

## Emergency Contraception: Knowledge and Practices of Tertiary Students in Osun State, South Western Nigeria

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### Abstract

The contraceptive prevalence in our environment is very low with attendant increase in unwanted pregnancy and unsafe abortion. The use of Emergency Contraception (EC) in women with unprotected intercourse could be the only option that can avoid the unwanted pregnancy and unsafe abortion with associated complications.

The objective of the study was to determine the prevalence of emergency contraceptive use among students of tertiary institutions in Osun State and to assess the knowledge and attitude towards emergency contraception. It was a descriptive cross-sectional study using self administered, structured questionnaire. The study population was students of State Polytechnic Iree and Obafemi Awolowo University, Ile Ife. Data were entered and validated, and statistical analysis was performed using SPSS version 11 software. The Study revealed that majority of the respondents 241 (80.3%) had poor knowledge of emergency contraception. Majority of them 160 (55.3%) were sexually active while 32.6% of the sexually active respondents used contraceptives. Condom was the most used contraceptive. Among those using contraception, 86 (28.7%) were current users. Among the people surveyed, only 47 (15.7%) of them had used emergency contraception. Overall, there was a limited knowledge and use of emergency contraception by the students in this study. Evidently, there is a need for carefully designed educational programmes and promotion of EC in existent student health care centres on campuses.

**Keywords:** Knowledge; Practice; Emergency contraception; Tertiary students; Nigeria

### Introduction

Emergency contraception refers to any device or drug that is used as an emergency procedure to prevent pregnancy after unprotected sexual intercourse [1].

Synonymous terms for EC include “the morning-after pill, postcoital contraception, interception, post ovulatory contraception, “visiting pill, and “vocation pill” [1].

Attention has recently been focused on the potential for emergency or postcoital contraception to reduce the number of unwanted pregnancies and thus the abortion rate [2].

It is estimated that between 30-50% of women presenting for termination of pregnancy were not using contraception at the time they became pregnant while nearly half of all women who became pregnant do not plan to do so [3,4]. Many of the women presenting for abortion could have used emergency contraception, provided they had known of its availability, where it could be obtained and how to use it.

The use of 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 most common emergency contraceptive methods available in Nigeria, they can be obtained over the counter from patent medicine and pharmaceutical shops. Unconventional techniques of emergency contraception are common among young women in our setting. As much as 75% of sexually active teenage girls (14-19 years) 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 [5].

Emergency contraception can be used up to 72 hrs after unprotected intercourse [6]. It works by interfering with ovulation, fertilization and implantation. Many patients and providers are not aware of emergency contraception which limits its use [6]. Only 36% of respondents in a study were aware that anything “could be done “within a few days to

prevent pregnancy, 55% “had heard” of emergency contraception and only 1% had used it [7]. A study of inner-city adolescents found that only 25% “had heard” of emergency contraception [8]. World wide, one of the biggest obstacles to the widespread use of emergency contraception is that many women do not know it [9]. Emergency contraception represents a “second chance method”. Every year, unplanned pregnancies lead to at least 50 million abortions world wide, many of them being unsafe, and subsequently resulting in approximately 80,000 maternal deaths. An increase in the use of emergency contraception would reduce the number of unwanted pregnancies and the number of induced abortions. Unfortunately, this method of contraception following unprotected intercourse appears to be greatly under utilized.

Young people in general are sexually active. Tertiary students form an important high-risk group in any society. The youth in this age group (15-24 years) are most often at the beginning of exploration of their sexuality, very often free of any parental guidance, under great influence from peers and often indulge in alcohol or other influential illegal substances. The spread of HIV/IDS other sexually transmitted infections and the potential serious consequences render the issue of “safe sex” in this age group a priority. Tertiary students on the other hand, by virtue of their level of education and experience, probably form a group in any community that should have an over all higher level of awareness of available methods of contraception, including that of emergency contraception [10]. The study was aimed at determining

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the prevalence of emergency contraceptive use among students of tertiary institutions in Osun State and to assess the knowledge and attitude towards emergency contraception.

## Methodology

It was a descriptive cross-sectional study using self administered, structured questionnaire. The study involved students of state polytechnic Iree and Obafemiawolowo University, Ile Ife. Three hundred cases were used for the study. Simple random technique was used using lecture theatres and hostels. The questionnaires were administered to willing students after explaining the purpose of the study. Confidentiality was ensured by omitting names in the Questionnaire.

