

# Sexual behaviour of in-school adolescents in Ibadan, South-West Nigeria

Morbason-Bello IO\*, Oladokun A, Enakpene CA, Fabamwo A O\*, Obisesan KA, Ojengbede OA

## ABSTRACT

This study was a cross-sectional survey conducted among 716 senior secondary school adolescents in Ibadan from March to August 2005. The result of 695 that was analyzed revealed that the mean age of  $15 \pm 2.6$  years. 28.3% of the respondents had previous sexual exposure with higher proportions being male ( $p=0.00043$ ). Majorities' first sexual exposure was unplanned. Family settings and educational level do not have significant influence on the previous sexual exposure. The methods of sexual activity were mainly through vagina route while some had also practiced oral and anal sex. Most of those that are sexually exposed had more than one partner. About half of the respondents learn about sex from their friends while others through their parents and media.

We conclude that in-school adolescents practiced unsafe sexual activity and they are therefore predisposed to STI/HIV and other reproductive health risks. (*Afr J Reprod Health* 2008; 12[2]:89-97)

## RÉSUMÉ

### Comportement sexuel des adolescents qui fréquentent encore l'école à Ibadan au sud-ouest du Nigéria.

Cette étude était une enquête transversale menée au sein de 716 adolescents des lycées à Ibadan entre les mois de mars et d'août 2005. Le résultats concernant 695 qui ont été analysés ont révélé que l'âge moyen était de  $15 \pm 2,6$  ans. 28,3% des enquêtés ont eu une expérience sexuelle antérieure, les adolescents mâles ayant des proportions supérieures ( $p=0,00043$ ). Dans la plupart des cas, la première expérience sexuelle était imprévue. Les cadres familiaux et le niveau de scolarisation n'influencent pas de manière significative les expériences sexuelles antérieures. Les méthodes de l'activité sexuelle étaient surtout par voie vaginale alors que certains ont pratiqué aussi le fellation et le sexe par voie anale. La plupart de ceux qui sont exposés sexuellement avaient plus d'un partenaire. A peu près une moitié des enquêtés se renseignent sur le sexe auprès de leurs amis tandis que les autres le font auprès de leurs parents et dans la média. Nous concluons que les adolescents qui fréquentent encore l'école s'engagent dans l'activité sexuelle dangereuse et qu'ils sont en conséquence prédisposés aux IST/VIH et aux risques de la santé de reproduction. (*Rev Afr Santé Reprod* 2008; 12[2]:89-97)

---

KEY WORDS: *Adolescents, In-School, Sexual activity, Sexual exposure, Nigeria*

---

Morbason-Bello IO\*, Oladokun A, Enakpene CA, Fabamwo A O\*, Obisesan KA, Ojengbede OA  
Department of obstetrics and Gynaecology, University College Hospital, Ibadan and\*Department of Obstetrics and Gynaecology, Lagos State University Teaching Hospital, Ikeja, Lagos. NIGERIA.

**Correspondence:** Dr Morbason-Bello, I. O. Department of Obstetrics and Gynaecology, University College Hospital, Ibadan. [onembello@yahoo.co.uk](mailto:onembello@yahoo.co.uk)

## Introduction

Adolescence represents a transition from childhood to adulthood with features including secondary sexual growth, changes in hormonal milieu, emotional, cognitive and psychological development<sup>1,2,3</sup>. Adolescents are usually adventurous in all spheres of human endeavours including sexual practices<sup>4</sup>. They constitute about 20 percent of the world's population with about 85 percent of them in developing countries<sup>5</sup>. Okonofua in 2000 corroborated that sub-Saharan African countries have larger proportion of adolescents than any region in the world<sup>6</sup>.

Recent WHO reports showed that many of them engage in risky sexual activity without protection and most had their debut through a subtle coercion by their partner<sup>7,8</sup>. This practice commonly resulted in sexually transmitted infections (STIs), human immunodeficiency virus, unwanted pregnancy and unsafe abortion<sup>1,9,10</sup>. Studies within Africa including Nigeria have demonstrated increasing rate of premarital sex and decline in age of sexual debut among adolescents contrary to our moral and cultural values<sup>6,11,12</sup>. The following reasons has been advanced for the above observations, these include; high poverty level, adoption of western norm of sexual liberty, gradual erosion of traditional norms/values, lack of parental control, mass media, urbanization and tourism<sup>12,13,14</sup>.

