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EMERGENCY CONTRACEPTIVE KNOWLEDGE AND PRACTICE AMONG UNMARRIED WOMEN IN ENUGU, SOUTHEAST NIGERIA.

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ABSTRACT

Background: With a high incidence of unwanted pregnancies and unsafe abortion especially among unmarried women in developing countries, there is need to promote emergency contraception (EC).

Objective: To assess the unmarried women's knowledge, attitude and practice of EC.

Methods: A random sample of a cross-section of 594 unmarried women in Enugu, southeast Nigeria, was surveyed with questionnaire between January and April 2004.

Results: Of the 1,160 unmarried women interviewed initially, 51% had heard of EC. One hundred (16.9%) knew the correct meaning of EC and these were mainly those with higher educational qualification, previous unwanted pregnancy, or had used modern contraception ($p<0.05$). Other respondents mentioned vaginal douching, application of traditional remedies to the vagina as effective emergency contraceptives. Although sixty percent (n=354) of respondents had used regular modern contraception, only 20% (n=119) had ever used EC. Few respondents knew correctly how EC function and the recommended timeframe for use. The two most common sources of information about EC were mass media (49.2%) and friends (28.8%). Seventy three percent (n=87) of emergency contraceptive users had some difficulties obtaining EC due to non-availability (n=42), attitude of health service providers to unmarried women demanding contraception (n=28) and cost (n=17). The attitude of the health service providers may have accounted for the dearth of information on EC even among users. Sixty-seven percent of respondents favored the use of EC by unmarried women. Opposition to the use of EC by unmarried women is because of belief that it has some health effect (n=72), induces abortion (n=80) and for religious reasons (n=42).

Conclusion: Provision of appropriate information and access to EC, better service providers' attitude towards unmarried women is advocated.

Key Words: Emergency Contraception, Unmarried Women, Enugu, Nigeria. *(Accepted 28 August 2007)*

INTRODUCTION

Emergency contraception (EC) sometimes referred to as 'morning after' or post-coital contraception are used to prevent pregnancy after unprotected intercourse. This 'second chance' method is invaluable for women who have being forced or coerced into unplanned, unprotected intercourse, following method failure or incorrect method use. By lowering the chances of unwanted pregnancy, EC decreases the need for abortion. Nigeria, the most populous country in Africa, has a high rate of unwanted pregnancy with 610,000 abortion performed annually, most of which are believed to be unsafe [1]. The Nigerian government has made reduction of unwanted pregnancy a priority and has endorsed the promotion of reproductive health including family planning, through maternal and child health services[2]. However, persistent reluctance to avail single women with contraceptives for cultural reasons may discourage contraceptive use [3]. Globally, there is growing promotion of EC for prevention of unwanted pregnancies and hence unsafe abortion. In United States the use of EC prevented millions of unintended pregnancies [4].

EC can delay or prevent ovulation, impair formation of the corpus luteum or cause histological or biochemical changes within the endometrium thus preventing implantation.The most common method of EC (Yuzpe) consisted of ethinyl estradiol and either norgestrel or Levonorgestrel, the same active ingredient found in some combined estrogen-progestin oral contraception. For those women in whom estrogen is contraindicated progestinonly pill have been used with comparable effectiveness. They can reduce the risk of pregnancy by as much as 75% [5] when administered within 72 hours of unprotected Intercourse and the second dose taken 12 hours later.

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The non-hormonal EC, the copper bearing intrauterine contraceptive device (IUCD) when inserted up to 5 days after unprotected intercourse is highly effective and has a failure rate of less than 0.1 percent[6].

Women who are sexually active and wish to prevent unintended pregnancy should know about these methods of EC and have them handy before the need arises. The effective utilization of EC depends on proper dissemination of information. If the health care providers are knowledgeable about EC, they will no doubt educate women about its use. Previous studies conducted in developing countries evaluated EC from the perspective of the family planning providers [7, 8] and the student population [9] and none have done so among unmarried women generally who are best suited for EC because they often engage in infrequent and unexpected sexual activity [10]. This article aimed to explore the knowledge, attitude and practice of EC among all categories of unmarried women in Enugu, Southeast Nigeria.