The questionnaire consisted of questions relating to the socio demographic characteristics of the student, sexual relations, use of contraception in general and knowledge, use, and intention to use emergency contraception.

## Statistics

Data were entered and validated; statistical analysis was performed using SPSS version 11 soft ware. Results were presented in frequencies/percentages, cross table analysis and descriptive measures.

A score for knowledge of Emergency Contraception (EC) was obtained for each participant by summing up the correct answers given on selected questions from the questionnaire. These included what EC is, the time limit for its use, side effects, its effectiveness in preventing pregnancy and its safety. The maximum score possible was 9. Score of 4 or less was regarded as poor knowledge while score of 5 and above was regarded as good knowledge.

Ethical approval was obtained from the ethical committee of the institution.

## Results

The overall mean age of respondents is  $23.6 \pm 5.1$  years (15-46 years). The mean age for female is  $24.0 (SD \pm 4.9)$  and the mean age for male is  $23.2 (SD \pm 5.3)$  years. The study shows that there is no significant difference in age groups among the sexes ( $t=1.41$ ,  $p=0.160$ ).

One hundred and sixty five respondents (55%) were university students while 135 (45%) were national diploma students. One hundred and thirty six respondents (45.3%) were males while 164 (54.7%) were females (Table 1, Figures 1 and 2).

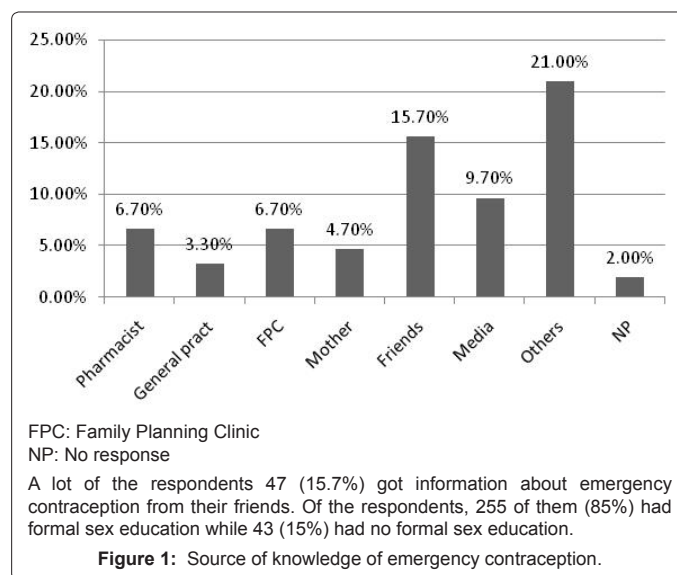
One hundred and sixty six respondents (55.3%) were sexually active while 134 (44.7%) were not sexually active. Of those who were sexually active, only 75 (32.6%) of them used contraceptive while the majority 155 (67.4%) did not use contraceptive. The remaining respondents (23.3%) did not indicate whether contraceptive was used or not. Condom was the most used contraceptive.

Among those using contraception 86 of them (28.7%) were current users. Various reasons for contraceptive use by respondents include prevention of STI, HIV/AIDS 28 (9.3%), prevention of pregnancy 17 (5.7%), had been pregnant before 8 (2.7%) to prevent STI, HIV/AIDS, pregnancy 54 (18.0%), to prevent STI, HIV/AIDS in those pregnant before 1 (0.3%), others did not give reasons or responded. Problems encountered during contraceptive use include difficulty in use 6 (2.0%), skin irritation 6 (2.0%), pain 29 (9.7%) expensive 16 (5.3%) break/ship of condom 14 (4.7%) lack of sexual satisfaction 28 (9.3%) got pregnant following its use 1 (0.3%) and others 8 (2.7%). Among the people surveyed, only 47 (15.7%) of them had used emergency contraceptive. Chemists/pharmacy 156 (52.0%) was the commonest place where