At International Conference on Population Development in both Cairo and Beijing in 1994 and 1995 respectively, adolescent/youth health was identified as a major public health problem especially among developing nations of the world<sup>6</sup>. However, despite

these pronouncements a decade later nothing substantial has been achieved especially in sub-Saharan Africa<sup>6</sup>. In fact, Nigeria presently cannot boast of any functioning programme that specifically addresses adolescent reproductive health issues<sup>6</sup>. Likewise, family planning services in Nigeria did not cater to youths/adolescents rather, efforts were concentrated on married couples<sup>15</sup>. Sexuality education among adolescents in Nigeria schools had been a controversial issue that is begging to be resolved. Apart from this, studies in Nigeria have also reported high rate of parental aversion in discussing sexuality issues with their children<sup>16</sup>. This has resulted in Nigerian adolescents being vulnerable to all forms of sexually transmitted infections including HIV and unsafe abortion practices with the attendant complications<sup>18</sup>.

We undertake this study to describe the sexual behaviour of in-school adolescents in Ibadan, Nigeria. Our specific objective was to determine the prevalence and pattern of sexual activity among in-school adolescents and to find out any relationship between the sociodemo-graphic characteristics of respondents and their sexual behaviour.

## MATERIALS AND METHODS

This was a descriptive cross-sectional study conducted among senior secondary schools (grades 10 – 12 high school) students in Ibadan, the largest city in West Africa. The city is located in the south-west of Nigeria, and it is made up of 11 local government councils (LGC), five councils are located within the metropolis, while six are in the

outskirts of the city. Four schools (2 within the metropolis and 2 in the outskirts) were selected using stratified multistage random sampling technique among schools with co-education. In each of the selected schools, only students in senior secondary school level 1 to 3 (grades 10 to 12) were selected using systematic random method for equal representation of both sexes.

Ethical clearance was obtained from the state ministry of education and health. Consents were also required from students before enrolling them in the study. The school authorities and the respondents were assured of confidentiality in view of the intricacy and sensitivity of the questions contained in the questionnaire such as age of first sexual debut, number of sexual partners, and type of sexual practices. They were thus encouraged to answer the questions with utmost sincerity. In order to validate the questionnaire, a pilot study of 100 respondents was conducted at a school not involved in the study. The study period spanned between March to August 2005 using a self-administered questionnaire containing both open and close-ended questions.

Data obtained were coded and entered into a computer running Epi-Info 2002 software package. The same module was used to validate all entries. Initial analysis was done by generation of frequency tables while further analyses were done by cross-tabulation to explore statistical relationship between variables. Categorical variables and proportions were analyzed using Chi-square and parametric continuous variables with normal distribution were analyzed using student t-test. Means +Standard deviation

and 95% confidence interval were calculated for normal values. Differences between two parameters were taken as statistical significance when P-values were less than 0.05

## **Results**

Out of the 716 students interviewed, the response of 695 was suitable for analysis. The age range of respondents was 12 - 24 years with mean of  $15 \pm 2.6$  years. Table 1 showed sociodemo-graphic characteristics of respondents. Both sexes were fairly represented with most respondents (59.2%) in the second level of the senior class. Most of the students interviewed were Christian (64.2%); Yoruba (93.9%) and from monogamous family structure (69.2%). The parents of about half of respondents had tertiary level education while only few had no formal education.

Of the 695 respondents, 197 (28.3%) admitted to previous sexual exposure (Figure A). Among sexually experienced group, 129 (65.5%) were male while 68 (34.5%) were female. The cross tabulation of some identified factors with respondents sexual behaviour showed that 37.8 percent of all the male students and 19.2 percent of all female interviewed were sexually experienced ( $X^2= 19.5843$ , OR 2.5495,  $p= 0.000043$ ) (Table 2). With respect to the level of education, about 40 percent of SS3 level, 27.5 percent of SS2 level and 27.0 percent of SS1 level students amongst those interviewed were sexually experienced ( $X^2=3.7039$ ,  $p=0.1569$ ) (Table 2). About 29 percent of those from monogamous family were sexually experienced and similar proportions were from polygamous family

**Table 1: Students' Socio-Demographic Characteristics ( N= 695 )**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>	354	51.0
Female	341	49.0
Male		
<b>Class</b>		
SS1	232	33.4
SS2	411	59.2
SS3	52	7.4
<b>Religion</b>		
Christianity	446	64.2
Islam	243	34.
Traditional	6	90.9
<b>Tribe</b>		
Yoruba	653	93.9
Igbo	25	3.6
Hausav	8	1.2
Other	9	1.3
<b>Family</b>		
Monogamous	481	69.2
Polygamous	214	30.8
<b>Father Education</b>		
None	47	6.7
Primary	47	6.7
Secondary	229	32.9
Tertiary	372	53.6
<b>Mothers Education</b>		
None	53	7.6
Primary	44	6.4
Secondary	221	31.8
Tertiary	377	54.2

