

*Full Length Research Paper*

# **Socio-demographic correlates of sexual behaviours II: A cross sectional survey of adolescents in Imo State secondary schools**

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Accepted 19 December, 2011

The study was designed to determine the socio-demographic correlates of sexual behaviours of the adolescents in Imo State secondary schools. The objectives are to determine the influence of peer pressure on sexual behaviours of the adolescents, the levels of sexual behaviours of the adolescents with various ages at first sexual intercourse and the levels of the sexual behaviours of the older and younger adolescents in Imo State secondary schools. A cross sectional survey design was used and sample size was 3360 (2.2%) of 153,586 adolescents. A structured, validated and reliable questionnaire ( $r = 0.79$ ) as well as focus group discussions were used as the instruments for data collection. Data analysis was done using mean, z-test and ANOVA statistics. The result showed that in Imo State secondary schools, peer pressure significantly influenced the sexual behaviours of the adolescents (Z-cal. 9.51, Z-tab. 1.96;  $p < 0.05$ ). Various ages at first sexual intercourse significantly influenced their sexual behaviours (F-cal. 437.92, F-tab. 2.60;  $p < 0.05$ ) and various age groups of the adolescents influenced the adolescents sexual behaviours significantly (Z-cal. 6.19, Z-tab. 1.96;  $p < 0.05$ ). The older adolescents ( $\mu = 1.49$ ) were more involved in sexual behaviours than the younger adolescents ( $\mu = 1.40$ ). The study concluded that unrestricted and uncontrolled adolescents sexual behaviour may expose the adolescents to sexually transmitted infections/HIV/AIDS, unwanted pregnancies, illegal abortion and dropping out of school. Thus comprehensive sex education including assertiveness skill acquisition was recommended among others.

**Key words:** Socio-demographic, correlates, sexual, behaviour, adolescents.

## **INTRODUCTION**

Adolescence is defined both in terms of age (spanning the ages of 10 to 19 years) and in terms of phase of life by special attributes. These attributes include rapid physical growth and development, physiological, social and psychological maturity, but not all at the same time (World Health Organization (WHO), 2003; Nwankwo and Nwoke, 2009); while correlate is a causal, complementary, parallel, or reciprocal relationship, especially a structural, functional or quality correspondence between

two comparable entities for example a correlation between drug abuse and crime. On the other hand, sexual behaviour is a form of physical intimacy that may be directed to reproduction (one possible goal of sexual intercourse), spiritual transcendence, and or the enjoyment of any activity involving sexual gratification. Sharma (2003) reported that adolescents practice a wide variety of sexual behaviours, having masturbation as the commonest manifestation. Mutual masturbation among same sex adolescents is also common. Sharma further noted that among the sexually active adolescents, one may observe that many have single partners; others have multiple partners at a time.

Adolescents' sexual activities were clearly not and

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never had been without risks (Watney, 1987; Nwankwo and Nwoke, 2009). These risks include but not limited to unplanned pregnancy, dropping out of school, unsafe abortion and sexually transmitted infections/HIV/AIDS, which are the major implications of sexual risk behaviours considering its grave consequences.

Socio-demographic correlates of sexual behaviours of adolescents are factors that influence the sexual behaviours of this group. This study considered three objectives, which are to determine the influence of peer pressure on sexual behaviours of the adolescents, to determine the levels of sexual behaviours of the adolescents with various ages at first sexual intercourse and to determine the levels of sexual behaviours of the older and younger adolescents in Imo State secondary schools. Several studies (Gage, 1998; Isarabhakdi, 2000; Kirby et al., 2005; UNESCAP, 2007; Bamidele et al., 2009), have reported that peer characteristics influence the sexual behaviours of the adolescents. If their peers have permissive values about sex, or are actually having sex, using condoms and other contraception, they are likely to have sex, use condom and other contraception. Werner-Wilson (2007) noted that generally, adolescent males and females reported similar perceptions of peer pressure, but males were more likely to submit to peer influence. Again, similarities of sexual behaviours occur via acquisition of friends who have similar sexual behaviours (Werner-Wilson, 2007).

