IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 17, Issue 3 Ver.14 March. (2018), PP 24-28
www.iosrjournals.org

Awareness of Emergency Contraception among Pregnant Women in North-West Nigeria

BurodoAT[1], Singh S[1], Ladan AA[1],Nwobodo EI[1], Nnadi DC[1], Hassan M[1], Magaji BA[2].

[1]*Department of Obstetrics and Gynaecology,UsmanuDanfodiyo University Teaching Hospital, Sokoto*
[2]*Department of Community Health,UsmanuDanfodiyo University, Sokoto*

Corresponding Author: Singh Swati
Department of obstetrics and Gynaecology
UDUTH, Sokoto. Email: swasingh@yahoo.co.in

Abstract

Background

Unintended pregnancy is a major challenge to the reproductive health of young adults especially, in developing countries like Nigeria where roughly one in every five pregnancies is unplanned. Emergency contraception (EC) has been shown to prevent up to 86% of expected pregnancies when administered within 72 hours of unprotected coitus.

Aim

This study assessed the awareness of emergency contraception among pregnant women attending antenatal care in a tertiary health institution in Sokoto, Northwestern Nigeria.

Subjects and methods

This was a cross-sectional study performed among women attending antenatal care at the UsmanuDanfodiyo University Teaching Hospital (UDUTH), Sokoto. An interviewer-administered questionnaire was the instrument of data collection. The questionnaire was pretested among nonparticipants and contained the socio-demographic data of the subjects,assessment of the knowledge, attitude and practice of EC.

Results

There were 360 respondents, majority 314 (87.2 %) were between the ages of 21 and 35 years and the mean age was 27.7 (SD ± 5.0) years. Most of the respondentsattained secondary school level of education 319(88.6%), were mainly of the Hausa/Fulani ethnic group 22 (63.6%), and belonged to the Islamic religion 261(72.5 %). About 33.3 % (120/360) of the respondents were aware of EC and most 54 (45 %) of their information was obtained from friends. There was statistically significance difference between the educational status, religion and place of residence of the participants to awareness of EC (P=0.05). The emergency contraceptive pills (progesterone only and combined pills) were the most common types of EC known to the respondents 110 (91.6%). Only 14 (11.7%) of them could determine the correct time for taking EC and 9 (7.5%) had ever used EC. The identified barriers to the use of EC include; fears of safety, side effects and religious belief.

Conclusion

The awareness of EC in this study is very low and only very few could determine the correct timing of use. Misconception, fear of side effects and religious belief are among the barriers to the use of EC.

Keywords*: emergency contraception, awareness, Nigeria.*

Date of Submission: 12-02-2018 Date of acceptance: 28-03-2018

I. Introduction

Unintended pregnancy is a major challenge to the reproductive health of young adults especially, in developing countries like Nigeria where roughly one in every five pregnancies is unplanned.[1,2] Recent reports indicate a rising trend.[1]The World Health Organization (WHO) estimated that 84 million unwanted pregnancies occur annually worldwide.[3] Many young women with unintended pregnancies resort to abortions which are mainly performed in unsafe conditions.[1]Nigeria has restrictive abortion laws and induced abortion is still regarded as a criminal offence. Because of this, the practice is driven underground and performed clandestinely under questionable conditions and in unsafe hands. Emergency contraception (EC), also known as "post-coital or morning after contraception" refers to any drug or device used to prevent pregnancy following unprotected sexual intercourse or potential contraceptive failure.[3,4] It has been shown to prevent up to 86% of expected pregnancies when administered within 72 hours of unprotected coitus.[4]The main reasons for needing emergency

contraception are the nonuse of condoms, condom breakage and missing an oral contraceptive pill. It is also a very critical option for preventing an unwanted pregnancy in case of sexual assault.

