

Comparative analysis of sexual practice and contraceptive use among student and non student adolescent girls in Onitsha, Nigeria

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Abstract

Aim: Adolescents constitute one-fifth of Nigerian population. Risky sexual behaviour is reported to be rampant amongst them and the females often bear the brunt of the consequence. A comparative analysis was made of the sexual and contraceptive practices of unmarried female students and non students, in Onitsha Anambra State, Nigeria.

Methods: This was a cross-sectional comparative design in which 391 school girls were selected from 25 private and 17 public schools in the local government making use of multistage sampling method. Another 392 out-of school adolescent girls were selected from a major market in the same area using cluster sampling technique. Data on socio-demographic profile, sexual practices and contraceptive use were collected by means of pre-tested questionnaires.

Results: A statistically significant proportion of the out-of-school girls 24.3% has had sex compared to the in-school girls 17.1% ($P < 0.05$). The out-of-school girls also had statistically significantly lower mean age of sexual debut 14.7 ± 2.7 compared to the in-school girls with a mean of 15.0 ± 2.6 . The main reasons for sexual initiation were pressure from partner and friends, transactional and non-consensual sex were also common among both groups. About half of the girls in both groups had multiple sexual partners but a larger proportion of the in-school respondents had sexual partners 5-10 years older than their age. There was no statistically significant difference in the proportion that used contraception at first or last sexual intercourse in both groups.

Conclusion: Stakeholders in adolescent reproductive health should develop appropriate strategies such as sustainable peer education to improve the sexual health behaviour of the adolescents, especially the out-of-school girls who are evidently more vulnerable than their in-school counterparts. Community participation in health is also advocated for greater positive impact on the sexual practice and contraceptive use by the adolescents.

Keywords: Anambra state, contraceptive use, Nigeria, non-student adolescent girls, sexual practice, student.

Introduction

The consequences of unsafe sex affect not only the adolescents but all individuals connected to them. Studies done within and outside Nigeria have shown that out-of-school youths are more exposed more to sexual risk and have more multiple partners than in-school youths (1-5). The school environment is thought to have protective effects on adolescents' sexual health (6).

A study done in Uganda revealed that in-school youths initiated sex at a higher age than out of school (7). While that done in Tanzania and Ghana revealed that out-of-school initiated sex at a higher age than in-school adolescents (1). The proportion of those sexually active is always higher amongst the out-of school group because they are more vulnerable (1-5).

Several studies on adolescents have reported risky sexual behaviour among them and research has shown that consistent use of condom offers protection against STIs including HIV and is also effective in preventing unwanted pregnancy (8-10). Condom use is generally low among young people, and research has shown that neither specific teaching about contraception nor improving the contraceptive service consistently increases effectively contraceptive use by young teenagers (11). The 2008 NDHS documented that condom use at first and last sexual contacts among the unmarried adolescents were 23.7% and 18% respectively.

A comparative study of the in-school and out-of-school adolescents is of great importance as restricting studies to in-school adolescents ignores issues and problems pertinent to out-of school adolescents. School is only one of the settings in which adolescents congregate. In Nigeria, 59% of females and 35% of males in rural areas have no education, 27.3% fall within 15-24 year age group (12). Therefore restricting research to adolescents who are only in school may not provide enough evidence regarding the dynamics at play and may provide biased results that cannot be generalized to the adolescent's population at large. A study

done in Tanzania and Ghana revealed that in-school adolescents initiated sex at lower age than the out-of-school adolescents and had lower contraceptive use (1). In contrast, that done in Uganda reported in-school adolescents to have initiated sex at a later age and had higher contraceptive use than out-of-school adolescents (2). In recognition of the importance of these disparities, a comparison of the pattern of sexual behavior and contraceptive use among in-school and out-of-school female adolescents in Anambra State, a South-eastern zone of Nigeria is needed to ascertain the needs and problems associated with the sexual behavior of the two groups. The results of the study will provide information for stakeholders in adolescent reproductive health and inform policy direction to promote adolescent reproductive health.