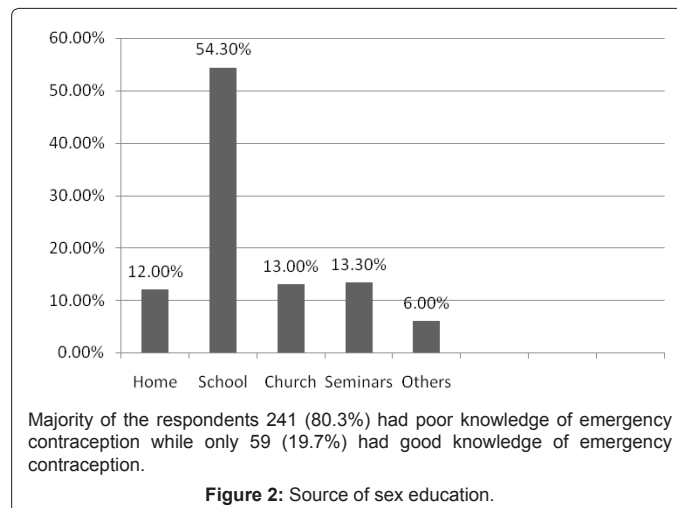
Variable	Number	Percentage
Religion		
Christianity	210	70
Islam	81	27
Traditional	9	3
Tribe		
Yoruba	230	76.7
Hausa	19	6.3
Igbo	35	11.7
Others	16	5.3
Marital status		
Single	260	86.7
Married	36	12.0
Widowed	4	1.33
Type of Relationship		
Stable sexual relationship	82	27.3
Casual sexual relationship	88	29.3
Never had sexual Relationship	130	43.3

Majority of the respondents were Christians (70%) while most of them were Yoruba by tribe (76.7%). Also, majority were singles (86.7%) Most of them had never had sexual relationship (43.3%). 196 of the respondents (65.3%) had heard about emergency contraception.

**Table 1:** Sociodemographic Characteristics of Respondents



**Figure 1:** Source of knowledge of emergency contraception.



**Figure 2:** Source of sex education.

respondents obtained emergency contraceptive, other sources include friends 9 (3.0%), partner 5 (1.7%), family planning clinic 55 (18.3%), Doctors/Nurse 46 (15.3%), others 8 (2.7%) and no response 1 (0.3%).

The partner approved use of emergency contraceptive in 72 (24%) respondents, disapproved in 60 (20%) and indifferent in 78 (26%) while no response was obtained in 90 (30%) respondents. 152 (50.7%) of the respondents would recommend EC to their friends while 143 (47.7%) would not recommend EC to friends.

Table 2 above shows that majority of the respondents (79.5%) who did not use emergency contraceptive had no formal education. Partner's approval significantly influenced emergency contraceptive use in majority of the respondents and this is statistically significant ( $p=0.000$ ).

Ninety two respondents (86.8%) who had never used emergency contraceptive claimed they would still not use it in the future as against 41 respondents who had used it before but would not use it again ( $\chi^2=52.48$ ,  $df=1$ ,  $p=0.000$ ). Previous use of emergency contraceptive promotes its recommendation to friends, this is also significant statistically.

## Discussion

In this study, 196 of the respondents (65.3%) had heard about emergency contraception. The study shows that majority of the respondents had poor knowledge of emergency contraception. This is not different from previous studies [2,9]. Good knowledge of EC was a significant predictor of their use, which is in agreement with reports of studies conducted in Nigeria [11]. It has been suggested that millions of unwanted pregnancies could be prevented if emergency contraceptives were used [12]. Despite the utility of emergency contraceptives in preventing pregnancy, studies indicate poor perception and usage among the Nigerian undergraduates [13]. Worldwide, one of the biggest obstacles to the widespread use of emergency contraceptive is that many women do not know about it. A 1997 survey showed that only 11% of all women in the United States knew the basic facts about emergency contraceptive [14]. Even where women have heard about emergency contraception, myths and misperceptions still exist about what it is, how it works and how or where to get it. In a study conducted by Fatemeh et al. in Malaysia, the usage rate of EC was 11.2% [15]. Overall the usage rate of EC was low. Lack of knowledge of EC and fear of side effects were the most frequently reason for not using of EC [16] (Table 3).