Since it is difficult to determine the infertile period of the menstrual cycle with certainty, EC is better provided to any woman who is concerned about her risk of pregnancy regardless of the cycle day of exposure.[3] Unintended pregnancyis the primary cause of unsafe abortion and is linked to numerous maternal and child health problems.[4]

Several regimens are currently available for EC. However, the recommended methods in clinical practice include the hormonal methods: progesterone-only pills (e.g. Postinor-2^R), combined estrogen-progesterone pills, (the Yuzpe's regimen), thenon-hormonal such as Copper-T intrauterine contraceptive device and recently the progesterone receptor modulator known as Ulipristal acetate (Ella-One).[4] This "second chance" method is invaluable for women who have been forced into unplanned, unprotected intercourse, following method failure or incorrect use.[4] However, despite the availability, safety and efficacy of the specific emergency contraceptive agents, there is still limited knowledge and utilization of emergency contraception among women of reproductive age group.[3-6] This limited knowledge even in situations of potential regular contraceptive failure, is a global public health problem.[3-5]

The awareness of EC is relatively high in the southern part of Nigeria. The awareness levels range from 51.1% in Enugu, [7] 51.6% Anambra, [2] 58% in Edo[1] 67.8% in Lagos[8] and 85.1% in Imo States.[4] These studies were performed mainly among the female students of tertiary institutions. The levels of awareness were similar to those observed in other African countries such as Ethiopia (41%)[3] and Kenya (58%) espectively.[9]However there is dearth of information on the knowledge of EC in the northern part of this country. This study was aimed to assess the awareness of emergency contraception among pregnant women attending antenatal care (ANC) in a tertiary health institution in Sokoto,, North-West Nigeria. Pregnant women by implication have been sexually active and most are in a marital setting

II. Materials and Methods

This was a cross-sectional study, which aimed to the awareness of emergency contraception among women attending ANC atUDUTH, Sokoto. The UDUTH is a tertiary health institution located in the northwestern region of Nigeria. Is has 600 bed spaces and provides tertiary and secondary health care services to neighboring states and also runs a residency training program for doctors in the various sub-specialists including Surgery, Obstetrics &Gynaecology, Internal Medicine, Paediatrics, Pathology among others. The study population consisted of pregnant women who were attending the antenatal clinic of the hospital. The department of Obstetrics and Gynaecology of the hospital comprises of four firms that perform ANC clinics on weekdays (Monday to Thursday). An average of 100 women is seen for ANC during each visit. Therefore in this study, women were recruited from all the firms over a period of eight weeks by simple random sampling. Informed verbal and written consents were obtained.Those who declined to participate were excluded from the study. Ethical clearance was obtained from the Committee on Ethics and Research of the UsmanuDanfodiyo University Teaching Hospital, Sokoto.

The sample size was calculated using the formula given below.

$N=Z^2 (P (1-P)/d^2)$

Therefore considering 31% awareness of respondents about EC in Nigeria[10] (p = 0.31), with 95% confidence level and 5% precision of estimate (d = 0.05), and (Z = 1.96). The minimum sample size was calculated to be 328. An attrition rate of 10%, which is equal to 32, was added and therefore new sample size was 360. An interviewer-administered anonymous questionnaire was used to obtain relevant information. The questionnaire contained both open-and closed-ended questions. It was pretested and some adjustments were made. The questionnaire contained their socio-demographic data, knowledge of, attitudes to EC and practice of emergency contraception. Subjects were assessed on their knowledge, types, timing of use of the emergency contraception. The data obtained from the respondents were analyzed using Statistical Software Package for Social Sciences (SPSS) version 20.0 (IBM Corp., Armouk NY, USA) for windows. The data was presented in frequencies and percentages. The Chi-square test was used to test for association at P =0.05

III. Results

There were 332 respondents, majority 314 (87.2 %) was between the ages of 21 and 35 years and the mean age was 27.7 (standard deviation [SD] 5.0) years (Table 1). Most of them 319 (88.6 %) attained at least secondary school level of education. The womenbelonged to the Hausa/Fulani ethnic group 229 (63.6%) and were mainly Muslims 261 (72.5 %) as shown in (Table2).