Methods

Design and study area

This comparative cross sectional study was done in 2012. The Onitsha main market is the largest in West Africa and a large number of traders and visitors from within and outside the country daily patronizes the market. The main market is surrounded by other smaller markets. Many out-of-school adolescents are found in every part of the market either hawking their wares or serving as shop assistants, while some are left entirely on their own in some stores. This scenario constitutes the setting for the out-of-school aspects of this study. Furthermore, the LGA has 25 private schools and 17 public schools, giving a total of 42 schools. They are 22 co-educational schools, 12 boys only schools and 8 girls only schools. Some of the schools belong to the mission, some are government-owned, while the rest are private schools.

Study population

The study population consisted of single adolescent female students and their out-of-school counterparts aged 10-19 years residing in Onitsha North LGA in Anambra State. Only senior secondary school students were considered for the study and

compared with their out-of-school counterparts of corresponding age group. Other inclusion criteria for out-of-school adolescents were that they have never been to secondary school, finished primary school but did not continue or had dropped out of secondary school. Conversely for in-school, all the post-secondary school students, those with hearing, speech and mental disabilities were excluded in the same way that their out-of-school counterparts employed or unemployed who had finished secondary school or are in school and those with mental, hearing or speech disabilities were also excluded.

Sampling technique: Selection of in-school respondents

Secondary schools in the state were stratified into 4 categories as follows: 2 Female-only private, 6 female-only public, 17 mixed private and 5 mixed public schools. From each of the strata, one school was picked and from the selected school, a total of 391 students were chosen taking into consideration the number of students in each class (SSS1-SSS3) as a guide to the proportionate allocation of respondents for the study.

Selection of out-of-school-adolescents

As was done in previous studies (2,12), unmarried female adolescents in the market were selected using cluster sampling technique. From the sampling frame of all the estimated 60 clusters in the market, 30 were selected by simple random sampling method. Then using the WHO cluster sampling technique, seven consenting adolescents were selected from each cluster until a total of 392 respondents were reached. Since the clusters were in different directions, a bottle was spinned and the direction of its mouth was used to show the starting point of the study.

Instruments/methods of data collection

The same pre-tested interviewer-administered questionnaires were used for both in-school and out-of-school adolescents to ensure uniformity. The

questionnaires were used to collect information on variables such as: demographic characteristics, pattern of sexual practices/ behavior and outcome, and contraceptive use.

Data analysis

Data was analyzed using SPSS version 17 statistical software. The Chi (χ^2) square statistical test of significance was used to compare proportions and evaluate associations between variables while, p-values of less than 0.05 were considered statistically significant ($p \leq 0.05$)

Results

A higher proportion of out-school-girls had engaged in sex compared to the in-school girls ($p=0.05$). Proportion of them who had ever had sex was 17.1% and 25.3% for the former and latter respectively. In addition, the mean age of first sex was 15.0 ± 2.6 years for in-school girls, is slightly higher than that for out-of-school girls with 14.7 ± 2.7 years, and this is statistically significant ($p < 0.05$).

Currently, 43/67 (64.2%) of in-school and 66/99 (66.7%) of out-of-school girls reported they were having sex regularly. However, a statistically significant proportion of those that regularly engage in sex were out-of-school girls ($\chi^2=14.52$, $p=0.001$). About half of the girls in both groups had multiple sexual partners.

Although about a quarter of them did know the age of their partners, most of them had sex with partners who were quite older than them.

Out-of-school girls had partners about the same age with them or partners more than 10 years older than them.

A significant proportion of the out-of-school girls did not know the sexual behaviour of their friends ($\chi^2=67.14$, $p=0.0001$), although they were more likely to read or watch program that depicts sex than their in school counterparts ($\chi^2=15.60$, $p=0.001$). Out-of-school girls were more willing to discuss condom with partner ($\chi^2=6.02$, $p=0.014$) and actually did so before sex ($\chi^2=11.52$, $p=0.001$).

