

## MISCONCEPTION OF EMERGENCY CONTRACEPTION AMONG TERTIARY SCHOOL STUDENTS IN AKWA IBOM STATE, SOUTH-SOUTH, NIGERIA

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### ABSTRACT

**Objective:** To assess the degree of awareness and use of emergency contraception among tertiary school students in Akwa Ibom State, Nigeria.

**Design:** A self-administered questionnaire survey.

**Setting:** The Akwa Ibom State Polytechnic, Ikot Osurua, located on the outskirts of Ikot Ekpene local government area between 1<sup>st</sup> April 2002 and 31<sup>st</sup> April 2002.

**Subjects:** 1,000 randomly selected female students of the Akwa Ibom State polytechnic, Ikot Osurua

**Results:** The students were aged between 16 and 43 years. Five hundred and eighty-nine (68.5%) of the respondents had heard of products that could be used as emergency contraceptives. However, only 49 (5.7%) of the respondents had practised some form of emergency contraception, which was most commonly practised by those between 16 and 25 years (71.4%). Menstrogen (30.6%), gynaecosid (24.5%), and quinine (14.3%) were the most common medications used for emergency contraception. Patent medicine dealers (40.9%) and friends/course mates (29.7%) were the most common sources of knowledge about emergency contraception.

**Conclusion:** This study shows that awareness and use of emergency contraception by our youths is low. Community enlightenment about emergency contraception using specifically designed programmes, the formation of reproductive health clubs in our tertiary institutions and training of peer group educators in all our communities are advocated. Patent medicine dealers in our communities should have basic training in modern contraceptive methods and periodic evaluation should be carried out to assess their knowledge and practice of emergency contraception.

**Key Words:** Emergency contraception, tertiary school students, Akwa Ibom state. (Accepted 22 April 2006)

### INTRODUCTION

Unwanted pregnancy particularly amongst adolescents and youths is a major public health and social issue in the developing world<sup>1</sup>. In Nigeria, over 80% of pregnancies in unmarried youths are reported to be unintended<sup>2</sup>. Several studies in Nigeria have also shown increased adolescent sexual activity and decreasing age at first coitus<sup>3-6</sup>. Thus, Nigerian youths are now initiating sexual activity earlier and are increasingly having pre-marital sex<sup>7</sup>. These coupled with their low knowledge and utilization of Modern methods of contraception<sup>2</sup>, expose them to the risk of unplanned pregnancies and subsequently unsafe abortions.

Recent reports indicate that over 80% of adolescents and young people aged 15-24 years in this country do not use any form of contraception<sup>5</sup>. Currently, available statistics indicate that abortion is the leading cause of maternal mortality in Nigeria accounting for 40% of all maternal deaths<sup>2,8</sup>. A community based study of abortion prevalence in Nigeria showed that more than one-third of women who had induced abortions were adolescents as were 80% of the patients with abortion related complications<sup>9</sup>. In comparison with adults, youths are more likely to delay abortions, resort to unskilled persons to perform them, use dangerous methods and present late when complications occur<sup>10</sup>.

This is of particular relevance to us here in Nigeria where abortion is illegal under the law unless the woman's life is threatened by the pregnancy. Hence, most abortions are typically performed clandestinely, often by unskilled providers, under unsanitary and very dangerous conditions<sup>11</sup>.

Recent studies offer strong evidence that use of effective contraception leads to a decline in abortion rates<sup>12</sup>. Emergency contraception (Ec) provides a safe and effective means of post coital treatment and has been estimated to prevent at least 75% of pregnancies expected from unprotected intercourse<sup>13</sup>. It is particularly suitable for youths because of their pattern of sexual behaviour and contraceptive use. They do not often plan their first intercourse or may have infrequent intercourse with no contraceptive options<sup>13</sup>. No medical condition other than established pregnancy rules out the use of emergency hormonal contraception and laboratory tests, Pap smears, blood tests and breast examinations are not necessary<sup>14</sup>.

Few studies have reported on the awareness and use patterns of emergency contraception among youths in Nigeria and to the best of the knowledge of the authors no such work has been carried out in Akwa Ibom State, South-South Nigeria. Thus this study is designed to meet this need. It is hoped that the outcome of this study will reveal the need to introduce measures that will help increase the awareness and use of emergency contraception by our youths.