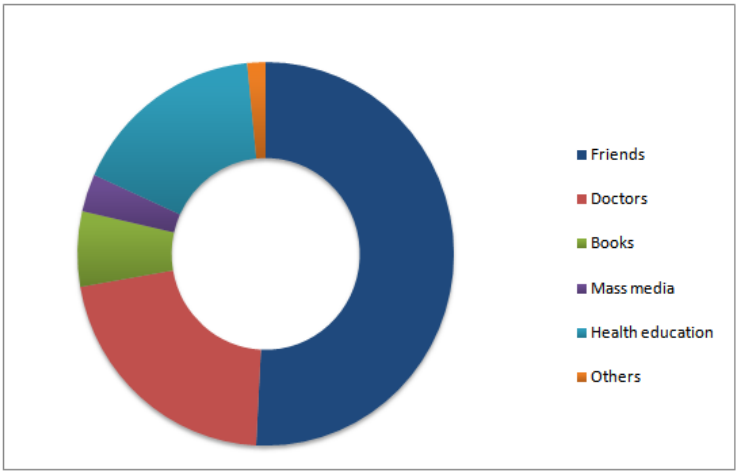
Table 1: Age Distribution of the respondents

Age	No. (%)	Statistics
16–20	27 (7.5)	Mean age 27.69 years

21–25	94 (26.1)	SD = 5.067
26–30	154 (42.8)	
31–35	66 (18.3)	
36–40	15 (4.2)	
41+	4 (1.1)	
Total	360	

Only about 120 (33.3 %) of the respondents were aware of emergency contraception and the main source of information (50.8 %) was from friends [Figure 1].

Figure 1: Sources of Information on emergency contraception



Other sources of information about EC were from medical doctors, health education talk shows, Textbooks and through the mass media.

The educational status and occupation of the respondents significantly affected awareness of EC. The awareness was more with higher level of education and when the respondents were gainfully employed (P = 0.02). There was also significant association between the place of domicile of the respondents and awareness of EC. Urban and semi–urban dwellers had higher level of awareness compared to those in the rural setting (P = 0.009, DF = 2). The parity and ethnicity of the participants did not significantly influence the awareness of EC, however, Christians were more aware of EC compared to their Muslim counterparts (P = 0.001, DF=1), as depicted in Table 2.

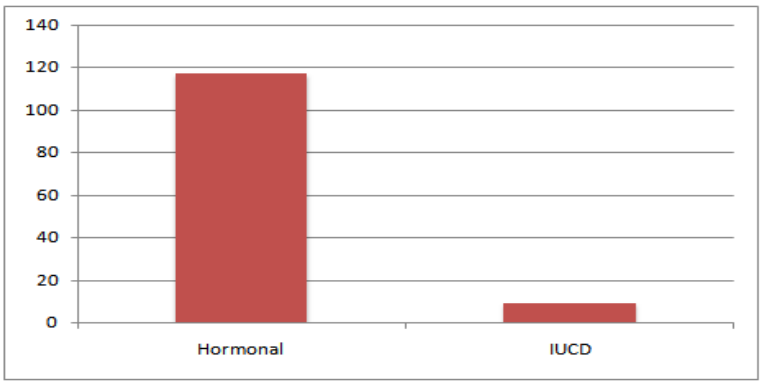
Table 2: Association between socio-demographic variables of the respondents and awareness of emergency contraception

Socio-demographic Variables	Awareness of Emergency contraception		Statistics and p-value
Occupation	Yes	No	
Housewife Civil servant Business women	61 45 23	164 42 25	X^2= 20.32 df= 3 P-value=0.0001
Educational Status			
Primary Secondary Tertiary Quaranic/No education	4 31 88 6	6 85 115 25	X^2= 13.11 df= 5 P-value=0.022
Place of Residence			
Rural Semi urban Urban	1 13 115	20 19 192	X^2= 9.49 df= 2 P-value=0.009
Tribe			
Hausa /Fulani Igbo Yoruba Others	71 24 23 11	158 31 31 11	X^2= 6.77 df= 3 P-value=0.08
Religion			
Muslim Christian	80 49	181 50	X^2= 11.04 df= 1 P-value=0.001
Parity			

Primipara	47	90	X^2= 0.324
Multipara	66	111	df= 2

The emergency contraceptive pillsin inform of the progesterone only and combined pills were the most common methods known to the respondents 91.7% (110) [Figure 2], however, only 14 (11.7%) of them could determine the correct timing fortaking EC after unprotected intercourse.

