

Prevalence of Sexual Activity and Outcome among Female Secondary School Students in Port Harcourt, Nigeria

IC Anochie¹ and EE Ikpeme²

ABSTRACT

Sexual activity among 534 Nigerian female secondary school students was studied using self-administered questionnaire. Prevalence of sexual intercourse was 25.7%. There was no significant difference between the junior (48.2%) and senior (51.8%) students ($p > 0.05$). Seventeen (12.4%) students had initiated sexual intercourse before 11 years. The frequency of sexual exposure was high, with 34.3% of the students having intercourse more than once in a week. Pregnancy rate among sexually active females was 27.0%, with 24.8% rate of induced abortion. Early sexual health education starting from primary school would be helpful in influencing the reproductive decisions and sexual behaviour of the students, including contraceptive acceptance and usage, to avoid teenage pregnancy. Education of parents is also recommended in order to overcome the cultural barriers that discourage parents from providing sex education to their children at home. (*Afr J Reprod Health* 2001; 5[2]:63-67)

RÉSUMÉ

Prévalence de l'activité sexuelle et ses conséquences chez les étudiantes du secondaire à Port Harcourt, Nigeria. L'activité sexuelle chez 534 étudiantes du secondaire a été étudiée à l'aide des auto-questionnaires. La prévalence de l'acte sexuel était de 25,7%. Il n'y avait pas de différence importante entre les étudiantes des petites classes (48,2%) et celles des grandes classes (51,8%) ($p < 0,05$). Dix-sept étudiantes s'étaient initiées à l'acte sexuel avant l'âge de 11 ans. La fréquence de l'acte sexuel était élevée, 34,3% des étudiantes avaient des rapports sexuels plus d'une fois par semaine. Le taux de grossesse chez les filles sexuellement actives était de 27,0% alors que le taux de l'avortement provoqué était de 24,8%. Les initiations à l'éducation de la santé à partir de l'école primaire seront utiles pour influencer les décisions sur la santé reproductive et le comportement sexuel des étudiants y compris l'acceptation et l'utilisation de la contraceptive pour éviter la grossesse chez les adolescentes. Nous préconisons le renseignement de parents comme moyen de maîtriser les obstacles culturels qui découragent les parents d'assurer l'éducation sexuelle à leurs enfants à la maison. (*Rev Afr Santé Reprod* 2001; 5[2]:63-67)

KEY WORDS: *Female, secondary students, sexual activity, pregnancy, abortion, Port Harcourt, Nigeria*

¹Lecturer, University of Port Harcourt Teaching Hospital, Rivers State, Nigeria. ²Consultant Paediatrician, Braithwaite Memorial Hospital, Port Harcourt, Rivers State, Nigeria.

Correspondence: Dr (Mrs.) I.C. Anochie, P.M.B. 5160, Port Harcourt, Rivers State.

Introduction

Sexual activity is the outcome of normal physiological changes occurring in adolescents. The World Health Organization (WHO) defines an adolescent as a person in the age group of 10 to 19 years. Adolescence is characterised by rapid rate of physical growth and development with the attainment of secondary sexual characteristics occurring under the influence of sex hormones.¹⁻⁴

Teenage sexual activity is increasing globally with a trend towards early onset.^{2,5-10} In developing countries, factors such as early onset of menarche, changing values due to increasing urbanisation, exposure to foreign cultures through migration, tourism and mass media, erosion of traditional norms and values, peer influence and lack of parental control have been implicated.^{2,5,10-13}

More than 20% of secondary school girls in Nigeria are sexually active, or have had sexual relationship at least once (SALO).^{1,9-16} Pregnancy among teenage girls is a growing public concern worldwide, especially in sub-Saharan Africa countries.^{5,6,8-16} It is one of the unfavourable outcomes of adolescent sexual activity. About 20% of teenagers conceive during their first sexual exposure and 50% within the first 6 months.^{10,13} The younger the age at initiation of sexual intercourse the greater the likelihood of a pregnancy.⁷

Most pregnancies (80%) in adolescent girls in Nigeria are unwanted, because the girls are usually unmarried and have no financial power to assume responsibilities for themselves.^{1-3,13} They often resort to termination of the pregnancies. In Nigeria, unlike in some developed and developing countries where abortion is legal, most abortions are usually done by 'quacks' due to an existing abortion law in the country.^{1,13} Unwanted teenage pregnancy and its outcomes are of enormous burden to the family and society because of the numerous complications that result.^{1,2,13,17}

The present study was, therefore, undertaken to determine the prevalence of sexual activity and its outcome among female secondary school students in Port Harcourt, a city that is undergoing rapid urbanisation and westernisation as a result of oil exploratory activities.

