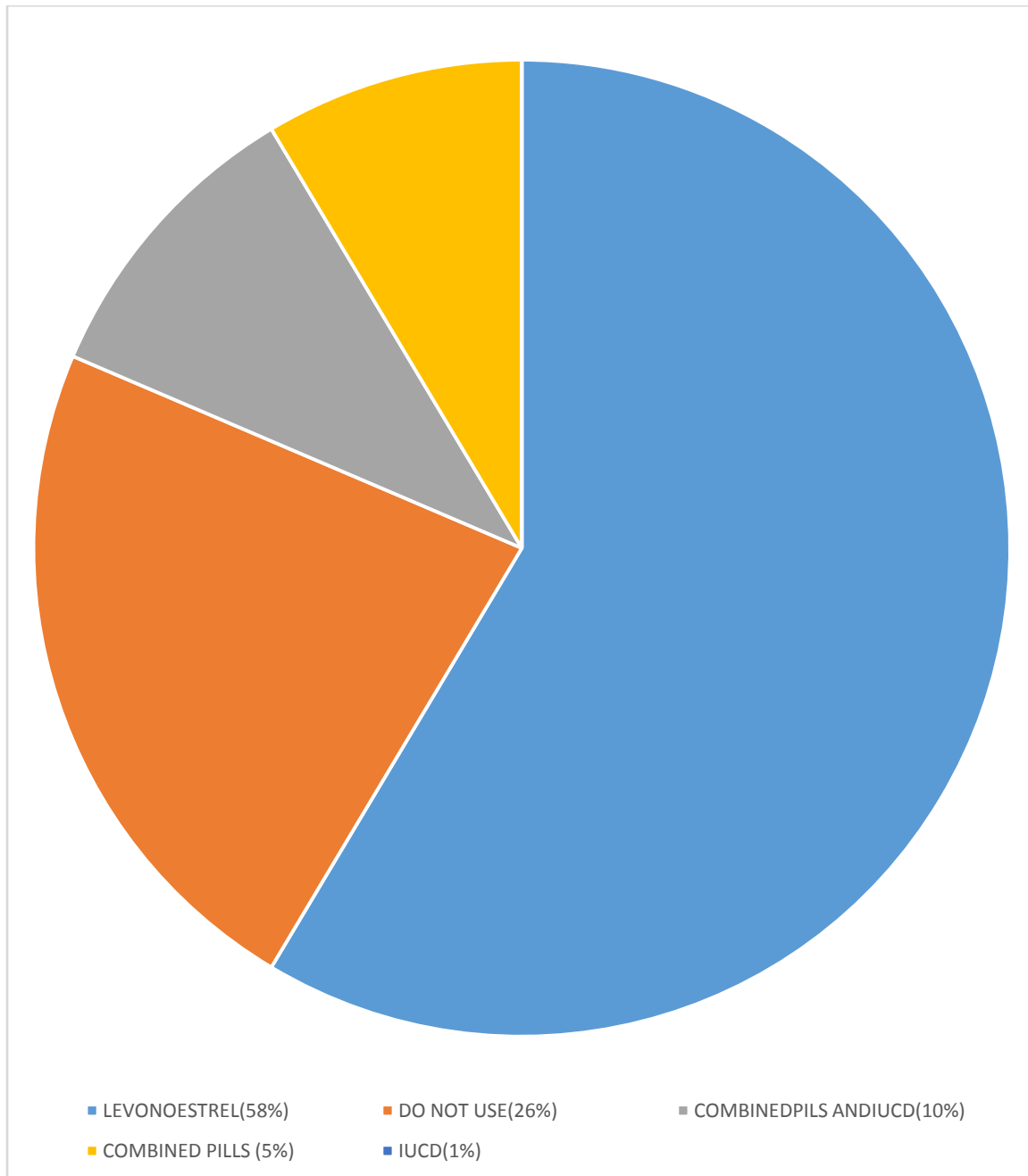


Figure 1: Portion of female undergraduate students and the form of E.C they use.

Relationship Between Age And Forms of E.C. Utilized among Female University Undergraduates In Port Harcourt, Rivers State.

Levonogestrel pills were predominately used among the female university undergraduates. 210 (96.3%) teenage female university undergraduates used levonogestrel pills while 8 (3.7%) teenage female university undergraduates used combined pills. Among adult female university undergraduates, 100 (55.5%) used levonogestrel pills, 22 (12.2%) used combined pills and 58 (32.3%) used combined pills/IUD. Also among the older female adult university undergraduates, 90 (80.3%) used levonogestrel pills, 10 (8.9%) used IUD and 12 (10.8%) used combined pills/IUD.