MATERIALS AND METHODS

This survey was conducted between January and April 2004 in Enugu, the capital of Enugu state of Nigeria, located east of the River Niger. This cosmopolitan town has two teaching hospitals, an orthopaedic hospital, eight health centres, one hundred and forty two private hospitals and clinics and about eight hundred pharmaceutical and registered patent medicine dealer stores. Most of the hospitals and clinics offer maternity and family planning services. Also the family planning devices and drugs can be purchased over the counter in most pharmaceutical and patent medicine dealer stores. Enugu has a projected population of about half million persons and women of reproductive age who are unmarried constituted a very significant number. The inhabitants are predominantly Ibos with pockets of other tribes. The adult population is mainly civil servants, students with few business entrepreneurs and traders of all sorts.

The study was a cross-sectional survey using the multistage sampling technique. The inhabitants of Enugu urban were divided into nine zones based on their respective residential areas. Three zones, Uwani, Asata and New Haven were selected by simple random sampling. A list of all the streets in each of the selected zones were made and numbered. Using systematic sampling procedure and sampling interval of 5, six streets were selected from each of the three zones. For each street, 33 questionnaires were administered making a total of 594 questionnaires. The minimum sample size was 277 using the formula $N = \frac{P \times Q}{SE^2}$ Where N is the sample size, P is prevalence, Q =100-P and SE is sampling error (3%). The contraceptive prevalence, P (49%) was obtained from the previous study [9]. At the discretion of the researchers, we adopted a sample size of 594.

A total of 1160 unmarried women were initially interviewed orally, and 594 of them that have heard of EC were selected. The pre-tested questionnaires, which were mainly structured with a few open-ended questions, were interviewer assisted for the illiterates and self-administered for the literate respondents. Information was sort from these 594 women on age, educational status, religion, occupation, their knowledge, attitude and practice of EC. A total of 594 questionnaires were administered and four were omitted from the final analysis because of incomplete responses. The data was analyzed by simple percentages and chi-square as appropriate using Graph Pad prism software. A p-value of <0.05 is significant.

RESULTS

One thousand, one hundred and sixty consecutive unmarried women seen during the study period were questioned on EC. However, only five hundred and ninety four (51%) of them had ever heard of EC. Four respondents were omitted from the final analysis because of incomplete responses. The data presented here is based on the responses of the remaining 590 respondents. The general characteristics of these 590 respondents and their correct knowledge about EC are showed in table 1. Higher educational qualification, use of modern contraception, previous history of unwanted pregnancy were significantly associated with correct knowledge of EC ($P<0.05$)

Table 2 further summarizes the knowledge, attitude and practice of EC by the 590 respondents. Only one hundred (16.9%) respondents knew the correct meaning of EC. To one hundred and thirty (22%) respondents, EC meant use of vaginal douching after intercourse, while seventy (11.9%) associated EC with application of some traditional remedies (e.g. herbs etc) to the vagina after intercourse. Ten percent (n=60) of respondents knew correctly how EC functions. Progestin-only pill was the most popular (27.8%) modern EC identified by the respondents and majority (63.7%) thought they must wait until the next morning (i.e. 12-24 hours) after unprotected sexual intercourse to begin treatment. While 60 percent (n=354) of the respondents are using a modern method of contraception, majority (n=278) of them are irregular with the use. Only one hundred and nineteen (20.2%) respondents have ever used EC and most (52%) obtained the contraceptive over the counter. Seventy-three percent (n=87) of these emergency contraceptive users had difficulty obtaining emergency contraceptive services because of non-availability (n=42), attitude of health service providers to unmarried women (n=28) and cost (n=17).

Sixty-seven percent (n=396) of respondents favored the use of EC by single women. Those that opposed the use of EC by single women are because of believe that it has some health effect (n=72), induces abortion (n=80) and religious reasons (n=42).

Table 1: **Respondents Characteristics and Correct Knowledge About Emergency Contraception**

Variable	Correct Knowledge (n=100)		Incorrect Knowledge (n=490)		Total (n=590)	
	No.	(%)	No.	(%)	No.	(%)
AGE (years)						
<20	40	19.4	166	80.6	206	34.9
>20	60	15.6	324	84.4	384	65.1
	X^2=1.37, df=1, P=0.24, Not significant.					
Religion						
Christianity						
Roman catholic	32	16	168	84	200	33.9
Anglican	34	17.6	159	82.4	193	32.7
Pentecostal	29	16.2	150	83.8	179	30.3
Islam	5	27.8	13	72.2	18	3.1
	X^2=1.76, df=3, P=0.62, Not significant.					
Educational Status						
Primary	2	11.1	16	88.9	18	3.1
Secondary	28	7.9	326	92.1	354	60
Tertiary	70	32.1	148	67.9	218	6.9
	X^2=56.58, df=2, P<0.0001, Significant.					
Occupation						
Civil Servant	51	17.1	247	82.9	298	50.5
Trader	25	16.7	125	83.3	150	25.4
Student	13	16.3	67	83.7	80	13.6
Unemployed	9	17.3	43	82.7	52	8.8
Farmer	2	20.0	8	80.0	10	1.7
	X^2=0.11, df=4, P=0.99, Not Significant.					
Previous Unwanted Pregnancy						
Yes	20	28.6	50	71.4	70	11.9
No	80	15.4	440	84.6	520	88.1
	X^2=7.62, df=1, P=0.006, Significant.					
Use of Modern Contraception						
Yes	71	20.1	283	79.9	354	60.0
No	29	12.3	207	87.7	236	40.0
	X^2=6.07, df=1, P=0.014, Significant.					