In an adolescent health survey (Bearman and Bruckner, 1999) of students in grade seven through twelve in the United States, when factors of family structure, wealth, education and popularity were controlled, a female close group of friends had the most influence on timing of sexual debut. Adolescents whose friendship network included mostly low risk friends were half as likely to experience first intercourse as were adolescents whose close friends' network was composed mostly of high risk friends. In a National Survey of Teens (Kaiser Family Foundation/ YM Magazine, 1998), adolescents were asked why they had sex for the first time. Thirteen percent of young men aged 13 to 18, cited pressure from their friends compared to seven percent of young women. Eight percent of young women and one percent of young men cited pressure from a partner as a factor.

In another study of secondary school students in Benin City, Nigeria, Temin et al. (1999) noted that in some communities, people started having sexual intercourse at an early age. In this study, females started having sexual intercourse at younger age than males, while the commonly stated debut for females was 11 to 13 years, males were 14 to 15 years. The study concluded that those who started sexual intercourse at an earlier age were more involved in sexual activity than those who started at a later age. Thus, age as a factor was found to be of influence in the sexual behaviour of adolescents as they are more likely to have sex as they become older

(Kirby et al., 2005).

## MATERIALS AND METHODS

A cross sectional survey design was used. The postgraduate board of studies ethical committee of the Nnamdi Azikiwe University, Awka, gave approval for the study. Consent was got from institutional heads (Principals of schools) and adolescents before the commencement of the study. The study population involved adolescents from 308 urban and rural areas of Imo State. These adolescents were accessed in Government owned secondary schools in these two areas comprising of a population of 153,586 students (Ministry of Education, 2005). The present study therefore required a 95% confidence level, to make a conservative estimate of adolescents' sexual behavior using age as a parameter. Using appropriate formula such as  $[n = (Z\alpha/2)^2 \pi(1-\pi_0)] \div d^2$  or  $Z\alpha/2 \div 4 d^2$ , provided by Devore and Peck (1997), in this case for detecting: (a) a minimum change of 10% in sexual behavior among the adolescents by age (this was based on 50% global proportion of adolescents ever having sexual intercourse); (b) 5% level of significance; and (c) 80% power of statistical test. Thus, the minimum calculated sample size was at least 384 adolescents. However this was reviewed upwards to accommodate margins of sampling error (assumed  $\pm 4\%$ ). Study sample consists of three thousand three hundred and sixty (3,360) adolescents (2.2%) drawn from the study population of 153,586 adolescents. Twenty eight (28) schools were randomly selected and 120 adolescents were proportionally sampled from each school. The instruments used were the validated questionnaire consisting of 27 items under two sections and four (4) focus group discussions. Each focus group was made of six to eight students of same sex at a time and information extracted from the students both consensus and divergent views were used in discussion. Section A of the questionnaire sought information on personal data of the adolescents and section B, sought information on sexual behaviours of the adolescents. The instrument was structured on weighted four point scale of Strongly Agree (SA) 4, Agree (A) 3, Disagree (DA) 2, and Strongly Disagree (SD) 1, with a decision mean of 2.50. Any mean below 2.50 is sexually inactive and mean 2.50 and above is sexually active.

There was a trial test of the instrument on 20 adolescents, 10 adolescents each from government owned urban and rural secondary schools in Owerri Zone. The selected secondary schools were noted and were not included in the main study. The Cronbach's Alpha reliability technique was adopted in testing the reliability of the instrument. The Cronbach's Coefficient Alpha of  $r = 0.79$  was obtained, indicating that the instrument was reliable. The administration of the instrument lasted three months and data analysis done using 3260 validly returned copies of the questionnaire (return rate = 97%). Mean, z-test and ANOVA were used for analysis. For the FGDs, the issues canvassed focused on three main areas such as: adolescent sexual behavior in the last three months; influencing factors to sexual behavior and Understanding of its consequences.