## **MATERIALS AND METHODS**

This study was carried out at the Akwa Ibom State Polytechnic, Ikot Osurua located on the outskirts of Ikot Ekpene local Government area. It has a student population of 4,006 of which 2,203 (55.0%) are females.

Between 1<sup>st</sup> April 2002 and 31<sup>st</sup> April 2002, 1000 female students were selected for the study by simple random sampling. Data for the study was obtained using self-administered questionnaires with closed and open-ended questions. Trained youth corps doctors, laboratory scientists and students from the school of health technology who worked with the first author administered the questionnaires to the consenting students in-between lectures after explanation of the nature of the study and assurance of confidentiality of information. The questionnaires contained questions on demographic data, awareness and use of contraception; sources of information on emergency contraception, awareness of emergency contraception and substances used as emergency

contraceptives. Eight hundred and sixty questionnaires (86.0%) were completed correctly and data analysis was based on these. The data were analysed using tables and percentages and the results obtained formed the basis of the discussion.

## **RESULTS**

### **Demographic characteristics of the respondents**

The respondents were aged between 16-43 years. Four hundred and eighty-five students (56.4%) were between 16-25 years of age while 43.6% of the respondents were between 26-43 years of age. Six hundred and six of the respondents were single (70.5%) while 0.8% were widowed (Table I)

### **Awareness of emergency contraception**

Five hundred and eight-nine (68.5%) of the respondents had heard of products that could be used as emergency contraceptives and this awareness was highest among those aged 21-30 years (55.2%) and lowest among those above 40 years of age (2.5%).

Table II.

### **Sources of information on emergency contraception**

The various sources of information on emergency contraception were patent medicine dealers 241 (40.9%), friends/course mates 175 (29.7%), television/radio 105 (17.8%), newspapers/magazines 48 (8.1%), parents and relatives 15 (2.5%), and the family planning clinic 5 (0.8%).

### **Contraceptive practice**

One hundred and seventy eight (20.7%) of the respondents admitted to having practiced some form of contraception in the past. However, only 49 (27.5%) of these had practiced some form of emergency contraception, which was also the most commonly practiced contraceptive method, followed by the rhythm method (21.9%). Emergency contraception was most commonly practiced by the 16-25 year age group (71.4%) and least commonly by those between 36 and 40 years (8.3%) Table III.

### **Substances used as emergency contraceptives**

The different substances used for emergency contraception by the respondents are shown in table IV. Menstrogen was the most common preparation used by 15 (30.6%) of the respondents followed by gynaecosid 12 (24.5%) and quinine 7 (14.3%).

Others were oral contraceptive pills 5 (10.2%), ergometrine 4 (8.2%), chloroquine 3 (6.1%) and alcohol (illicit gin and stout-6.1%).

**Table I: Demographic characteristics of the respondents**

VARIABLE	NO. N = 860	(%)
<b>Age</b>		
16-20	185	(21.5%)
21-25	300	(34.9%)
26-30	140	(16.3%)
31-35	105	(12.2%)
36-40	95	(11.0%)
>40	35	(4.1%)
<b>Marital Status</b>		
Single	606	(70.5%)
Married	191	(22.2%)
Divorced	30	(3.5%)
Separated	26	(3.0%)
Widowed	7	(0.8%)

**Table II: Awareness of emergency contraception by age**

AGE	NO	(%)
16-20	123	(20.9%)
21-25	186	(31.6%)
26-30	139	(23.6%)
31-35	79	(13.4%)
36-40	47	(8.0%)
>40	15	(2.5%)
<b>Total</b>	<b>589</b>	<b>(68.5%)</b>

**Table IV: Drugs used for emergency contraception by the respondents n=49**

TYPE OF DRUG	No	(%)
Menstrogen	15	(30.6)
Gynaecosid	12	(24.5)
Quinine	7	(14.3)
Oral contraceptive pills	5	(10.2)
Ergometrine	4	(8.2)
Chloroquine	3	(6.1)
Alcohol	3	(6.1)