Table 2: **Knowledge Attitude and Practice of Emergency Contraception by the 590 Respondents**

Questions and Answers	No.	%
Meaning of EC		
Correct	100	16.95
Wrong	200	33.90
No Idea	290	49.15
Mechanism of Action of EC		
Correct	60	10.17
Wrong	530	89.83
Type of EC Identified		
Yuzpe	100	16.9
Progestin-Only	164	27.8
IUCD	20	3.4
Traditional Methods	240	40.7
None	290	49.2
When Do You Start EC		
Immediately after coitus	84	14.24
12-24hours after coitus	376	63.73
Within 72 hours of coitus for pills	58	9.83
Within 5 days for IUCD	30	5.08
No idea	42	7.12
Sources of Knowledge about EC		
Friends/ peer group	170	28.81
Print media/ Books	290	49.15
Family planning provider	90	15.25
Others (e.g. radio etc)	40	6.78
Ever Used Any EC		
Yes	**119**	**20.2**
No	471	79.8
How Did You Obtain the EC (N=119)		
Pharmacy shop	62	52.1
From friends	45	37.8
From family planning clinic	12	10.1
Are You Using Any Modern Contraceptives Method		
Yes	354	60.0
No	236	40.0
Are You Regular with These Contraceptive Method		
Yes	76	21.47
No	278	78.53
Should Unmarried Women Use EC		
Yes	396	67.12
No	194	32.88

DISCUSSION

This study showed that half of the respondents had heard of EC. However, only 16.9 percent knew the correct meaning of EC as drugs or device that a woman can take after unprotected intercourse to reduce the risk of becoming pregnant. Those with correct knowledge of EC had higher educational qualification, previous abortion or are using modern contraception, features which previous study [12] associated with emergency contraceptive knowledge. The low level of knowledge about EC may be because the health care providers whom these respondents relied upon for information on contraception lacked in-depth knowledge of emergency contraceptive method or are just unwilling to educate the client on EC [8,13].

The lack of dependable information on EC was glaring in this study as most respondents erroneously thought that some post coital traditional practices were effective modern EC. Even among those with knowledge about EC, there was some confusion

about the recommended maximum length of time following intercourse that a woman could begin the regime. For most of them, the term 'morning after pill' implies that a woman must wait until next morning (i.e. 12-24 hours) after intercourse to begin use. Only a few (3.4%) respondents knew of post coital intrauterine contraceptive device (IUCD) use. The mass media as reported earlier [9] was an important source of contraceptive information for these women. With a large number of respondents using modern contraceptives in a sporadic fashion, it is instructive to note that only twenty percent had ever used EC, a figure that is very low considering its usefulness as a back up if a woman doubted the efficacy of her regular method. Its use in this regard will no doubt reduce the number of menstrual regulations performed.

Majority of respondents had favorable attitude towards the use of EC by single women. However, accessibility to the method is a major setback to its use. In Nigeria, like most developing countries, there is reluctance on the part of family planning providers to offer contraceptive information to unmarried women because the culture does not support premarital sexual activity [3].This stigma prompted majority of respondents that used EC to obtain them either from friends or over the counter. The implication is that some of the users of EC have limited knowledge about the contraceptive method. Educating client and service providers on EC and providing convenient access to the method is an important step to the method's success in preventing unplanned pregnancies. Opposition by some respondents to the use of EC by unmarried women was due to unfounded concern that repeated use has some health effect or induces abortion, a fact which studies [14,15] has shown to be false.

It is concluded that the unmarried women's knowledge of EC, its availability and use is limited due to insufficient information, poor education, inaccessibility and service provider's attitude. Provision of appropriate information and access to EC, better service provider's attitude through training and retraining them are advocated.

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