
Full Length Research Paper

A survey of the knowledge and practice of emergency contraception among Adolescents in Calabar, Nigeria

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The current prevalence rate of contraceptive use in Nigeria is approximately 11 – 13%. This rate is very low in spite of the high rate of sexual activity and widespread awareness of the various contraceptive methods among Nigerian adolescents and youths. As a result there are many unintended pregnancies and illegal abortions contributing to a high maternal mortality ratio, which seems to indicate a large unmet need for contraceptive usage. This survey aims to ascertain the knowledge and practice of emergency contraception among adolescents in Calabar. This was a self-administered questionnaire-based study carried out in Calabar metropolis. The information was gathered at 3 different recreation parks in the metropolis- Marina resort, Tinapa resort and Calabar municipality resort. Information collected included age, level of education, knowledge of contraception, source of information, use of emergency contraception, and awareness of other methods of contraception. A total of 1,246 female adolescents were recruited into this study. Their age ranged from 16years to 19 years, with a mean age of 17.8 years. The respondents all attained basic primary education and above or were still in school but had all heard about contraception or family planning. About 90% have had sexual intercourse and of this number 65% used Emergency contraceptive pills, 28.5% used condom occasionally while 6.5% did not used any method. Adolescents are in dire need for information on reproductive health issues not only on contraception but also on other issues concerning their reproductive health. They should be assisted and given unhindered access to various methods of contraception to prevent unwanted pregnancies and unsafe abortion.

Key words: Adolescents, practice, emergency, contraception.

INTRODUCTION

Emergency contraception is defined as any drug or device used after sexual intercourse to prevent pregnancy. It has been suggested that millions of unwanted pregnancies could be prevented if emergency contraceptives were widely used (Trussell, 2004). The reproductive and sexual health needs of adolescents differ from those of adults (WHO, 2010). During adolescence, the body undergoes significant developmental changes, most notably puberty, the bodily changes of sexual maturation, and the formation of sexual identity (National Institutes of Health, 2007).

Achieving reproductive and sexual health requires more than preventing unwanted pregnancy and sexually transmitted infections, it includes developing the ability to form and maintain meaningful relationships with others and with one's own body. Psychological, social, educational, environmental, and economic factors, among others, all play a role (Tolman et al., 2003). The majority of women who use emergency Contraception are of unproven fertility and many use it after an accident with a condom which may not in fact have resulted in the leakage of seminal fluid or ejaculation of semen into the vagina or on the vulva. The chance of conception following one act of sexual intercourse has been calculated to be around 27% per cycle so that even without emergency contraception over 70% of women will

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not conceive (National Institutes of Health, 2007). In addition, adolescents are more likely to engage in risk-taking behaviors than either younger children or adults (Steinberg et al., 2004). These significant factors underline the importance of meeting the reproductive and sexual health needs of this age group (Beatty and Chalk, 2007). Teen mothers are more likely to drop out of school and face unemployment, poverty, welfare dependency, and other negative outcomes than women who delay childbearing (Singh et al., 2000). Reproductive and sexual health – combined with mental health disorders and emotional problems, violence and unintentional injury, substance use, and poor nutrition – form part of a complex web of potential challenges to adolescents' healthy emotional and physical development (Steinberg et al., 2004). After a decade of decline, rates of sexual activity among high school students have been rising since 2001 and vary by gender and race (Ethier et al., 2006). Among male high school students, 73% of blacks, 58% of Hispanics, and 44% of whites reported having had sexual intercourse in 2007 (Martin et al., 2009). Among female high school students, 61% of blacks, 46% of Hispanics, and 43.7% of whites reported having had sexual intercourse in 2007 (Martin et al., 2009; CDC, 2010). After over a decade of growth, rates of condom usage among high school students have been declining since 2003 and vary by gender and race (Hoffman and Saul, 2006). Among male high school students, 74% of blacks, 70% of Hispanics, and 66.4% of whites reported using a condom at last intercourse in 2007 while among female high school students, 60% of blacks, 52% of Hispanics, and 53.9% of whites reported their partner using a condom at last intercourse in 2007 (United States, 2007). About one in five high school girls has been physically or sexually abused by a dating partner (Silverman et al., 2001). Those engaging in casual sex in the majority of cases hardly use condom while a good number of persons claim not to derive emotional sexual satisfaction when having sex with condom.