## RESULTS AND DISCUSSION

The results in Tables 1 and 2 show that adolescents who were influenced by peer pressure (yes) and those who were not influenced by peer pressure (no) in Imo State secondary schools respectively had average sexual behaviour of 1.88 and 1.66 on a 4-point scale. This shows

**Table 1.** The association between independent research variables and sexual behaviours practiced by the adolescents in Imo State secondary schools.

S/N	Variables	Group	Frequency	Mean	Level of sexual behaviours
1	Peer pressure influence	Yes	2200	1.88	Inactive
		No	1060	1.66	Inactive
2	Ages at first sexual intercourse	10-13 years	137	1.87	Inactive
		14-16 years	226	1.97	Inactive
		17-19 years	210	2.01	Inactive
		No experience	2687	1.36	
3	Age	10-14 years	969	1.40	Inactive
		15- 19 years	2291	1.49	Inactive

**Table 2.** Two sample Z-test for means of peer pressure in all classes.

Variable	Mean	Known variance	Observations	Z-cal	Z-tab	P (z<= z)
Yes	1.88	0.33	2200	9.51	1.96	0.0001
No	1.66	0.16	1060			

that in Imo State secondary schools, those adolescents who were influenced by their peers were more involved in sexual behaviour (mean = 1.88) than those who were not influenced (mean = 1.66) (z-calculated value for the two means = 10.52;  $p < 0.05$ ). Earlier studies (Bearman and Bruckner, 1999; Kirby et al., 2005; Werner-Wilson, 2007; Bamidele et al., 2009) also confirmed influence of pressure from peers as terribly influencing adolescents' sexual behaviours.

The results in Tables 1 and 3 show that adolescents in Imo State secondary schools whose ages at first sexual intercourse were 10 to 13 years, 14 to 16 years and 17 to 19 years respectively had average sexual behaviour of 1.87, 1.97 and 2.01, while those who had not been involved in sexual intercourse (that is, age at first intercourse = "no experience") had an average of 1.36. Thus adolescents of the study whose age at first sexual intercourse was 17 to 19 years (Mean = 2.01) had the highest level of sexual behaviour, followed by those whose age at first sexual intercourse was 14 to 16 years (mean = 1.97), while those whose age at first sexual intercourse was 10 to 13 years (mean = 1.87), had the lowest level of sexual behaviour among adolescents with various ages at first sexual intercourse in Imo State secondary schools.

Further analysis (F-statistic) on the data showed that there were significant differences among adolescents with different ages at first sexual intercourse in Imo State secondary schools in terms of their levels of sexual behaviours (F-cal = 436.15, F-tab = 2.60,  $P < 0.05$ ). This study reveals that the adolescents in Imo State secondary schools get more involved in sexual behaviours as they advance in age which could be attributed to hormonal changes during adolescents' maturity and

their adventurous nature. It could also be due to family background or orientation. However, this particular finding was not exactly consistent with other studies as the adolescents from various places had little variations in regards to the age at first sexual intercourse and their levels of sexual behaviours which could be attributed to cultural differences as regards to sexual relationships or behaviours.

The results in Tables 1 and 4 show that among the sampled adolescents in Imo State secondary schools, the level of sexual behaviours of the older adolescents (15 to 19 years) with mean = 1.49 was greater than that of the younger adolescents (10 to 14 years), mean = 1.40. Further statistical analysis using z - statistic on the data showed that there was a significant difference between the sexual behaviours of the older adolescents (15 to 19 years) and the younger adolescents (10 to 14 years). In this study, the sexual behaviours of the older adolescents were greater than that of the younger adolescents because the adolescents tend to get more involved in sexual activities as they advance in age. This could probably be attributed to the influence of sexual hormones which are associated with maturity and influence the attraction of most adolescents to opposite sex. At this age, they are influenced by their peers, are more inquisitive and exploratory in nature. The present result is in line with the study carried out by Emmans (2004), where it was found that the reported sexual activity among 15 to 19 year old adolescent girls increased from 30% in 1971 to 50% in 1979. The author further reported that among the never married white teenagers in age group 15 to 19 years, statistics from 1971 indicated that 23% were sexually experienced, and this incidence increased to 42% in 1979. Much less was