Table 1. Sexual practices of the two groups

Sexual Practice	In-School	Out-of-School	χ^2	P-value
	(N=391) N (%)	(N=392) N (%)		
Ever had sex				
Yes	67 (17.1)	99 (25.3)	7.725	0.005
No	324 (82.9)	293 (74.8)		
Age at first sexual intercourse (in years)				
	N=67	N=99	10.83	0.054
≤9	5 (7.5)	4 (4.0)		
10-11	4 (6.0)	8 (8.0)		
12-13	5 (7.5)	16 (16.2)		
14-15	12 (17.9)	26 (26.3)		
16-17	37 (55.2)	33 (33.3)		
18+	4 (6.0)	12 (12.1)		
mean ± SD	15.0 ± 2.6	14.7 ± 2.7		
Currently engaged in sex				
Yes	43 (64.2)	66 (66.7)	0.11	0.74
No	24 (35.8)	33 (33.3)		
Regular engagement in sex				
Yes	11 (16.4)	44 (44.4)	14.52	0.001
No	56 (83.6)	55 (55.6)		
Number of sex partners				
1	35 (52.2)	50 (50.5)	1.902	0.925
2	23 (34.3)	29 (29.3)		
3	5 (7.5)	14 (14.1)		
≥4	4 (6.0)	6 (6.1)		
Mean ±SD	2.0 ± 1.0	1.7 ± 0.87		
Relative age of partner				
Same age	6 (9.0)	20 (20.2)	19.98	0.001
5-10 years older	39 (58.2)	28 (28.3)		
>10 years older	5 (7.5)	19 (19.2)		
DNK	17 (25.4)	26 (26.3)		

Only 23 (34.3%) out of 67 in-school girls and 41 (41.4%) out of 99 out-of-school girls had ever used contraception despite being sexually exposed. About 30% of them in both groups used condom at first sex. However, even a fewer proportion

17.9% of in-school girls and 24.2% of out-of-school girls had used contraception at their last sex. Condom was the most common contraception used at first sex. There was no statistically significant difference in the contraceptive use of both groups at first or last sexual intercourse.

Table 2. Sexual practices among respondents who had ever had sex

Sexual Practice	In-School	Out-of- School	χ^2	P-value
	(N=67) N (%)	(N=99) N (%)		
Discussed condom with partner before last sex				
Yes	14 (20.9)	45 (45.5)	11.52	0.001
No	53 (79.1)	54 (54.6)		
When was last sex				
	N=43 (%)	N=66 (%)	6.39	0.172
Some days ago	5 (11.6)	14 (21.2)		
some weeks ago	37 (86.1)	47 (71.2)		
some months ago	1 (1.5)	5 (5.1)		
Proportion of friends engaged in sex				
	N=391(%)	N=392 (%)	67.14	0.001
None	143 (36.6)	73 (18.6)		
Few	80 (20.5)	54 (13.8)		
Most	38 (9.7)	27 (6.9)		
All	11 (2.8)	9 (2.3)		
DNK	117 (29.9)	229 (58.4)		
Read or watch program that depicts sex				
Yes	218 (55.8)	32 (59.2)	15.6	0.001
No	173 (44.3)	160 (40.8)		

Table 3. Pattern of Contraceptive use by in-school and out-of-school adolescents who had ever had sex

Use of contraception	In-School	Out-of-School	χ^2	P-value
	(N=67) N (%)	(N=99) N (%)		
Ever used contraception				
Yes	23 (34.3)	41 (41.4)	0.847	0.225
No	44 (65.7)	58 (58.6)		
Used contraception at first sexual intercourse				
Yes	20 (29.9)	30 (30.3)	0.00	0.95
No	47 (70.2)	69 (69.7)		
Used contraception at last sexual exposure				
Yes	12 (17.9)	24 (24.2)	0.943	0.443
No	55 (82.1)	75 (75.8)		
Method of contraception used at first sex exposure				
	N=20	N=30	1.00	0.416
Condom	16 (80.0)	27 (90.0)		
Pills	3 (15.0)	2 (6.7)		
Others	1 (5.0)	1 (3.3)		

Discussion

One in five of the adolescents interviewed in this study have had sexual experience. Furthermore, a higher proportion of the out-of-school adolescents (25.3%) compared to their in-school counterparts (17.1%) has had sex. This finding is similar to result of prior studies among female adolescents in Ikenne (13) and Port Harcourt (14) in Nigeria. But the figure is also different when compared to results of similar studies done in Lagos [47%] (4) Ibadan [58%] (15) and northern parts [9.1%] (16) of Nigeria. The disparities in findings could be attributed to different cultures and religious background of the Nigerian people. In other African countries like Ghana (1), the figure of those sexually active is 50% for both groups and 70% for those in Uganda (2). The 2008 NDHS confirms that premarital sex is decreased with increasingly level of education (12) and studies done in Ghana (1) and Uganda (2) confirms it.