Figure 2: Methods of emergency contraception known by the clients



Among those who had knowledge of EC, majority 86 (71.7%) wasof the opinion that EC could be self-administered. Only 45.2% (54) of the respondents would agree to use EC after unprotected sexual intercourse, whereas 61 (50.8%)could advice their relations or friends to use EC after unprotected sexual intercourse. The identified barriers to the use of EC include; fears on safety, side effects and religious belief. Some of the respondents 46 (38.3%) thought EC is an abortificient, while 63 (52.5%) and 60 (50.0%) thought EC could encourage sexual promiscuity and spread of sexually transmitted infections such asthe human immunodeficiency virus (HIV) respectively. About 74 (61.6%) of the subjects were unaware on how to access EC, and only 9 (7.5%) had used EC in the past. The oral Levonogestrel (Postinor^R) was the most common method used 9 (7.5%). All the pregnancies were prevented among the women who had used EC in the past, but only 4 (3.3%) agreed to use it again.

Table 3: Methods of Emergency contraceptives known to the respondents

Contraceptives	Frequency	Percent
*Oral contraceptives pills	110	91.6
Intrauterine contraceptive device (IUD)	8	6.7
Not aware of any form	2	1.7
Total	120	100

*These includes oral Levonogestrel (Postinor^R) and combine oral contraceptive pills (COCP)

IV. Discussion

The awarenessabout EC was 33.3%in the index study. This is low compared to the 98% observed in Port Harcourt, 85.1% in Owerri and Lagos in the Southern parts of Nigeria,[4,8] but is similar to that noted from a study among undergraduate students in Ethiopia.[3,5] It is however higher than the 11.2% awareness level observed from a study in the Northern part of India.[11]. The differences in the level of awareness could have been influenced by the disparities in the study populations and socio-cultural factors known to affect knowledge and attitudes. These factors influence on individual behaviors depending on one's social values such as religion, economic status, education, family and cultural values.[12] Poor awareness level and low utilization of EC could lead to an increase in the rate of unwanted pregnancies and subsequently unsafe abortion among the vulnerable groups with its attendant consequences especially in resource poor countries like ours. Efforts should therefore, be made by the government, relevant agencies and health institutions at all levels to promote the use of EC. Health education especially during ANC to provide detailed information about EC is recommended since it is an important resource with potential to reduce the number of unwanted pregnancies and abortions in this country. Emergency contraception is effective and therefore it is also incumbent on healthcare providers to supply women with the information they need to make informed decisions about all aspects of their reproductive health. Where the subjects were aware of EC, the chief source of information was from friends.This was similar to the findings in other parts of the country and even beyond.[3-5,8]This observation is worrisome, as the mysteries and myths surrounding the use of EC may not have been properly addressed. There are also misconceptions, incorrect usage and ineffective timing for taking EC when the knowledge level is poor. Other ways to improve

on the knowledge level is to create awareness through the print and electronic media. In a similar study from India, the main source of knowledge of EC was both electronic and print media, indicating that dissipation of information by these means could be helpful. [11]

The respondent's educational status, occupation and religious persuasions were factors that significantly associated with awareness of EC.

The progesterone only form of emergency contraception Levonogestrel,(Postinor^{R}) was the method commonly known and used by the respondents. This appears to be the most readily available method of EC in Nigeria and can be obtained over the counter. Among the respondents who were aware of EC, only few knew correctly the time frame for effective use of EC. The reasons for this may not be farfetched because where the knowledge of EC is low the time frame for its use may also be low. However this is in consistence with the findings from other studies where the knowledge of correct timing and dosage was also very low even among the healthcare providers. [13-16]

The low level of practice of EC found in this study may be related to the religious and cultural practices of the study population, who are predominantly Muslims and of the Hausa/Fulani ethnic group that cherished large family size.

