AWARENESS AND ATTITUDES TOWARDS EMERGENCY CONTRACEPTIVES (EC) AMONG UNDERGRADUATE STUDENTS IN MAKURDI NORTH CENTRAL NIGERIA.

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Abstract

Objective: The study sought to establish the awareness, utilization and attitude towards the use of EC among female undergraduates.

Method: This is a descriptive cross-sectional study that was conducted among 397 female undergraduates of the Benue State University, Makurdi between May and June 2016.

Results: Out of the 400 subjects recruited 397(99.3%) were analyzed. Most of them 358(90.2%) were 25 years and below. Majority of them 370(93.2%) were single and 186 (49.6%) were sexually active. Of the sexually active, 51(27.4%) had multiple sexual partners and 63(33.9%) had been pregnant at one time or the other. Overall 172(43.3%) were aware of EC and of these, 103(59.9%) had utilized them. Awareness was highest among those with multiple sexual partners (74.5%) and those who had had a previous pregnancy (68.3%). The most common type of EC used among the respondents was the Levonorgestrel only (postinor 2) pill 88(85.4%). The most common sources of initial information for those who were aware and those who had used EC respectively were peers/friends (37.2% and 44.7%)..

Conclusion: Awareness and utilization of EC was low among the undergraduate students. We recommend that efforts should be made to make information about EC and its use available on university campuses.

Keywords: Awareness, utilization, attitude, emergency contraceptive, sexuality undergraduates

INTRODUTION

Emergency contraception (EC) is a form of contraceptive that is used after coitus but before pregnancy occurs [1,2].The contribution of contraception to reduction in maternal mortality and morbidity is universally acknowledged [3] and emergency contraceptive represents a safe means of preventing unwanted pregnancy for all women who had unprotected intercourse or in an event of contraceptive failure [4].

The World Health Organization (WHO) estimated that about 38% of all pregnancies are not planned and 60% of these end in voluntary termination. If women are educated about the use of EC, approximately 75% of unwanted pregnancies could be avoided [4,5].

Initially two methods of EC were utilized world-wide: hormonal methods (combined oestrogen-progesterone pills and progesterone only pills) and intrauterine methods (post coital insertion of a cupper bearing or Levonorgestrel bearing intra-uterine device). A new hormonal method, based on the use of Selective Progesterone Receptor Modulator (SPRM, anti-progestin or progesterone antagonist) can be used [4].

The importance of EC at preventing unwanted pregnancies cannot be over emphasized. For hormonal EC, they are safe, effective and easy to use and no medical examination or pregnancy test is required and can be used at any time of the menstrual period. They are also readily

available at government and private clinics and as over the counter contraceptives in drug stores [6]. The limitations or disadvantages of hormonal EC are that they are effective only if used within 120 hours of unprotected intercourse and they do not protect against sexually transmitted infection [6]. They cannot also be used as regular contraceptives. For Intrauterine Contraceptive Devices (IUDs), they are most useful when more than 72 hours have elapsed after the unprotected intercourse when hormonal EC are no longer very effective. They are also useful when client is considering long term contraceptive [6].

Given increasing adolescent sexual activity and decreasing age at first sex in developing countries, the use of contraceptives in preventing unwanted pregnancy and unsafe abortion is especially important. In Nigeria however, contraceptive use among adolescents is low. Studies from western and southern Nigeria have found rates of contraceptive use among sexually active adolescents of about 30%, considerably lower than the rates reported from developed countries [7,8].

The lower levels of contraceptive use among adolescent in Nigeria and other developing countries may reflect inadequate knowledge and access of contraceptives as well as the spontaneity of adolescent sexual activities. They may also reflect the notion among youths that it is easier and safer to obtain an abortion than to practice contraceptive on a regular basis [7].

Studies about knowledge and perceptions of EC among undergraduates have been done in southern and North Eastern part of Nigeria [7-9] and other African countries [8] but few if any done in north central part of Nigeria. The aim of this study is to determine the awareness and attitudes of female university undergraduates towards EC in our environment. In addition, we

shall look at factors that influence the awareness, utilization and attitudes towards EC to enable the development of strategies that will improve its use by youths.