( $X^2=0.0076$ ,  $OR=0.999$ ,  $p=0.5367$ ) (Table 2). Majority (77.2%) of the sexually experienced respondents admitted that their first sexual exposure was unplanned (Table3). The method of sexual activity practised by the sexually experienced respondents were vagina (98.5%), oral (47.2%) and anal (15.2%) (Table3). About 40 percent had more than one sexual partner and most had their first sexual exposure the same day they met the partner (37.6%) (Table3).

Most respondents first learnt about sex from their friends (47.7%). Others learnt from parents (25.3%), other siblings (6.0%) and through the media (21.0%) (Figure B).

## **Discussion**

Adolescent reproductive health issues have been particularly of interest in the last decade because of widespread HIV/AIDS. Several researchers have made efforts find measures to curb the unacceptable prevalence of HIV/AIDS and other STIS among the youths.

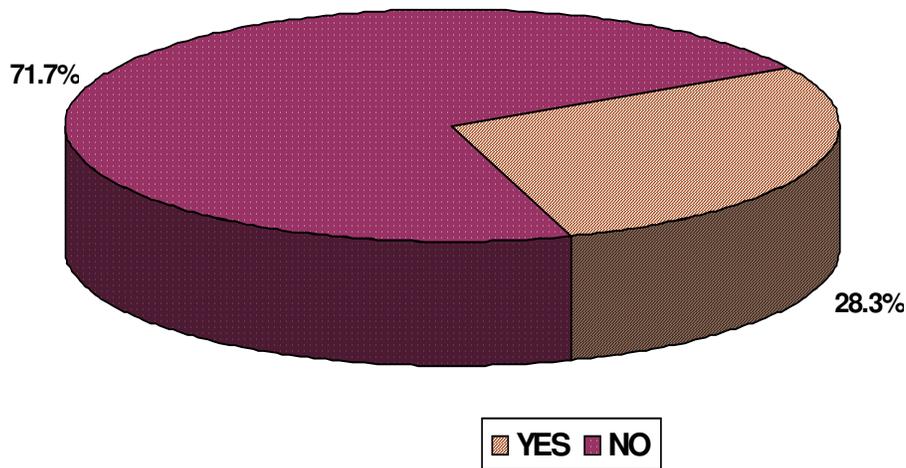
Table 2: Identified Factors with Sexual behaviour

Identified Factors	Previous Sex		X <sup>2</sup>	Odds Ratio (CI)	P-Values
	Yes	No			
<b>Sex</b>					
Male	129 (37.8%)	212 (62.2%)	19.5943	2.5495	0.0000043 <sup>+</sup>
Female	68 (19.2%)	286 (80.8%)			
<b>Class</b>					
SS1	63 (27.0%)	169 (73.0%)	3.7039		0.1569
SS2	113 (27.5%)	298 (72.5%)			
SS3	21 (40.4%)	31 (59.6%)			
<b>Family</b>					
Monogamous	140 (29.1%)	341 (70.9%)	0.0076	0.999	0.5367
Polygamous	62 (29.1%)	152 (71.0%)			

+ Statistically significance at  $p < 0.05$

Table 3: Pattern of Sexually Active Respondents ( N=197)

variables	Frequency	Percentage
<b>First Sexual Intercourse</b>		
Planned	45	22.8
Unplanned	152	77.2
<b>Method of Sex</b>		
Vaginal	194	98.5
Oral	93	47.2
Anal	30	15.2
<b>Number of Sexual Partner</b>		
1	120	60.9
2	22	11.1
3	15	7.6
>3	40	20.4
<b>Interval Between Contact With The Partner &amp; Having Sex</b>		
< 24 Hours	74	37.6
1 – 7 Days	46	23.3
1 – 4 Weeks	30	15.2
> 1 Month	47	23.9

**FIGURE A: DISTRIBUTION OF PREVIOUS SEXUAL EXPOSURE**

The sociodemographic characteristics of students studied were comparable to previous findings in Nigeria<sup>12,18,19</sup>. However, unlike other previous studies, most respondents in this study were from monogamous family<sup>11</sup> (69.2%) and more than half of their parents had tertiary education<sup>12,18</sup>.