Materials and Methods

A female secondary school in Port Harcourt city, southeastern part of Nigeria, was used for the

study. Selection of the study school was done by multistage sampling technique from among the 35 government approved secondary schools in Port Harcourt Local Government Area (PHALGA). They were first stratified into federal, state and privately owned schools. These comprised of 4 federal, 21 state and 10 government approved private schools. The state schools were further stratified based on sex (co-educational, males and females schools). There were eight co-educational, seven male only and six female only schools. The final selection of the female only school was done by simple random sampling through balloting among the six female secondary schools.

All classes in the school were represented, from junior secondary one to senior secondary three. One stream of each class was randomly selected for the study. All the students in the selected streams participated in the study. Before the study was commenced, permission was obtained from the State Ministry of Education and from the school authority. Informed consent was also obtained from the students.

Data for the survey was collected using a self-administered questionnaire with closed questions. The questions were on age, sexual experience, age at first sexual experience, frequency of sexual intercourse, any resulting pregnancy(ies), outcome of pregnancy(ies), parents' educational level, occupation and number of siblings. The questionnaire was pilot tested on 30 female students from a school similar to the study school but in a different area of the city.

The questionnaire was administered to students in the school hall under the supervision of the authors. Before the students filled the questionnaire, the purpose of the study was explained to them and they were encouraged to write only the truth. To ensure confidentiality, no names were recorded and teachers were not allowed to participate. The authors collected the completed questionnaires. Statistical analysis of data was done manually using chi-square test. Probability $p < 0.05$ was considered significant.

Results

Socio-Demographic Characteristics

Table 1 shows details of the personal data of the 534 female students involved in the study. The age range of the students was 8 to 23 years. Two hun-

dred and twenty seven (86.0%) of students in the junior classes (JS1-JS3) were between the age of 8 and 15 years. Two hundred and eighty nine (54.1%) of the respondents were from large families with more than four siblings. Most of the students' parents had primary education and most were semi-skilled. Mothers' educational level and occupation were generally lower than fathers'.

Table 1 Students Socio-Demographic Characteristics (N = 534)

Variable	Total number	%
<i>Age</i>		
8-11	51	9.6
12-15	296	55.4
16-19	160	30.0
20-23	27	5.1
<i>Year of schooling</i>		
1st-3rd	264	49.4
4th-6th	270	50.6
<i>Number of siblings</i>		
None	53	9.9
1-2	56	10.5
3-4	136	25.5
≥ 5	289	54.1
<i>Father's educational level</i>		
None	34	6.4
Primary	41	7.7
Post primary	103	19.3
Post secondary	356	66.7
<i>Mother's educational level</i>		
None	47	8.8
Primary	71	13.3
Post primary	128	24.0
Post secondary	288	53.9
<i>Father's occupation</i>		
Unemployed	29	5.4
Low/unskilled jobs	69	12.9
Semi-skilled	250	46.8
Low level professional	26	4.9
High level professional	160	30.0
<i>Mother's occupation</i>		
Unemployed	13	2.4
Low/unskilled jobs	159	29.8
Semi-skilled	266	49.8
Low level professional	24	4.5
High level professional	62	11.6

Sexual Activity

One hundred and thirty seven (25.7%) students had initiated sexual intercourse. Out of these, 66 (48.2%) were in junior classes while 71(51.8%) were in senior classes. There was statistical difference between the junior and senior students ($p > 0.05$). The peak age at initiation of sexual intercourse was between 12 and 15 years (Table 2). Seventeen (12.4%) students had initiated sexual intercourse by 11 years.

Frequency of Sexual Intercourse by Class of Respondents

Among the girls who claimed to have been sexually active, 34.3% had sexual intercourse at least once a week, while 41.6% had intercourse less frequently. The year of schooling (class) was found to have no influence on the frequency of sexual activity, as shown in Table 3.