MATERIALS AND METHOD

Benue State University is one of the two tertiary institutions situated in Makurdi. The University has about 18,800 undergraduate students out of which about 40% are females. Many of the female students reside in the school provided hostels but a significant number resides in the privately owned rented houses around the University and throughout the city.

This is a questionnaire based, descriptive cross-sectional study that was conducted among female undergraduates of the Benue State University from May to June 2016

Study population was all eligible undergraduate female students of Benue State University and all eligible registered undergraduate female students of the university were included in the study. The undergraduate female students who were not fully registered, the postgraduate students and those who did not consent were excluded from the study.

The minimum sample size was calculated using the formula: $n=Z^2 pq/d^{2.}$

Where n= minimum sample size

Z=standard normal deviation at 95% confidence interval which corresponds to 1.96

P= prevalence of EC use among undergraduates which is 71.5% based on a study done in Maiduguri, North Eastern Nigeria [9]

q=complimentary probability (1-p) = 1- 0.72= 0.28

d=degree of accuracy (=5%)

$n= (1.96)^2pq/d^2 = (1.96)^2(0.72)(0.28)/(0.05)2= 310$

To adjust for attrition rate (N) =n/1-f, where f= no response rate.

Assuming the no-response is 20%, therefore, N=310/1-0.2 = 310/0.8= 387.5. Consequently, a total number of 400 female undergraduates were recruited.

DATA COLLECTION

A pretested structured self administered questionnaire was used for individual interviews. The questions were closed ended on participants' biodata, sexual history, awareness of contraceptive methods and the methods in use. Also the knowledge and source of information of EC and its use, the reasons for use and where it was obtained were sought. Those administering the questionnaire were trained female students (from College of Medicine and other departments) and this included prior provision of information leaflet stating the protocol for the study in clear terms.

Respondents were recruited from the classes to ensure access to all students while some of these classes with large students' population were selected by toss of coin. Willing respondents completed the consent form before they were given the self administered questionnaire. In cases where a respondent did not know anything about EC, attempts were made by the trained interviewer to explain what it is in a manner that would not influence her responses.

Data obtained were entered into a computer and analyzed using SPSS version 20.0. Initial analysis was done by generating tables while further analysis was done by cross tabulation to explore statistical relationship between variables. The observed differences were subjected to a

chi square test and level of statistical significance was <0.05. Graphs and figures were drawn where necessary.

RESULTS

Four hundred respondents completed the questionnaire and 3 were incompletely filled leaving 397(99.3%) as the total number of analyzable questionnaire. The age range of the respondents were 15 to 32 years with a mean age of 21 years

Table 1 shows the socio-demographic characteristics and sexual activity of the respondents. Three hundred and fifty five respondents (89.4%) were 25 years and below. They were distributed across the College of Medicine and five other faculties in the University. Three hundred and seventy (93.2%) were single while 27(6.8%) were married. Most of the respondents 395(99.5%) were Christians, and only 2(0.5%) were Muslims. Majority 171(43.1%) were Tiv, 151(38.0%) were Idoma, 42(10.6%) were Igede while 33(8.4%) were made up of other ethnic groups such as Ibo, Yoruba, Hausa etc.

One hundred and eighty six (49.6%) of respondents were sexually active and the modal age at first sexual intercourse was 19 years. Ninety six (51.6%) of the sexually active respondents had been exposed before the age of 20 years. Fifty one (27.4%) of the sexually active students had multiple sexual partners and 63 (33.9%) had been pregnant at one time or the other.

Table 2 shows the distribution of respondents based on awareness of EC among the different groups. Of the total respondents, 172(43.3%) were aware of EC while 225(56.7%) were not. Awareness was more among those who were 26 years and above 24(57.1%), married 15(55.6%), sexually active 116(62.4%) and those who had more than one sexual partner 38(74.5%). Also knowledge of EC was more among those who had had a previous pregnancy 43(68.3%).