From this study, 28.3 percent had prior sexual experience. This is a lower figure compared to the earlier reports<sup>12,18,19</sup>. Okpani et al reported seventy-seven percent among the adolescents in Port Harcourt. He suggested that the increased sexual activity among in-school adolescents in Port Harcourt might be due to rapid urbanization of the city as Nigeria's crude oil operations expand; coupled with the poor socio-economic background of the indigenous adolescent<sup>12</sup>. The in-school adolescents who are sexually active had initial sexual exposure at about the same age in Ibadan like their peers in Port Harcourt<sup>12</sup>. Male respondents

were more sexually active than female ( $p < 0.05$ ), however, they both initiated sexual activity at same age. This observation is similar to Adegbeniga et al (2003)<sup>11</sup>. Sexual debut at an earlier age has been associated with increased risk of cervical cancer<sup>20</sup>; viral infections (HIV, HPV etc)<sup>21</sup>; bacterial infection (gonorrhoea, Chlamydia trachomatis)<sup>22,23</sup>. Studies have also showed that adolescent with earlier debut tend to have multiple sexual partners per unit time<sup>24</sup>.

Most of the sexually experienced respondents in this study admitted that their first exposure was unplanned (77.2%). This finding further confirmed the previous observation of increased risk of adolescents to STIs and HIV, unwanted/teenage pregnancies and complications of abortions in an attempt to terminate such pregnancies<sup>13,25</sup>. Most of our respondents (60.9%) unlike other studies had only one sexual partner<sup>12</sup>. Nearly half of the respondents in this study engaged in oro-genital sex and 15

percent in anal sex. These two methods have been associated with increased risk of HIV/ other STI transmission compare with vaginal sex<sup>26,27</sup>. This may be a reflection that homosexuality is now gaining ground in our society contrary to the earlier believe of only being popular in western countries.

Most respondents first learnt about sexual issues from their school-mates/ friends, sources often not properly informed about adolescent reproductive issue. Worse still, the government is not taking a bold step in incorporating adolescent sex education into the secondary school curriculum. One report indicated that parents are now having courage to discuss more about sexual matters with their children than in the past<sup>16</sup>. This is a welcome development because they will be in a better position to guide their children against unsafe sexual practises.

## **Conclusion**

The outcome of this study is consistent with earlier studies conducted in many other Nigerian cities which showed that in-school adolescents to be sexually active<sup>11,18</sup>. In fact, one can conclude from this study that at least one out of every four in-school adolescents in Ibadan is sexually active and most engaged in unsafe sexual practises. Therefore, this makes them vulnerable to various medical complications including STIs, HIV/AIDS and genital cancers. Apart from this, this study also shows that male students are more sexually active than their female colleagues. Also, worrisome is the high rate of anal sex observed among these students.

We therefore recommend that safe sexual practises should be discussed with our

adolescents while abstinence and chastity should be upheld. In addition, there should be promotion of youth friendly forum in schools where morality, abstinence, and contraception are discussed as well as other diversionary activities like sports, debate etc . The responsibility for proper sexual awareness of our youth lies with government at all levels, parents, and other stakeholders (teachers, counsellors, community/religious leaders, non-governmental organisations, community based organisations, faith based organisations etc) and all should embrace more interventions.

More research is needed. Therefore, we are proposing a wider based interventional research aimed at providing necessary information on various ways of ensuring safer sexual practices using religious/ community leaders amongst in-school adolescents in Oyo state.

## **REFERENCES**

1. Olukoya AA and Ferguson DJ: Adolescent sexual and Reproductive Health and development. In: Archives of Ibadan Medicine vol 3, No1: 22 – 27 (April 2002).
2. Olukoya AA and Ferguson DJ: Background Information on puberty. (Un published paper). WHO Geneva (2001).
3. Connell J P. Context, self and action; a motivational analysis of self system process across the life span. In: D Chichetti and M Beeghly {Eds}. The self in transition; Infancy to child hood. Chicafo; University of Chicago press, 1990, 61- 97.
4. Element K. Gwede, Robert J. MC Dermott et al; Health risk behaviour of rural secondary school student in Zimbabwe. In; Health education and behaviour, (2001) vol 28 (5); 608- 623

