

The Knowledge, Attitude and Use of Contraception among Secondary School Girls in Port Harcourt

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ABSTRACT

Background: Sexual activity is on the increase among teenagers worldwide, with a trend towards early onset. These activities are often unplanned and may lead to unintended pregnancies and sexually transmitted diseases including AIDS. Teenagers in developing countries exhibit little knowledge, and exposure to contraceptives. This study was undertaken to describe the knowledge, attitude and use of contraception among female students in Port Harcourt.

Method: A self-administered questionnaire was used for the study. Five hundred and thirty four students selected from a female only secondary school in Port Harcourt Local Government Area of Rivers State were studied.

Results: The students were aged 8-23 years (mean 15.6 years). Two hundred and sixty four (49.4%) were in junior classes (JSS1-3) and 270 (50.6%) in senior classes (SS1-SS3). Two hundred ninety five (55.2%) of the respondents had heard of at least one contraceptive method. Age and not the academic level significantly influenced the knowledge ($p < 0.05$). Condom was the commonest method known by the students. Few students (<10%) had knowledge of the modern contraceptive methods. One hundred and thirty five (25.3%) students believed that contraceptives could be harmful. Among the sexually active girls, only 45.3% had ever used any method of contraception. The use of contraception was more among junior students than senior students (64.5% vs 35.5%) ($p < 0.05$).

Conclusions: We therefore recommend formal sex education in secondary schools in Port Harcourt, in order to improve the reproductive health knowledge and contraceptive use of sexually active girls. The education program must address students' misconceptions about effective methods of contraception targeting the senior students specifically.

KEY WORDS: Contraception; Knowledge; Attitude; Use; Secondary school girls; Port Harcourt

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INTRODUCTION

Teenage sexual activity is on the increase worldwide, with a trend towards early onset¹⁻⁴. Young girls in developing countries are particularly vulnerable due to social and cultural factors that are beyond their control^{1,5}. Sexual violence such as rape, economic hardship, lack of access to formal sex education, erosion of traditional practices, westernization and lack of parental control have been implicated¹⁻³. These sexual activities are often unplanned and may lead to unintended pregnancies, sexually transmitted diseases including AIDS^{6,7}. In Nigeria, 80% of pregnancies in teenage girls are unwanted because the girls are unmarried and have no financial capabilities to take care of themselves⁷.

Pregnancy among teenage girls is a growing public concern worldwide especially in Sub-Saharan Africa⁸⁻¹⁰. Lack of knowledge, and exposure to contraceptives among sexually active girls are the cause of high pregnancy rate in developing countries^{8, 11-15}. In Kenya and Zimbabwe, 3 percent and 14 percent respectively of sexually active women aged 15-19 years were using modern methods of contraception¹¹. Okonofua⁹ found that 70% of adolescents in rural Nigeria had no knowledge of contraception and only 10% could identify the monthly fertile period. There are few studies on the attitude of young girls towards contraception in Rivers State.

The present study was therefore undertaken to assess the knowledge, attitude and use of contraception among secondary school girls in Port Harcourt. Port-Harcourt metropolis is an

oil city in the southern part of Nigeria. It has a large proportion of expatriates due to oil exploratory activities, and this is expected to increase sexual activities.

SUBJECTS AND METHODS

Five hundred and thirty four secondary school girls randomly selected from a female secondary school in Port-Harcourt city were studied. The school surveyed was selected by stratified sampling technique from 21 State secondary schools in Port-Harcourt Local Government Area (PHALGA) of Rivers State. The schools were first stratified based on gender characteristics: into 8 co-education, 7 male only and 6 female only. The final selection of the school was by simple balloting from six female only schools. A female only school was used in order to exclude the influence of males, which will be present in co-educational schools.

The minimum sample size of 336 was calculated using the formula¹⁶ $pxq/(SE)^2$, where p =prevalence, $q=(100-p)$ and SE =standard error. A reproductive knowledge rate of 30 percent¹³ and sampling error of 2.5% were used. A minimum of 80 students was randomly selected in each class of JSS1 to SS3 (junior and senior secondary classes). Permission for the study was obtained from the State Ministry of Education and from the school authority. The students also gave informed consent. The study instrument was a pre-tested questionnaire. Information obtained was age, class, sexual activity, knowledge of the various contraceptive methods and source of information, complications, beliefs about harmful effects, pregnancy (ies) if any and use of contraception. Parental occupations and family size were assessed. The respondents filled the questionnaires after the authors had carefully explained the purpose of the study and the method of filling them. The questionnaire was anonymous to encourage honest responses, as there were no names or any other identification column on them. They were filled in the school hall or in any available space, in the absence of their teachers. The authors were present during the exercise, and they collected the questionnaires immediately after the students had filled them. The results were analyzed statistically using chi-square. The level of significance was taken to be $p<0.05$.

RESULTS

Out of 534 female students studied, 264 (49.4%) were in junior classes (JSS1-3) and 270 (50.6%) in senior classes (SS1-SS3). The mean age of the respondents was 15.16 years (range 8 to 23 years). Three hundred and forty seven (65.0%) students were under 16 years and 187 (35.0%) between 16 and 23 years. Table I showed the background characteristics of the students. Many of the students had educated parents, and 54.1% had large family size.

Knowledge of contraception: Two hundred and ninety five (55.2%) respondents had heard of various methods of contraception. Out of these, 157 (53.2%) were in junior classes, while 204 (69.2%) were under 16 years of age. The proportion that had heard of contraception increased steadily with age, from 27.5% at 8-11 years to 64.2% at 12-15 years ($F<0.05$). However, their classes did not significantly influence knowledge ($P>0.05$) as shown in Table II. Condom was the commonest contraceptive methods known by the respondents (Table III). The source of information on contraceptive for the study group was from friends (22.1%), media (5.6%) and class teachers (2.8%). One hundred and thirty two (24.7%) students did not indicate their source of information.