Statistical Analysis showed a significant relationship between age and forms of E.C utilized among the female university undergraduates in Port Harcourt Rivers State ($X^2 = 158.0$, $P < 0.01$, d.f = 6), as levonogestrel pills was mostly used by all the age groups.

Table 4: Relationship Between Age And Forms Of E.C. Utilized Among Female University Undergraduates In Port Harcourt, Rivers State.

Ages of group of participants	Frequency (%)	TYPES OF E.C USED BY THE STUDENTS			
		Levonogestrel (%)	Combined Pills (%)	IUD (%)	Comb. pills /IUD (%)
Teenagers	218 (42.7)	210 (96.3)	8 (3.7)	0 (0.0)	0 (0.0)
Adults	180 (35.2)	100 (55.2)	22 (12.2)	0 (0.0)	58 (32.3)
Older adults	112 (32.4)	90 (80.3)	0 (0.0)	10 (8.9)	12 (10.8)
Total	510 (100.0)	400 (28.4)	30 (5.8)	10 (1.9)	70 (13.9)

$X^2 = 158.0$, $P = < 0.01$, d.f = 6

Age relationship between awareness and utilization of E.C. among female university undergraduates in Port Harcourt, River state.

The results on age relationship between awareness and utilization of E.C among the female university undergraduates in P.H River State showed that, out of 218 female teenagers who used E.C, 200 (91.7%) were aware of E.C while 18 (8.3%) were not aware of E.C. Among 180 female adults of who used E.C, 162 (90%) were aware of E.C while 18 (10%) were not aware of E.C. Also, among 112 older female adults who used E.C, 100 (89.2%) were aware of E.C and 12 (10.8%) were not aware of E.C. Statistical analysis showed non-significant association between awareness and utilization of E.C among female university undergraduates in Port Harcourt, Rivers state ($X^2 = 0.625$, $P = 0.731$, d.f = 2).

Furthermore, the results on age relationship between awareness and non- utilization of E.C showed that, all the 10 female teenagers who did not use E.C were aware of E.C. among 68 female adults who did not use E.C, 50 (73.5%) were aware of E.C while 18 (26.5%) were not aware of E.C. Also among 100 older female adults who did not use E.C, 78 (78%) were aware of E.C and 22 (22%) were not aware of E.C. Statistical analysis showed a significant association between awareness and non-utilization of E.C among female university undergraduates in Port Harcourt, Rivers state ($X^2 = 3.35$, $P = 0.187$, d.f. = 2).

Table 5: Age relationship between awareness and utilization of E.C among female university undergraduates in Port Harcourt, Rivers state.

Ages of Participants	Frequency (%)	Awareness of E.C		X ²	P. value
		Yes (%)	No (%)		
Utilization of E.C					
Teenagers	218(42.7)	200(91.7)	18(8.3)		
Adults	180(35.3)	162(90.0)	18(10.0)		
Older adults	112(22.0)	100(89.2)	12(10.8)		
Total	510(100.0)	462(90.5)	48(9.5)	0.625	0.731
Non-utilization of E.C.					
Teenagers	10(5.6)	10(100.0)	0(0.0)		
Adults	68(38.2)	50(73.5)	18(26.5)		
Older adults	100(56.2)	78(78.0)	22(22.0)		
Total	178(100.0)	138(77.5)	40(22.5)	3.35	0.187

DISCUSSION

The female undergraduate students' knowledge of emergency contraceptives

The results from this study recorded high knowledge of emergency contraceptives among the female undergraduate students in Rivers state. 87.2% of the students were aware of emergency contraceptives and the time of utilization, 72.7% were aware of the E.C dosage and 15.7% were aware of the side effects. These findings are consistent with the study of Bilkisu, Sanusi, Killima and Bako (2016) which found high level of awareness of E.C among female university students in Nigeria. But not consistent with those of Davtyan (2000); Ojule, Oriji and Georgewell (2008); Ibekwe and Obuna (2010). This study is also not consistent with the 2008 Nigeria Demographic Health Survey which reported contraceptive prevalence of 6.5% in the state where the study was carried out (National Population Commission (NPC), 2008). However, the discrepancy in results could be seen as; pregnancy outside wedlock is a taboo especially in Nigerian traditional settings and as such any unmarried woman who is sexually active must ensure that pregnancy is prevented. The fact that a majority of respondents in this study were singles gives credence to this assumption. In the absence of E.C, unwanted pregnancy could occur and opportunity to get rid of it is not available because of the restrictive abortion law in Nigeria.