The barriers to the use of EC identified from this study are in agreement with the findings from other parts of Nigeria and even beyond.[3,4,7]

V. Conclusion

The knowledge of EC in Sokoto is very low. Only very few respondents could correctly identify the timing of use for it to be effective. Misconceptions, fear of side effects and religious beliefs are among the barriers to the use of EC. Health education during the antenatal period as well as public health enlightenment through the print and electronic media will help to improve the level of knowledge.

Financial support
Nil

Conflict of interest
There is no conflict of interest

References

[1] Aziken ME, Okonta PI, Ande AB. Knowledge and perception of emergency contraception among female Nigerian undergraduates. Intern FamPlannPerspect 2003;29(2):84-7.
[2] Ezeibialu IU, Eke AC. Knowledge and Practice of Emergency Contraception Among Female Undergraduates in South Eastern Nigeria. Ann Med Health Sci Res. 2013 3(4):541–5.
[3] NasiruTajure, Pharm B. Knowledge, Attitude and Practice of Emergency Contraception Among Graduating Female Students of Jimma University, Southwest Ethiopia. Ethiop J Health Sci 2010;20(2): 91–7.
[4] Ojiyi E, Anolue F, Ejekunle S, Nzewuihe A, Okeudo C, Dike E, et al. Emergency Contraception: Awareness, Perception and Practice among Female Undergraduates in Imo State University, Southeastern Nigeria. Ann MedHealthSci Res 2014;4(6):904-9.
[5] Tilahun D, Assefa T, Belachew. T. Knowledge, Attitude and Practice of Emergency Contraceptives Among Adama University Female Students. Ethiop J Health Sci 2010;20(3):195-202.
[6] Ikeme AC, Ezegwui HU, Uzodimma AC. Knowledge, attitude and use of emergency contraception among female undergraduates in Eastern Nigeria. J ObstetGynaecol : J Institute ObstetGynaecol. 2005;25(5):491-3.
[7] Obi SN, Ozumba BC. Emergency contraceptive knowledge and practice among unmarried women in Enugu, southeast Nigeria. Niger JClinPract. 2008;11(4):296-9.
[8] Ebuehi OM, Ekanem EE, Ebuehi OA. Knowledge and practice of emergency contraception among female undergraduates in the University of Lagos, Nigeria. East Afr Med J. 2006;83(3):90-5.
[9] Morgan G, Keesbury J, Speizer I. Emergency contraceptive knowledge and use among urban women in Nigeria and Kenya. Stud FamPlann. 2014;45(1):59-72.
[10] Gwendolyn Morgan, Jill Keesbury, Speizer I. Characteristics and patterns of use of emergency contraception among urban women in Nigeria and Kenya. Stud FamPlann 2014;45(1):59–72. .
[11] Tarkkar N, Goel P, Saha PR, Dua D. contraceptive prevalence and awareness of emergency contraception in educated working women. Indian J Med Sci 2005; 59(4): 144–8
[12] Shamaki MA, Buang A. Socio-cultural practice in maternal health among women in a less developed economy: an overview of Sokoto State, Nigeria. Malay J Societ Space 2014; 10: 1-14
[13] Oriji VK, Omietimi JE. Knowledge, attitude, and practice of emergency contraception among medical doctors in Port Harcourt. Niger JClinPract 2011;14(4):428-31.
[14] Morhason-Bello IO, Adedokun BO, Mumuni TO, Bello FA, Abdus-Salam RA, Lawal OO, et al. Knowledge and use of emergency contraception by medical doctors on internship in a tertiary healthcare facility in Nigeria. Niger JClinPract 2014;17(4):431-5.
[15] Onwuhafua PI, Kantiok C, Olafimihan O, Shittu OS. Knowledge, attitude and practice of family planning amongst community health extension workers in Kaduna State, Nigeria. J ObstetGynaecol : J Institute ObstetGynaecol. 2005;25(5):494-9.
[16] Ebuehi OM, Ebuehi OA, Inem V. Health care providers' knowledge of, attitudes toward and provision of emergency contraceptives in Lagos, Nigeria. Intern FamPlannPerspect. 2006;32(2):89-93.

Burodo At "Awareness of Emergency Contraception among Pregnant Women in North-West Nigeria."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 3, 2018, pp24-28.