The mean [SD] age of first sexual encounter was 15.0 ± 2.6 years for in-school girls and 14.7 ± 2.7 years for out-of-school girls and there was significant difference between the two groups. The mean [SD] age of first sex 15 (2.6) years is consistent with figures from studies conducted in Ibadan (17), Port Harcourt (14) and a northern part of Nigeria (16). The mean for the out-of-school girls agrees with studies carried out in Benin (18), South-Africa (19) and Lagos (20). Having sex at such an early age is often associated with higher risk of becoming pregnant or contacting an STI/HIV. Our findings strengthen the need to pay extra attention to out-of-school youth. The current efforts in the country to provide sexuality education in schools must be extended to out-of-school adolescents as well. This can be achieved by carrying out enlightenment campaigns in places where they can be found including the streets for street children.

In this study, the main factors affecting the initiation of sexual activity were pressure from partners, gifts or financial reward, pressure from friends and coercion. A higher percentage of in-school

adolescents said they receive pressure from partners to have sex in return for financial reward. This is consistent with results found in similar studies done in Nigeria (15,17,19) and some African countries (21). This explanation is plausible for the finding that transactional sex and pressure from partners most of whom are older, was reported to be common among female adolescents in this area (12). The economic circumstances in many developing countries have made the transition of young people into healthy adults difficult and may explain why transactional sex is common among female adolescents. A study among out-of-school girls in Nigeria reported that almost half of the respondents were expected to find the means to supplement the funds they were given to meet their basic needs and most of them were found to be sexually active (12). Another study from Uganda showed that financial pressures play a major role in influencing out of school girls to begin engaging in sex in order to meet basic needs for girls out of school and not living with their parents, basic needs could be as basic as a meal or two (22). The outcome especially in young uneducated or street girls is a sequence of events such as pregnancy, unsafe abortion and sexually transmitted infection including HIV. Adolescents therefore require information, goal setting skills, refusal skills and decision making skills to help them make the right choices about their sexual behaviour. The study also revealed that 17% of the respondents have been raped; similar studies have reported this non-consensual sexual intercourse (10,19). There is need for more research on factors leading to non-consensual sexual intercourse in this area as the number is quite high compared to 5% reported from Lagos (23) and 3% in northern (10) states in Nigeria. Though, there may have been underreporting of rape in this area because of stigmatization and fear. Also support must be provided for the victims, and legal environment must be conducive for adolescents who desire legal actions against perpetrators.

The findings in this study also show that they are

involved in high risk sexual intercourse. Almost half of the sexually active adolescents have more than two partners (49% of out-of-school and 47% of in-school adolescents). It is alarming that the adolescents in this area have multiple sexual partners in spite of awareness on the risk of HIV infection. This finding is consistent with the results of similar studies in Nigeria (2,3,23). A comparative study of the two groups in Uganda reported that 13% of those in-schools had multiple sexual partners compared to 22% of the out-of-school adolescents. People engage multiple sexual partners for different reasons. In a study done in Tanzania using in-depth interviews and focus group discussions in young men and women aged 16 to 24 years, it was found that pursuit of multiple sexual partners for boys is sexually motivated while girls are involved for economic reasons (24). In Uganda and South Africa, the pursuit of multiple sexual partners is underpinned by exchange of gifts or favours and this affects the ability to negotiate the terms of sexual relationship (21). The more desperate a need is, the weaker the power to negotiate. The consequences are many fold especially following unprotected sexual intercourse. These include pregnancy, unsafe abortion, dropping out of school, sexually transmitted infections including HIV.