Among those using contraceptive in this study, 28.7% were current users. Various reasons were given for contraceptive use such

Variable	Poor Knowledge No (%)	Good Knowledge No (%)	$\chi^2$	DF	P value
EC Use	53 (52.5)	52 (80.0)	5.97	1	0.000
Do not use EC	48 (47.5)	13 (20.0)			
Ec recommendation					
Yes	62 (62.0)	55 (84.6)	9.77	1	0.001
No	38 (38.0)	10 (15.4)			
Had formal sex education	86 (86.0)	64 (98.5)	7.40	1	0.004
Did not have formal sex education	14 (14.0)	1 (1.5)			

Majority of respondents who used emergency contraceptive had good knowledge of emergency contraception. 84.6% of respondents who would recommend it to friends had good knowledge of emergency contraceptive ( $p<0.001$ ). Emergency contraceptive use as shown in this study promotes further knowledge of emergency contraception as majority of those with poor knowledge of emergency contraceptive had never used it ( $p<0.000$ ). Formal sex education has also been shown to have a significant impact on knowledge of emergency contraception, only 1 (1.5%) of those who did not have formal sex education had good knowledge of emergency contraception ( $p<0.004$ ).

**Table 3:** Relationship between Knowledge of EC and other Variables (Knowledge score group).

as prevention of pregnancy, prevention of HIV/AIDS, prevention of sexually transmitted infections. However, among the people surveyed, only 47 (15.7%) had used emergency contraceptive before. This prevalence rate was slightly higher in similar studies conducted in Ibadan, Nigeria and Durban where the prevalence rate was found to be 11.8%. This could be attributable to the study population and higher awareness among tertiary students and availability of emergency contraceptive. The prevalence rate is however similar to that obtained (16.7%) by Seamark et al. [16-18]. Generally speaking however, emergency contraceptive use is low.

An association was found between formal sex education and emergency contraceptive use. School was the most commonly cited source of sex education (24.3%). This is similar to findings in a study conducted in south east Scotland [19]. Partners' approval contributes significantly to emergency contraceptive use. Among women who had used emergency contraceptive before, majority of them intended using it again. This shows that emergency contraceptive use influences its re-use and previous usage influences its recommendation to friends. There is a significant association between knowledge of emergency contraception and its recommendation to friends. Without education about emergency contraception, women are unable to make informed contraceptive choices. When there is better recommendation of its availability and its advantages women make better choices.

Women who had used emergency contraceptive before were also found to have better knowledge of emergency contraception. This was clearly shown in this study. There was a positive association between knowledge of emergency contraception and having received formal sex education. Formal sex education contributes significantly to knowledge of emergency contraception. Although the students in this study had an overall limited knowledge and use of EC it was, as presumed higher than that of the general public. In a recent study by Smith et al. in South Africa [20], knowledge, attitudes and use of emergency contraception among public sector primary health-care clients was investigated. Only 22.8% of the women who were interviewed had heard of emergency contraception and it was noted that younger age group and higher educational status were significant factors independently associated with knowledge.

Variables	Contraceptive Usage		$\chi^2$	DF	P value
	YES NO (%)	NO NO (%)			
Had sex education	97 (38)	158 (62.0)	5.07	1	0.025
No sex education	9 (20.5)	35 (79.5)			
Partners' approval	65 (90.3)	7 (9.7)	86.29	2	0.000
Partner' disapproval	19 (31.7)	41 (68.3)			
Use Emergency Contraceptive	65 (61.3)	41 (38.7)	52.48	1	0.000
Do not use emergency Contraceptives	14 (13.2)	92 (86.8)			
Recommend EC to friends	86 (56.6)	66 (43.4)	58.06	1	0.000
Not recommend EC to friend	20 (14.0)	123 (86.0)			
Good knowledge	40 (67.8)	19 (32.2)	33.87	1	0.000
Poor knowledge	66 (79.5)	17 (20.5)			

**Table 2:** Factors Associated With Emergency Contraceptive Usage.

## Conclusion

Tertiary Students form an important high-risk group in the community. The majority is sexually active and is at risk of unwanted pregnancies and sexually transmitted infections including HIV/AIDS if not adequately protected. There was a high incidence of unprotected intercourse in the students in this study.

Emergency contraception is relatively easily obtainable. Its use represents a second chance method and an option superior to that of termination of pregnancy. Overall there was a limited knowledge and use of emergency contraception by the students in this study. People who are knowledgeable use emergency contraceptive more than those who are not knowledgeable. Evidently, there is a need for carefully designed educational programmes and promotion of emergency contraception in existent student health-care centres on campuses. Awareness programmes can also be organized by non governmental organizations and even the federal Government on the importance of emergency contraception. Use of regular contraceptive methods as well as condom use needs to be stressed simultaneously.

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