Table 3 shows utilization of EC among respondents. Utilization of EC was generally low; 103(25.9%) among all the respondents. Among those who had utilized EC, 86(83.4%) were single. Among the age groups however, there was increased level of usage of EC with increasing age: usage was 14.4% for age group of less than 20 years, 34.2% for 20-25 age group and 47.5% for those 26 years and above. Usage of EC was also found to be more among the married (56.0%), those who had multiple sexual partners (62.7%) and those who had a history of previous pregnancy (71.9%). The most common type of EC used among the respondents was the Levonorgestrel only (postinor 2) pill 88(85.4%). Fourteen respondents (13.6%) used the combined (yuzpe) pill and only one respondent (1%) used the intrauterine device (IUCD).

Table 4 represents the sources of initial information for those who were aware and those who had used EC. For sources of awareness and use respectively; peers/friends was highest (37.2% and 44.7%), followed by health facility (29.1% and 31.0%), news media (14.5% and 9.7%) internet (9.9% and 9.7%). Other sources included parents, and youth centers.

DISCUSSION

The low level of awareness and utilization of EC among respondents in this study is consistent with studies from many developing countries including Nigeria [9-13]. And this agrees with the general lack of knowledge in the developing countries [7,8]. The findings are however lower than those in Maiduguri (65.6%)[9], Abuja (60.6%)[14], Benin(67.8%)[7] and Porthacourt (85.3%)[15] all in Nigeria. The reason for high awareness and usage in the study in Maiduguri was said to be due to the fact that pregnancy outside marriage is considered an absolute cultural taboo among the population and so any sexually active woman must ensure that pregnancy is prevented. Other reasons for high level of awareness in these studies were due to higher exposure

to and availability of information on EC through various means. Many of the respondents had never heard of EC methods and hence the low level of awareness and usage of EC in our study. This underscores the unmet need for information on EC, because if women are educated about the use of emergency contraception, many unwanted pregnancies could be avoided.

Though awareness and usage of EC was generally low in this study, awareness was higher among those who were 26 years and above, married, sexually active, having multiple sexual partners and those with history of previous pregnancy. This is comforting since these are the most vulnerable groups for unwanted pregnancy. But because the awareness is generally low, there may be many among these groups who will be unaware of EC and its value to their reproductive health.

Friends/peers and health personnel constituted the highest source of information about EC. This is similar to findings from other studies [9,14,16]. The fact that friends/peers were a major source of information about EC suggests that sound and adequate information through this medium could be effective. On the other hand wrong information could also be passed on easily, therefore adequate and effective educational methods of communication and in a way that can easily be understood are needed to counter wrong information from these sources. It was found that information through parents and youth centers was low (7% and 2.3% respectively). Reports from African countries suggest that parents should be involved in providing reproductive health education to youths [17]. The misconception by some parents that sexual education for youths encourages early sex should be discouraged as alternative misinformation or outright wrong information from friends/peers could be detrimental to the sexual and reproductive wellbeing of these young girls. The results from this study also suggest an urgent need to provide special

designated youth centers and other health educational programmes in universities where information about reproductive health matters can be provided.

CONCLUSION

Most of the undergraduates were young and unmarried. Almost half of the students were sexually active and a good number of them had multiple sexual partners with a need for a form of contraceptive method. However awareness and utilization of EC was low among the students. The greatest sources of information about EC were friends/peers, health personnel and the media. Parents and youth centers were the least sources of information. Postinor was the most commonly used EC while IUCD was the least used EC method.

We therefore recommend that concerted efforts should be made to make information about EC and its use available on university campuses. This can be done through the organization of talks by qualified health personnel with the incorporation of EC as topic in general studies classes and youth centers as target areas to improve the sexual and reproductive health of this category of people. Also getting parents to recognize that sex education and information about EC is more advantageous to the reproductive health of their children will go a long way to mitigating unwanted pregnancies and its attendant consequences. The setting up of youth friendly clinics within the university campuses manned by appropriately trained staff will go a long way to providing information about EC and other health needs of the university undergraduates.