**Table 3.** ANOVA procedure for various ages at first sexual intercourse in all classes.

Source	DF	Sum of squares	Mean square	F value	F tab	Pr > F
Age_1st_intercourse	3	170.1130880	56.7043627			
Error	3256	421.6049922	0.1294856	437.92	2.60	<0.0001
Corrected total	3259	591.7180802				

**Table 4.** Two sample Z-test for means of age groups in all classes.

Variable (Years)	Mean	Known variance	Observations N	Z-cal	Z-tab	P (z<= z)
10-14	1.40	0.1389	969			
15-19	1.4938	0.1971	2291	6.1934	1.9600	<0.0001

known about the sexual behaviour of younger adolescents in 10 to 14 year old range.

### Focus group discussions (FGDs)

Four qualitative FGDs were conducted while the following three thematic areas were explored: Adolescent sexual behavior in the last three months; influencing factors to sexual behavior and understanding of its consequences. Study participants in each separate FGD group consisted of 6 to 8 adolescents of the same sex and age. Summary of results from the FGDs indicate that most adolescents have engaged in one form of sexual activity or the other which in most cases are considered risky. As one adolescent from FGD, Group 1 succinctly puts it thus:

“At advance age, you think you are missing out if you have not experienced sex for the first time. Your peers look at you as a social misfit and the tendency to experience sex for the first time comes up in order to belong”.

One can draw the conclusion that due to curiosity and adventurous nature of the older adolescents; they get more involved in sexual activities.

Further discussions with the adolescents reveal that the commonest source of information and influence is their peers. Similar studies done by Bearman and Bruckner (1999), Kirby et al. (2005), Werner-Wilson (2007) and Bamidele et al. (2009) also confirms this finding. Through information sharing, adolescents were aware of the dangers of getting pregnant and they also know that young people are not yet prepared to carry the stress of pregnancy.

However, the main response among adolescents to pregnancy outcome is to try to have an abortion, by whatever means. The expressions below help to illustrate the fear held by them.

“I will not want my parents to know that I am pregnant

coupled with the fact that I might be dismissed from school” (An Adolescent, FGD Group 2).

This fear drives them underground and limits their access to treatment and preventive services.

“Pregnancy in adolescents brings conflict between the parents and the girl. Parents mistreat girls who are pregnant, and the girl may feel bad and resort to abortion.

“I know some herbs people use for abortion. I can also visit a chemist shop and buy some drugs” (An adolescent, FGD Group 3).

### Conclusion

Findings from the study revealed the sexual behaviours of the adolescents in Imo State secondary schools in relation to the influence of peer pressure, various ages at first sexual intercourse and various age groups (older and younger adolescents). Though the sexual behaviours of the adolescents in Imo State secondary schools were generally inactive, it is still a source of worry as the extent of their involvement in sexual activities does not augur well with their health considering the consequences (unplanned pregnancy, dropping out of school, unsafe abortion and sexually transmitted infections/HIV/AIDS). This hinges strongly on the fact that one deviant in sexual behaviour can affect the society within a short period. Comprehensive sex education (comprehensive sex education programme encourages abstinence, promotes the use of condom for those who are sexually active, encourages fewer sexual partners, avoidance of casual sex, identification and treatment of sexually transmitted infections as well as teaching of sexual assertiveness skills and empowering the adolescents educationally) is advocated for before the sexually active fall prey to consequences of premarital sexual behaviours. Also, reviews of health education programmes in several countries conclude that sex education does not encourage

early sexual activity, but can delay first sexual intercourse and leads to more responsible sexual behaviour (UNAIDS, 1997).

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