In this study, friends (52.3%) constituted the major source of emergency contraceptive information. This is consistent with the studies of Nworah, Sunday, Joseph, Monday, Josepha (2010); Ojule, *et al.* (2008); Oye-Adeniran, Adewole, Odeyemi, Ekanem, and Umoh (2005) but contradicts a 1996 survey where information about sex and contraception came from parents, teachers, nurses, sex education classes and the media (Kaiser, 1996). The sharp deviation of information sources between the 1996 survey and this study could be attributed to

dynamism in lifestyle. It has been a long period between 1996 and 2017 (more than 2 decades) and a lot have changed including youthful lifestyles. Then (1996), youths take advice from parents and teachers who they perceived to be superior being with wide experience. But now youth rather take information from friends who influence their lives in various ways.

Practice of emergency contraceptives among female undergraduate students in Rivers state

In this study, 74.1% of the female undergraduate students use emergency contraceptive which is about two third of the sample population of the students. This is similar to the study of Bilkisu, Sanusi, Kullima and Bako (2016) which reported 71.5% utilization of emergency contraceptives.

Among 74.1% of the students who used emergency contraceptives, 30.2% used it after every unprotected sexual intercourse and 43.9% used it once in a menstrual cycle. This finding is similar to those of Tilahum, Assefa and Belachew (2010) which reported 29.9% female students who use emergency contraceptives after every unprotected sex and Hoque and Ghuman (2012) which reported 51.0% female students who used emergency contraceptives once in a menstrual cycle. Tilahum, Assefa and Belachew (2010) reported that the use of emergency contraceptive pills after every unprotected sex were associated with female students who had taken the medication on self-prescription, or students whose friends prescribed emergency contraceptive for. The scenario could be the same in the present study, as the proportion of students who had taken E.C pills after unprotected sex is almost close to that of Talihum, Asseta and Belachew (2010).

Forms of emergency contraceptives used by the female undergraduate students in Rivers State

It has been documented that the most common methods of contraception among teens and young adults are condoms and oral contraceptives (Forrest and Singh, 1990; Mosher, 1990) and that one-third of those who use the pills also use condoms (Alan Guttmacher Institute, 1994).

In the present study, the most common form of emergency contraception used was Levonorgestrel (postinor-2); the reason for this might be because postinor - 2 is well known by many sexually active adolescents and young adults as an emergency contraceptive pill in Nigeria. It can be obtained over the counter without prescription. Insertion of IUCD may be considered by young adult as been made for married women requiring long acting reversible contraception and therefore not suitable for them.

Relationship between age and forms of E.C. utilized among female university undergraduates in Port Harcourt, Rivers State.

The present study has shown a significant relationship between age and forms of E.C used among the female university undergraduates ($X^2 = 158.0$, $P = <0.01$, $d.f = 6$). Levenogestrel pills were predominantly used by teenage female university undergraduates and this may be as a result of self prescription or prescription by a friend arising from fear of being pregnant after unprotected sexual intercourse. Combined pills with IUD were mostly used by adult and older adult female university undergraduates and may have been prescribed by professional health practitioners. Ibekwe and Obuna (2010) reported that the use of levonogestrel pills was predominant among teenagers, who depend on self-medications. The findings of Fasanu, Adekanle, Adeniji and Akindele (2014) is in line with the result of the present study which

revealed that adult reproductive female mostly use IUD and combined pills to prevent pregnancy from occurring.

Age relationship between awareness and utilization of E.C. among female university undergraduates in Port Harcourt, River State.

The study showed that 90% of the female students who used E.C across the age groups were aware of it. However, statistical analysis showed no significant age relationship between awareness and utilization of E.C among the female students who used E.C. This may have occurred by chance as it is contrary to the findings of Amazigo, Silva, Kaufman, and Obikeze (1997), which recorded a significant relationship between awareness and utilization of E.C among female secondary school students in North Central Nigeria.

CONCLUSION

Female undergraduate students in Rivers State had knowledge of emergency contraceptives. There were adequate utilization and correct timing on the use of E.C among the students. However, their source of E.C information mainly through friends influenced the prescriptions of E.C which were also done by their friends. Prescription of E.C by friends is absolutely inadequate because friends are novice and lack knowledge of the adverse effect of E.C. Therefore, health education is needed to address the misinformation on their source of E.C information.

RECOMMENDATIONS

Considering the results of this study, the following recommendations were made:

1. Female university undergraduates should rely on prescriptions by health personnel rather than self-prescriptions.
2. Sustaining training of health personnel on the delivery of family planning services and provision of youth-friendly reproductive health services will go a long way in addressing the misinformation on the emergency contraceptives.
3. Improvements on information strength of health personnel should be done by comprehensively linking contraceptive counseling with other health services especially reproductive health services in the university health centres so that a wider coverage and more awareness can be achieved.

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