In 2007, chlamydia and gonorrhea rates increased for both females and males age 15 to 19, but varied by gender and race (CDC, 2009). Females in this age group had the highest rates of chlamydia and gonorrhea compared to any other age or sex group and showed 6.4% and 1.4% increases respectively from the previous year (CDC, 2009). Males had lower rates of chlamydia and gonorrhea than females but showed 14.3% and 3.8% increases respectively from the previous year (Sexually Transmitted Diseases Interactive Data 1996-2008). About 35% of 14 to 19 year olds test positive for high-risk human papillomavirus, a virus linked to cervical cancer in women (CDC, 2009). In 2007, adolescents represented 4% of all new cases of HIV infections in the USA (Klein and Jonathan, 1997). Positive youth development programs have been found to reduce sexual risk behaviors in adolescents. High quality afterschool

programming improves academic achievement and youths' attitudes towards school, factors associated with delayed onset of sexual activity (Fuentes-Affleck, 2006; Ford et al., 2004). Research suggests that integrating health promotion and disease prevention into youth employment and training programs can improve health and employment outcomes for disconnected youth, a group with particularly poor health status and low insurance coverage (Ford et al., 2004).

METHODOLOGY

This study was carried out within Calabar Metropolis in Cross River State, Nigeria. This was an age-dependent self-administered questionnaire-based study aimed at adolescents (16 – 19 years) selected from three popular recreation sites in the metropolis. The structured questionnaire was pretested and simplified for easy use. The sites were the marina resort, Tinapa resort and Calabar municipal council resort. These sites are regularly patronized by youths for recreation. On each site the interviewer gathered the adolescents for a brief health talk and introduced the research objective. Confidentiality issues were discussed and strict compliance adhered to. Names and addresses or contact information were not included in the questionnaire, except the researchers' contacts for any help if necessary. Only those who accepted to participate were given the questionnaire. This study was carried out over a 6-month period from December, 1st 2016 to June 1st, 2017. A total of 1,500 female adolescents were recruited for the study out of which 1,246 forms were duly filled for analysis. Information collected included age, level of education, knowledge of contraception, source of information, use of emergency contraception, and awareness of other method of contraception. Information on pregnancy and abortion was excluded after the pretest as most respondents were unwilling to volunteer this information. Data was inputted and analyzed using Epi-info version 7 (CDC, Atlanta Georgia) and presented in tables as frequencies and percentages.

RESULTS AND DISCUSSION

Adolescents who take health risks and experience psychological distress are more likely to forgo health care due to confidentiality concerns despite being among the most vulnerable and in need of health care services (Ford et al., 2004). Some of the factors hindering adolescents' use of or access to programs and services that can help reduce the risk of sexual and reproductive health problems include lack of confidentiality. Inconsistent and unclear policies regarding adolescent patient confidentiality can create additional barriers to care

Table 1. Sources of information of contraception.

Age	Internet/or Peer group	Radio/TV	Magazines/books	School
16	105(45.3%)	56(24.1%)	38(16.4%)	33(14.2%)
17	286(65.3%)	98(22.4%)	40(9.1%)	14(3.2%)
18	124(40.5%)	112(36.6%)	50(16.3%)	20(6.6%)
19	140(51.9%)	88(32.6%)	30(11.1%)	12(4.4%)
	52.6%	28.4%	12.7%	6.3%

Table 2. Sexual relationship.

	16yrs	17yrs	18yrs	19yrs	%
1partner	104(44.8%)	316(72.1%)	215(70.3%)	154(57.0%)	63.3
2partners	96(41.4%)	106(24.2%)	64(20.9%)	86(31.9%)	28.3
Multiple	32(13.8%)	16(3.7%)	27(8.8%)	30(11.1%)	8.4

Table 3. Educational status of respondents.

Educational status	16 yrs	17 yrs	18 yrs	19 yrs	%
Post primary	104	36	23	30	15.5
Secondary	89	53	42	22	16.5
Post-secondary	22	255	97	32	32.6
Undergraduates	17	94	144	186	35.4

(Jones et al., 2005). This study focused on the awareness and use of emergency contraceptive by adolescents in Calabar, an urban metropolis bubbling with seasonal carnivals with high influx of tourists. The study concentrated on those who are active sexually and have knowledge of contraception, after pledging absolute confidentiality on the information obtained without disclosing their identities. Although sex education is not commonly taught in schools (both public and private) in Nigeria, adolescents have various sources of obtaining information, especially these days with unhindered access to the internet and from peer groups. The major sources of information about contraceptives in this study were; Peer groups and internet (52.6%), radio and television (28.4%), magazines, pamphlets and articles (12.7%) and schools (6.3%) (Table 1). Dating abuse is associated with unhealthy sexual behaviors that can lead to unintended pregnancy, sexually transmitted diseases, and HIV infections (CDC, 2006). Dating abuse occurs more frequently among black students (13.9%) than among Hispanic (9.3%) or white (7.0%) students [22]. About 10% of adolescent females experience non-voluntary first sex (CDC, 2006).