AGE	RHYTHM No (%)	CONDOM No (%)	IUCD No (%)	OC No (%)	EC No (%)	INJECTABLES No (%)
16 - 20 n=33	5 (15.5)	8 (24.2)	1 (3.0)	4 (12.1)	12 (36.4)	3 (9.1)
21 - 25 n=60	13 (21.7)	12 (20.0)	3 (5.0)	9 (15.0)	21 (35.0)	2 (3.3)
26 - 30 n=38	6 (15.8)	7 (18.4)	4 (10.5)	3 (7.9)	10(26.3)	8 (21.1)
31 - 35 n=17	4 (23.5)	2 (11.8)	4 (23.5)	1 (5.9)	3 (17.6)	3 (17.6)
36 - 40 n=24	8 (33.5)	1 (4.2)	6 (25.0)	1 (4.2)	2 (8.3)	6 (25.0)
> 40 n=6	3 (50.0)	-	1 (16.7)	-	1 (16.1)	1 (16.1)
<b>Total n=178</b>	<b>39 (21.9)</b>	<b>30 (16.7)</b>	<b>19 (10.7)</b>	<b>18 (10.1)</b>	<b>49 (27.5)</b>	<b>23 (12.9)</b>

IUCD = Intra Uterine Contraceptive Device  
 OC = Oral Contraception  
 EC = Emergency Contraception

## DISCUSSION

Emergency contraception was introduced into clinical practice more than twenty five years ago and has proven to be an effective means of preventing unwanted pregnancy. However, its awareness and use among our youth is disappointingly low. Although emergency contraception was the most common form of contraception practiced by the respondents (5.7%), most of the substances they were using were of doubtful efficacy. Standard forms of emergency contraception currently used worldwide include the Yuzpe regimen of combined oestrogen and progesterone pills, progesterone only pills, mifepristone and intrauterine contraceptive device insertion. However, in this study, gynaecosid (a combination of methyloestrenolone and methyloestradiol) used for the treatment of amenorrhoea not related to pregnancy<sup>19</sup>, menstrogen (a combination of ethylestradiol and ethisterone) used in the treatment of conditions related to low hormonal levels such as dysfunctional uterine bleeding<sup>19</sup> and quinine, an anti-malarial were the most common medications used for emergency contraception by the respondents. The use of these medications as emergency contraceptives is dangerous as they are generally not effective in preventing unwanted pregnancy and some of them may actually result in serious adverse effects<sup>20</sup>. The use of these ineffective non-conventional medications by the students may not be unrelated to the fact that patent medicine dealers provided most of the information on the use of emergency contraception in this study and thus recommended these substances to them as emergency contraceptives. In our environment, patent medicine dealers offer various health care services and are often regarded as medical doctors. They are well accepted by the people and are well integrated in the community. They are preferred by youths because they are seen to be discrete and confidential. However, they virtually have no medical training, have diverse educational backgrounds and a significant number are often illiterate<sup>21</sup>. This study also showed that only 0.8% of those who practiced contraception derived their source of information from trained health care providers in the family planning clinics. Our family planning clinics (FPCs) have been reported as not being adolescent and youth friendly<sup>22</sup>. This is unfortunate considering the fact that the appropriately trained counsellors and service providers available in the FPCs would provide accurate and reliable information about EC. However, the FPCs service providers often view unmarried adolescents and youths with scorn and

disdain and are hostile to them because of existing cultural and religious restrictions on premarital sex and also because they see them as being sexually permissive and promiscuous<sup>22</sup>.

Levonogestrel only pills (marketed as Postinor) and combined oral contraceptive pills are the most common emergency contraceptives available in Nigeria<sup>19</sup>. They are cheap, readily available over the counter in most pharmacy outlets and can be purchased without a doctor's prescription. However as shown in this study, a lot of our young women are not aware of their existence as emergency contraceptives and hence do not use them to prevent unplanned pregnancy after unprotected intercourse. Thus, there is need for the urgent dissemination of information concerning emergency contraception and its role in preventing unplanned pregnancy to our youths. Programmes specifically designed to disseminate accurate information, dispel misconceptions and create awareness about contraception in general and EC in particular should be developed as television and radio programmes in order to enlighten the community in general. Youths in our tertiary institutions should be encouraged to form reproductive health clubs that will serve as vehicles for the education of youths on various methods of contraception and peer group educators who may through outreach programmes educate, provide relevant information and advice to other youths in the community on the timing, use and availability of emergency contraceptives should be trained. Serious consideration should be given to the possibility of establishing special clinics for our adolescents. Lastly, patent medicine dealers in our environment should have basic training in modern methods of contraception and periodic evaluation should be carried out to assess their knowledge and practice of emergency contraception.

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