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Table 1: Socio-demographic characteristics and sexual activity of the population

Socio-demographic characteristics	Number (n)	Percentage (%)
Age group 1 (years)		
< 20	142	35.8
20 – 25	213	53.6
26 – 30	35	8.8
> 30	7	1.8
Marital status		
Single	370	93.2
Married	27	6.8
Religion		
Christianity	395	99.5
Islam	2	0.5
Tribe		
Tiv	171	43.1
Idoma	151	38.0
Igede	42	10.6
Ibo	13	3.3
Hausa	5	1.3
Yoruba	4	1.0
Others	11	2.8
Sexual activity		
Sexually active	186	46.9
Not sexually active	211	53.1

Table 2: Awareness of emergency contraception among respondents

	Awareness of emergency contraception			
Socio-demographic characteristics	**Aware N (%)**	**Not aware N (%)**	**χ2**	**P – value**
Age (years)				
< 20	50 (35.2)	92 (64.8)	7.698	0.021
20 – 25	98 (46.0)	115 (54.0)		
≥ 26	24 (57.1)	18 (42.9)		
Marital status				
Single	157 (42.4)	213 (57.6)	1.765	0.184
Married	15 (55.6)	12 (44.4)		
Religion				
Christianity	171 (43.3)	224 (56.7)	**Yate's** <0.001	1.000
Islam	1 (50.0)	1 (50.0)		
Tribe				
Tiv	82 (48.0)	89 (52.0)	4.350	0.226
Idoma	60 (39.7)	91 (60.3)		
Igede	14 (33.3)	28 (66.7)		
Others	16 (48.5)	17 (51.5)		
Faculty groups				
College of medicine	42 (46.7)	48 (53.3)	0.529	0.467
Other faculties	130 (42.3)	177 (57.7)		
Sexually active				
Yes	116 (62.4)	70 (37.6)	51.672	<0.001
No	56 (26.5)	155 (73.5)		
Number of sexual partners				
None or 1	134 (38.7)	212 (61.3)	23.176	<0.001

≥ 2	38 (74.5)	13 (25.5)		
History of pregnancy				
Yes	43 (68.3)	20 (31.7)	19.270	<0.001
No	127 (38.4)	204 (61.6)		

Table 3: Utilization of emergency contraception among respondents

	Utilization of emergency contraception			
Socio-demographic characteristics	**Yes N (%)**	**No N (%)**	**χ2**	**P – value**
Age (years)				
< 20	18 (14.4)	107 (85.6)	22.216	<0.001
20 – 25	66 (34.2)	127 65.8)		
≥ 26	19 (47.5)	21 (52.5)		
Marital status				
Single	89 (26.7)	244 (73.3)	9.724	0.002
Married	14 (56.0)	11 (44.0)		
Religion				
Christianity	102 (28.6)	255 (71.4)	**(Yate's)** 0.221	0.639
Islam	1 (100.0)	0 (0.0)		
Tribe				
Tiv	47 (30.7)	106 (69.3)	2.963	0.397
Idoma	39 (28.1)	100 (71.9)		
Igede	7 (18.4)	31 (81.6)		
Others	10 (35.7)	18 (64.3)		
Faculty groups				
College of medicine	11 (15.3)	61 (84.7)	8.007	0.005
Other faculties	92 (32.2)	194 (67.8)		
Number of sexual partners				
None or 1	51 (18.5)	224 (81.5)	60.519	<0.001

≥ 2	52 (62.7)	31 (37.3)		
History of pregnancy				
Yes	41 (71.9)	16 (28.1)	63.365	<0.001
No	60 (20.1)	239 (79.9)		

Table 4: Source of information on emergency contraception and its awareness and use among respondents

	Awareness of emergency contraception		**Use of emergency contraception**	
Source of information	**N**	**%**	**N**	**%**
Peers/friends	64	37.2	46	44.7
Health facility	50	29.1	32	31.0
Radio/television/newspaper	25	14.5	10	9.7
Internet	17	9.9	10	9.7
Parents	12	7.0	4	3.9
Youth centre	4	2.3	1	1.0
Total	172	100.0	103	100.0