Table 2 shows the sexual partnership of the respondents. 789 (63.3%) have one sexual partner, 352 (28.3%) have 2 partners while 105 (8.4%) have multiple sex partners. While 60% of adolescents seeking reproductive health services at family planning clinics do so without parental knowledge, one in five would use no

contraception or the withdrawal method only if parental notification for prescription contraceptives were mandated (Lehrer et al., 2007). Adolescents in this study engage in sexual activities and use contraception without parental input or knowledge unlike in the western world where this is the norm. Majority of respondents in this study (35.4%) were undergraduates (Table 3). It can be seen that the contraceptive usage increased from 28.4% at age 16 to 93.5% at age 18 but declined slightly to 91.9% at age 19. No reason was adduced for this decline in this study but it may be that abstinence may be more in practice as the girls get more involved in academic studies.

Adolescents' low rates of outpatient visits put them at increased risk for health complications, and high school dropouts are at even greater risk than their non-dropout peers (Selden and Thomas, 2006). Adolescents in this study were all aware that unprotected sexual intercourse could lead to unwanted pregnancy. Most adolescents engage in 'emergency' sex and hence they seek emergency protection in order not to become pregnant, hence the use of emergency contraceptive pills to prevent any unforeseen or unwanted pregnancy. Postinor2, an emergency contraceptive pill is an 'off the counter' oral contraceptive pill, also known as 'the morning after pill' is popular among adolescents and women needing emergency contraception. 65% of respondents in this study use Postinor 2 regularly (Table 4). The pill is taken immediately after sex or in the

Table 4. Emergency contraceptive pill usage/awareness of other method of contraceptive apart from 'emergency pills.

Years	Emergency contraceptive pill usage		Awareness of other methods of contraception	
16	66	28.4%	224	96.6%
17	210	47.9%	398	90.9%
18	286	93.5%	286	93.5%
19	248	91.9%	258	95.6%

morning following sexual exposure, hence the name. The drug is cheap and readily available in Nigeria and can easily be purchase across the counter without prescription. Research shows that peer leaders can be more effective than adults in establishing conservative norms and attitudes related to sexual behavior (Ma et al., 2005). Access to on-site, school-based health centers increases the likelihood that adolescents will receive health and counseling services (Tandon et al., 2008). Sexually active adolescents in schools where condoms were available were more likely to report having used condoms in their most recent sexual encounter (United State, 2007). In Nigeria, most schools do not have sex education in their curriculum and even parents hardly discuss issues concerning sex with their children at home. Hence the adolescents are vulnerable and easily fall prey to peer influence.

Conclusion

Adolescence and puberty are very challenging periods in a young person's life coupled with societal, economic, cultural and peer pressure. There is ample research evidence identifying the various factors that contribute to the low prevalence of modern contraceptive use in Nigeria, with the most common factor being the myth about the side effects of modern contraceptives. However, what is lacking is a political will in Nigeria to provide family planning programs on a much larger scale, using community-oriented approaches and communication programs, to help change the myth about the side effects of modern contraceptives. Many factors contribute to unwanted pregnancy in Nigeria, and a very important factor is the low level of contraceptive used (Oye-Adeniran et al., 2005; Amazigo et al., 1997; Okpani and Okpani, 2000). Contraceptive prevalence rates have correlated with maternal mortality and it has been shown that countries with low contraceptive prevalence rates are also countries with very high maternal mortality ratios (Okonofua, 2003). Nigeria has one of the highest maternal mortality ratios in sub-Saharan Africa, and ranks as the country with the second highest number of maternal deaths in the world (WHO, 2005), with illegal and unsafe abortions contributing 20 - 40% of about

60,000 maternal deaths that occur yearly in Nigeria [34]. Adolescents should have unhindered access to information on contraception and be assisted by health care providers to make informed choice on contraceptive use. Including sex education early in the school curricula will help the adolescents on adequate knowledge and remove the myths on sex and reduce the incidences of unwanted pregnancies, unsafe abortion and its' attendant consequences. Information about sex should not be considered as a taboo; hence, parents should begin early to answer questions about sexual concerns from their home before they get unhindered information from peer groups and the internet.

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