Table 2 Age Distribution of Respondents according to First Sexual Experience

Age (Years)	Number	Percentage•
8-11	17	12.4
12-15	78	56.9
16-19	36	26.3
20-23	6	4.4
Total	137	100

Table 3 Frequency of Sexual Intercourse by Class

Class	≥ Once a week	≥ Twice a month	Once a month	Total
I-III (Junior)	25	25	16	66
IV-VI (Senior)	22	8	41	71
Total	47 (34.3)	33 (24.1)	57 (41.6)	137 (100)

Outcome of Sexual Activity

Thirty seven (27.0%) of the 137 sexually active girls claimed to have been pregnant at least once. Twenty (14.6%) of them had only one pregnancy

while 17 (12.1%) had two or more pregnancies. Thirty four (24.8%) have had at least an abortion before, out of which ten (7.3%) had had more than three abortions (Table 4). Only 3(2.4%) of the sexually active girls had delivered their babies; these were all in senior classes.

Table 4 Number of Abortions Procured

Number	Frequency (%)
0	103 (75.2)
1	16 (11.7)
2	8 (5.8)
3	1 (0.7)
> 3	9 (6.6)
Total	137 (100)

Discussion

The prevalence rate of sexual activity of 25.7% found in this study is comparable with the rate obtained among adolescents in some previous Nigerian studies.^{8,9-13,16} Odujinrin⁹ reported sexual activity rate of 29% among secondary school girls in Lagos State, while Adinma et al¹⁴ noted an incidence of 26.3% in a study of the sexual behaviour and pregnancy among Nigerian students. The present study confirms that female students in Port Harcourt have high incidence of sexual intercourse.

This rising rate of sexual activity has been found to have grave health and social implications on Nigerian adolescents.^{1,2,17-19} Fawole et al¹⁸ noted that most of the adolescents seen in sexually transmitted disease (STD) clinics in Ibadan had previous history of vaginal intercourse. Similar findings have been reported in Rivers State by Brabin et al.¹⁵ In Jamaica and Nigeria, pregnant women aged less than 15 years were 4–8 times more likely to die during pregnancy and childbirth than pregnant women aged more than 19 years.^{1,2} Infant mortality was also noted to be 30% higher for infants born to women aged 15–19 years than for those born to women 20 years and above.^{1,2,20}

The trend towards early exposure to sexual activity is supported by this study. Numerous factors have been advanced for the early age at sexual de-

but in young females.^{2,5,10} However, in Port Harcourt, the oil exploratory activities resulting in rapid urbanisation and influx of expatriates into the city may further reduce the age of sexual initiation. We therefore suggest a reproductive health program that would address the sexual needs of students in Port Harcourt before the age of 11 years.

We found that 54.1% of students were from large families with low socio-economic background. This is consistent with arguments and reports that economic hardship encourages girls to become sexually active at an early age for economic reasons.^{1,5-8,13,17} The frequent sexual intercourse reported by students in both junior and senior classes may be a reflection of general lack of discipline and supervision in most of the secondary schools in Nigeria.

Teenage pregnancy is one of the most unfavourable and usually unplanned outcomes of adolescent sexual activity. This study showed a high pregnancy rate among the sexually active girls. Studies have shown that young women in developed countries are less likely to become pregnant than those in developing countries, owing to their greater exposure to contraceptive usage.^{1,11,13,16,20}

This study has established that pregnancies in teenagers are unwanted. Although abortion is illegal in Nigeria, majority (24.8%) of the sexually active students in this study who had been pregnant resorted to clandestine abortion. This is comparable with abortion rate of 23.5% reported in Lagos; an urban city with similar terrain as Port Harcourt.⁹ Previous studies^{1,2,9,11,20,22} have noted that most adolescents procure illegal abortion from unskilled personnel and by dangerous methods. Between 150,000 and 200,000 women die every year from complications of illicit abortion. Previous studies in Nigeria have also shown that 16% of all maternal deaths were due to adolescent abortion.^{1,13} This problem of quackery, with the complications of clandestine abortion will remain for a long time unless efforts are intensified towards reducing teenage and adolescent sexual activity and pregnancy. This is because of the traditional, moral and religious beliefs of many Nigerians that oppose the restrictive abortion laws.