Thirty-nine percent of in-school girls significantly had partners 5-10 years older more than out-of-school girls 28% ($\chi^2=19.98$, $p<0.05$). The result is higher in Port Harcourt (17) where 74.2% had older men as sexual partners (14). The disparity in the two results stems from the fact that the latter is an oil rich state inhabited by many wealthy men who sleep with the young girls in exchange for financial reward or gifts. The prevalence is lower with that reported in NDHS 2008 11% (12) but higher in Ghana with 38% (23), in South-Africa the prevalence is 33% (25). Research has shown that girls appear vulnerable to cross-generational sex due to their poverty. And when it is not poverty, they are drawn to the transactional nature of it, receiving gifts, money, and cell phone in exchange

for sex. Other reasons or factors influencing such relationship include: improving one's social status, pleasure, love, material, comfort, security, life maintenance of school fees, booths, uniform, food, housing, insecurity, fear of physical or other harms (26). Sexual relationship with men older than the girls can contribute to spread of HIV and other STIs because older men are more likely to have been exposed to these diseases. Such relationships may lead to lack of communication between partners and limit a girl's ability to negotiate sex and advocate for condom and contraceptive use. A study carried out in Zimbabwe revealed that the substantial age differences between female and male sexual partners was identified as the major behavioral determinant of the more rapid rise in HIV prevalence in young women than in men (27). Also, only 10% of both groups were aware of their partner's other relationship as against 19.9% of those studied in Ile-Ife (3). Using preventive methods such as negotiating safer sex is more difficult when the age differences are large.

Only one in four of the respondents had ever used contraception, one in three at their first sexual exposure and one in five at their last sexual intercourse. This is comparable to the figure from studies reported from northern Nigeria [24%] (27) of last use of contraception, Ibadan [32.2%] (28) of first use and Ilorin [25.4%] (12) of ever use of contraception. But it is higher than the figures from the 2008 NDHS where 17.3% and 39.4% of youth from Anambra state used contraception at their first and last sexual intercourse respectively (12). In this study, there was no significant difference in contraceptive use, though out-of-school adolescent had a higher percentage usage. The result is in contrast to other studies done in Ghana (1) and Uganda (2) where in-school adolescents significantly used contraceptives more than out-of-school adolescents. And the 2008 NDHS reported the fact that increased condom or contraceptive use is associated with increasing level of education (12). The reason for the low level of contraceptive use in both groups could be due to the fact that majority

of them are Catholics, a faith that discourages artificial contraception and emphasizes abstinence. Condom was the most common method of contraception used by both groups and this is similar to finding from many studies (12,23). Major reasons for non-use of contraception among the sexually active in-school adolescents were that they did not think of it [31.8%], fear [17.5%] and the feeling of embarrassment in buying one [20.6%]. While the reasons out-of-school girls gave were fear of side effects [26%], did not think of using one [14.6%] and refusal by partner [9.4%]. This is in contrast to a study done in Ilorin (12) where a higher proportion of adolescents [43.5%] and [77.5%] expressed fear as the major reason for not using any contraception. Fear was the major reason pointed out during the focused group discussions. Female adolescents may not insist on condom use because they may be afraid of losing their lovers, or the source of their monetary support. Also, some fear that the use of contraception could render them infertile. Culture and religious belief seem to influence the contraceptive use among the adolescents in Nigeria. The above results/findings call for a well-organized information, education and communication through peers to bring about behavioral change.

In conclusion, pressure from partners, from friends and financial reward were the major reasons why most initiated sex; non-consensual sexual intercourse was also significant in this area. One in five of both groups were sexually active and half of them had multiple partners. They had men 5-10 years older and also, had low contraceptive usage. Overall, there was no significant difference

between the in-school and out-of-school in contraceptive usage. Out-of-school adolescents were more sexually active in this study and since most of them are willing to listen to and follow the advice from their peers, trained and supported young women can serve as peer educators. Intervention programmes are likely to succeed when young people take the lead in designing, implementing and managing programmes aimed at their peers. The ministry of youth and sports, faith based organization, international and private bodies, LACA and other adolescents' stakeholders should have a common forum to train, retrain and monitor young peer educators as they carry out BCC programmes. The community in which they live in should be actively employed in the programmes

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Ethical consideration and permission

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Conflict of interest: No conflict of interest was declared by the authors.

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