Attitude towards contraception: One hundred and thirty five (25.3%) students believed that contraceptives could be harmful, twenty four (4.5%) students did not believe while 375 (70.2%) gave no response. The effects mentioned were bleeding (28.8%), weight loss (13.7%), weight gain (10.3%), infections (24.7%) and abdominal pain (22.6%). The contraceptive methods implicated were oral contraceptive and vasectomy.

Use of contraceptive methods: One hundred and thirty seven (25.7%) students were sexually active. Out of these, 75 (54.7%) did not use any form of contraceptive method. Among the 62 (45.3%) students who used contraceptives, 8 (12.9%) were on oral pills, while the rest did not specify the contraceptive methods used. Forty (64.5%) students who used contraception were in junior classes. The difference was statistically significant ($p<0.05$).

Table I: Socio-demographic Characteristics of the students.

Characteristics	Number	%
Age Group (Years)		
< 16 years	347	65.0
17 - 23 years	187	35.0
Number of mother's children		
≤4	245	45.9
≥5	289	54.1
Father's educational level		
None	34	6.4
Primary	41	7.7
Post-Primary	103	19.3
Secondary Education	356	66.7
Mother's educational level		
None	47	8.8
Primary	71	13.3
Post-Primary	128	24.0
Secondary Education	288	53.9

Table II: Students knowledge according to class and age.

Variables	Yes (%)	No (%)	χ^2	
Age (years)	8-11	14(27.5)	37(72.5)	21.9
	12-15	190(64.2)	106(35.8)	
	16-23	91(48.7)	96(51.3)	
Classes	JSS1-3	157(59.5)	107(40.5)	3.67
	SS1-3	138(51.1)	132(48.9)	

Numbers in parentheses are percentages of the variables.

Table III: Contraceptive methods known by the respondents (N=295)

Methods	Percentage of students
Condom	50.7
Oral contraceptive	40.7
Rhythm method	2.1
Diaphragm	2.1
Tubal ligation	2.2
Vasectomy	2.2

DISCUSSION

Two hundred and ninety-five (55.2%) respondents had heard of the various methods of contraception. This is comparable to a contraceptive awareness of 56% reported by Okpani and Okpani⁸, but higher than the rate of 22.6% noted by Adinma and Okeke¹². Age was found to correlate with awareness of effective contraceptive method up till the age of 16 years. However, the academic level (classes) did not influence the contraceptive knowledge. The lack of formal sexuality education in most of the secondary schools in Rivers state at the time of the study may have contributed to the finding.

Condom was the commonest contraceptive method known by the students. This was however not surprising, because of the extensive promotion of the use of condom in the media for the prevention and control of sexually transmitted diseases especially Acquired Immune Deficiency Syndrome (AIDS). Although, more than 50% of the student had heard of contraception, less than 10% knew the modern methods of contraception. Rhythm method was known by only 2.1% of the respondents. This is a reflection of general deficit in basic knowledge of human reproduction and fertile period during menstrual cycle. This knowledge is relevant for sexually active girls who may not have access to modern contraceptives, and for whom using "rhythm" method may be one of their few alternatives. The present finding compares with the report by Okonofua⁹. There was no knowledge of withdrawal, intrauterine devices, spermicides, or injectables as contraceptive methods.

We found that friends were the main source of information on contraception among the respondents. This finding agrees with other studies, which noted that peers were preferred source of information on sexuality among adolescents^{13,17}. The lack of parental involvement in sexual education of their adolescents is supported by the present study. This is very worrisome because more than 50% of our respondents have parents with at least secondary education. The students had negative attitude to contraception. Even when they did not know

the contraceptive methods implicated, the students still felt that contraceptives could be harmful.

The prevalence rate of sexual activity noted in this study was 25.7%. This compares with the rates of 29% and 26.3% reported by Odujinrin⁶ and Adinma and Okeke¹² respectively. Despite increased sexual activity of the respondents, only 45.3% had used any form of contraception. This is comparable to the rate of contraceptive use reported by Odujinrin⁶, among other Nigerian studies^{3,4,8,9}. Fear of parental knowledge and disapproval, unrealistic fear of side effects of contraception consequent upon lack of proper sex education, and un-affordability of contraceptives have been found to contribute to low contraceptive use by sexually active adolescent girls^{4, 9-13,17}. Also, studies reported that students viewed condom use as lack of love, and could be harmful to women^{13, 17}. Many of the sexually experienced respondents in the study (39.4%) did not indicate their methods of contraception probably because adolescents feel inhibited discussing their sexuality with persons other than friends. This reflects the difficulty in studying adolescents' sexual behaviours.

The fact that condoms are used by males may explain why none of the female students mentioned its use in the present study. Similarly, Araoye *et al*¹⁰ noted that males reported the use of condoms more than females. The uninformed belief about the harmful effects of contraception reported by respondents may have affected the contraceptive acceptance and usage among sexually active females.

Lower contraceptive use reported by senior students may be the effect of peer pressure, and indifferent attitude of the senior students to the consequences of unprotected sex. This finding therefore suggests that senior secondary students need specific targeting in health education programmes to enhance their contraceptive use. They should be assisted to identify risky sexual behaviours and motivated to utilize available preventive measures.

We recommend formal sex education in secondary schools in order to improve the reproductive health knowledge and

contraceptive use of sexually active girls. The education program must not just teach about contraception, but must address students' misconceptions about effective methods and about alternative methods.

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