In view of the present findings, we recommend early sexual health education starting from the primary schools. This is to improve the knowledge

of young children, especially girls who are more vulnerable to sexual exploitation, and influence their reproductive decisions and sexual behaviour. Early sex education has been shown to preserve health and delay sexual activity among adolescents.²¹⁻²³ The services could also be provided using informal and extra-curricular approach.

Finally, parents and guardians should be educated to overcome the cultural barriers that discourage early sex education at home.

REFERENCES

1. World Health Organization. The health of youth; facts for action. *Youth and Reproductive Health* 1989; 1-11.
2. World Health Organization. The reproductive health of adolescents: a strategy for action. *Youth and Reproductive Health* 1989; 5-8.
3. Radharkrishina A, Gringle ER and Geenslade FC. Identifying the intersection: adolescent unwanted pregnancy, HIV/AIDS, unsafe abortion. *Ipas/Issues in Abortion Care* 1997; 1-20.
4. Vaughan VC and Behrman RC. *Nelson Textbook of Pediatrics*. WB Saunders Company, 1987, 20-24.
5. Adolescent sexual experience, contraceptive use and childbearing. *Demographic and Health Surveys (DHS) Program* 1991; 1-23.
6. Makiwane MB. Adolescent pregnancy and reproductive health in Transkei (Rural South Africa). *Afr J Reprod Health* 1998; 2: 41-48.
7. Adedoyin M and Adegoke AA. Teenage prostitution - child abuse: a survey of the Ilorin situation. *Afr J Med* 1995; 24: 27-31.
8. Fawole OI, Asuzu MC and Oduntun SO. Survey of knowledge, attitudes and sexual practices relating to HIV infection/AIDS among Nigerian Secondary School Students. *Afr J Reprod Health* 1999; 3: 15-24.
9. Odujirin O. Sexual activity, contraceptive practice and abortion among adolescents in Lagos, Nigeria. *Int J Gyn Obs* 1989; 34: 361-66.
10. Briggs ND. Adolescent sexuality and its problems in an African society. Nigerian FIGO concept paper. *Adolescent Gynaecology* 1991; 235-39.
11. Amazigo U, Silva N, Kaufman J and Obikeze DS. Sexual activity and contraceptive knowledge and use among in-school adolescents in Nigeria. *Int Fam Plann Perspect* 1997; 23: 28-33.
12. Temin MJ, Okonofua FE, Omorodion OF, Renne EP, Coplan P, Heggenhougen HK and Kaufman J. Perceptions of sexual behaviour and knowledge about sexually transmitted diseases among adolescents in Benin City, Nigeria. *Int Fam Plann Perspect* 1999; 25: 186-195.
13. Goddard C. Adolescent sexuality in Nigeria: advocates for youth. *The Facts* 1995; 275-276.
14. Adinma JI, Agbai AO and Okeke AO. Sexual behaviour and pregnancy among Nigerian Students. *Adv Contracept* 1994; 10(4): 265-70.
15. Brabin L, Kemp J, Obunge OK, Ikimalo J, et al. Reproductive track infections and abortion among adolescent girls in rural Nigeria. *Lancet* 1995; 345: 300-304.
16. Okpani AOU and Okpani JU. Sexual activity and contraceptive use among female adolescents - A report from Port Harcourt, Nigeria. *Afr J Reprod Health* 2000; 4: 40-47.
17. Meekers D and Calves AE. Gender differentials in adolescent sexual activity and reproductive health risks in Cameroon. *Afr J Reprod Health* 1999; 3: 51-67.
18. Fawole OI, Ajayi IO, Babalola TD, Oni AA and Asuzu MC. Socio-demographic characteristics and sexual behaviour of adolescents attending the STC, UCH, Ibadan: a 5-year review. *West Afr J Med* 1999; 3: 165-169.
19. World Health Organization. The health of youth: facts for action. *Youth and AIDS* 1989; 1-6.
20. Goldberg B. Adolescent reproductive health. *Network* 1997; 17:9.
21. Blaney CL. Sex education leads to safer sex. *Network* 1993; 14: 7-11.
22. Barrett B. Youths often risk unsafe abortions. *Network* 1993; 14: 13-15.
23. Barnett B. Education protects health, delay sex. *Network* 1997; 15-20.