5. World Health Organisation. Regional office for Africa. Adolescent health: A strategy for the African Region. AFR/R151/10 Rev. 1 Brazzaville (2001).
6. Okonofua F: Adolescent Reproductive Health in Africa: The future challenges. In: African Journal of Reproductive Health. (2000). 4(1) 7-9.
7. World Health Organization. Broadening the Horizon: Balancing protection and risk for adolescents. WHO/FCH/CAH/01.20, Geneva,(2001)
8. Gottlieb Such Mpangie, Melchizedex T Lehabari et al : Abortion and unmet need for contraception in Tanzania – The role of male partners in Teenage induced Abortion in Dar Es Salaam. In: Africa Journal of Reproductive Health. (1998) vol2 (2): 109-121.
9. Feyisetan B and Pebley AR.: Premature sexuality in urban Nigeria. Stud. Family planning (1989); 20:343-354.
10. Barbin L, Kemp J, Obunge O et al. Reproductive tract infections and abortions among adolescent girls in rural Nigeria. Lancet (1995); 345:300-304
11. Adegbenga M Sunmola et al: Reproductive, sexual and contraceptive behaviour of Adolescents in Niger stage, Nigeria. In: African Journal of Reproductive Health, (2002) 6(3): 83-91.
12. Okpani A.O.U, Okpani J.U: Sexual activity and contraceptive use among female adolescents: A report from Port Harcourt, Nigeria. In: Africa Journal of Reproductive Health. (2000) 4(1):41-47.
13. Briggs ND: Adolescent sexuality and its problems in an African society, Nigeria FIGO concept paper. Adolescent Gynaecology 1991; 235-239.
14. Adedoyin M, Adegoke AA: Teenage prostitution – Child abuse: a survey of Ilorin station African Journal Med. 86: 1995: 24: 27 – 31
15. Arowojolu AO, Ilesanmi AO, Robert OA, Okunlola MA: Sexuality, contraceptive choice and Aids awareness among Nigeria undergraduates. In: African Journal of Reproductive Health. 6(2): 61 – 70.
16. Ekott MI et al: Attitude of parents to their adolescent children's sexuality: A study of health care workers in Calabar. Tropical Journal of Obstetrics and Gynaecology 20(Suppl 1):S22. 2003.
17. Nicholas D, Ladipo OA, Paxuan JM and Otolorin EO: Sexual behaviour, contraceptive practice and reproductive health among Nigerian Adolescents. Stud. Fam. Plann. (1986) 17(2): 100 – 106.
18. Oladepo O, Brieger W.R: Sexual Attitudes and Behaviour of male secondary school students in Rural and Urban areas of Oyo state. In: Africa Journal of Reproductive Health. (2000) 4(2):21-24. Obisesan K.A: Sexual behaviour and fertility regulation among adolescents in southern Nigeria. Ibadan. Dept of Obstet & Gynaecology, University College Hospital 1996 (Report submitted to UNDP) UNFPA/WHO/Worldbank special programme of research development).
19. Araoye M.O, Fakeye O.O: Sexuality and Contraception among Nigerian Adolescent and Youths. In: Africa Journal of Reproductive Health.(1998) 2:142-150.
20. Edehiri A.A: Cervical Intraepithelial Neoplasia: The role of age at first coitus in its etiology. In: J. Reprod. Med. (1990) 35:256-259.
21. Kjaer S.K, Engholon G, Teisen C et al: Risk factors for cervical human papilloma virus and herpes simplex virus infection in Greenland and Denmark: a population-

- based study. In: *Am. J. Epidemiol.* (1990) 131:669-82.
22. Phillips R.S, Hanff P.A, Werheimer A, Aronson M.D: Gonorrhoea in Women seen for routine gynaecological care: Criteria for testing. In: *Am. J. Med* (1998) 85:177-82
  23. Shafer M.A, Beck A, Blain B et al: Chlamydia trachomatis: Important relationships to race, Contraception, Lower genital infection and Papanicolaou smear. *J. Paed* (1984) 104:141-6
  24. CDC, Premarital sexual experience among Adolescent women, United States,1970-1988. *MMWR* 1990; 39(51,52):929-32
  25. Okpani A.O.U, Ikimaho J, John C.T, Briggs N.D: Teenage pregnancy. *Trop. J. Obstet. Gynaecol.* (1995);12 Suppl.1:34-6.
  26. Kingsley L.A, Detals R, Kaslow R et al: Risk factors for Seroconversion for human immunodeficiency virus among male homosexual. *Lancet* (1987) 1:345-9
  27. Sackel S.G, Alpert S et al: Orogenital contact and Isolation of *Neisseria gonorrhoea*, *Mycoplasma hominis*, and *Ureaplasma Urealyticum* from pharynx. *Sex. Transm. Dis.* (1979) 6:44