Sexual Behaviours and Level of Knowledge of Reproductive Health among In-School Female Adolescents in Awka Education Zone

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Abstract

The research which was a survey investigated the sexual behaviours and level of knowledge of reproductive health among in–school female adolescents. Three research questions and two hypotheses guided the study. Stratified random sampling technique was used to draw a sample of 1192 in–school female adolescents. The instrument used for the study was a structured questionnaire which was duly validated. Percentages, mean and z–test were used for data analysis. The findings of the study revealed that majority of female adolescents said they have not had sexual intercourse, but a significant proportion have had sexual intercourse. Greater proportion of those who had sexual intercourse have multiple sex partners; most of them do not use condom during sexual intercourse, and level of knowledge of various components of reproductive health were slightly above average. The study also found that the major sources of reproductive health information are teachers, parents and mass media; there was a significant difference between urban and rural in-school female adolescents on the knowledge of reproductive health and there was a significant difference between those who are sexually active and those who are sexually inactive on the

knowledge of components of reproductive health. Recommendations were made based on the findings.

Adolescence is a period of metamorphosis characterized by the development of secondary sex characteristics. (Oswalk 2010) pointed out that an adolescent is a person between the ages of 11 – 18 years. Secondary sexual growth changes in hormonal secretion, emotional, cognitive and psycho-social development occur around puberty, resulting in sexual curiosity and experimentation. These biological and psychological changes result in awareness of sexuality in male and female adolescents (Obisesan, 1996).

Adolescence is a critical period of human development often characterized by confusion, mixed interpretation and understanding of adult behaviour and environment, exuberance and a penchant for experimentation, especially with drugs, alcohol and sex. Of all challenges, those associated with sexual maturation are the most distinctive as well as most problematic (Katchadourin, 1990). This stage of development is accompanied by an upsurge of sex drives, the development of sexual values and the initiation of sexual behaviour.

There is a growing awareness that adolescent girls in many societies including Nigeria face pressure to engage in sexual activity and are particularly vulnerable According to Ikwuako (2011), sexually active girls are increasingly at risk of contracting and transmitting sexually transmitted diseases (STD_S) including HIV and AIDS but they are poorly informed about protecting themselves.

Federal Ministry of Health (2001) revealed that about 905, 000 births occur among adolescent girls yearly owing to poor attitude of adults towards adolescent sexuality and lack of information, and services on reproductive health and family planning. This is a major problem because it contributes to rapid population growth, imposes heavy pressure on the economy and often disrupts the social development programmes designed to improve the well being of citizens. The problem of unwanted pregnancy has led to the withdrawal of many young girls from schools limiting their educational prospects and social status. Young female adolescents need expanded information, skill and services concerning sexual and reproductive health. Every girl should have the right to information, which will enable her take right decisions.

Empirical sources indicated that adolescents' involvement in unguarded and indiscriminate sexual behaviour is on the increase (National Research Council, 1993; Okonofua, 1996) and has led to increase in unintended and pre-marital pregnancies, illegal abortions, maternal mortality, and contracting of sexually transmitted diseases such as syphilis, candida, albican and HIV/AIDS. Very young mothers, especially those

below 15years old, are at higher risk of pregnancy-related complications such as haemorrhage, obstructed labour, fistulas and eclampsia. (Low 2009) such reproductive health problems stem from the mother's physiological immaturity (National Research Council 1993). For young girls, the consequences of pre-marital pregnancy are serious. In addition to medical complications that are more common among women who have not reached reproductive maturity, there are important social, educational and economic consequences. Low (2006) pointed out that sexual activity among in-school female adolescents has resulted in large numbers of unwanted pregnancies and illegal abortions, which pose serious health and social problems. He further stated that sexually transmitted diseases (STD_S), unwanted pregnancies, and unsafe abortion are the main sexual and reproductive health issues facing female adolescents.

Adolescents' reproductive health (RH) needs have been largely ignored in Africa. Female adolescents are vulnerable to pre-marital sex because they lack information and skills in negotiating sexual relationships (Low 2009). This is particularly, the case when reproductive and sexual health issues are still considered taboo subjects in many countries, thus preventing adolescents from obtaining adequate knowledge, guidance services regarding reproductive and sexual health, particularly at the school level (IWHC, 2010). The staggering rates of unwanted pregnancies, the number of deaths from unsafe abortion and the increasing incidence of sexually transmitted diseases (STDS) depict that adolescent needs for reproductive health services are not adequately met in most parts of the world and in Nigeria (Odelola 2004). It is estimated that 15 million adolescent women aged 15–19 gave birth throughout the world and about 11% of the figure is from Africa where adolescent fertility are highest (136 per 1,000) and about 6.2% from Nigeria (Ikwuako 2001). In Nigeria, major reproductive health problems identified by experts include high rate of maternal mortality, unsafe abortions, reproductive track infections, infertility, ectopic pregnancy, unwanted pregnancy, cervical cancer, genital fistulae, prenatal mortality, menstrual and sexual abnormality and high fertility, (Ariba 2000; Odelola 2004).

In-School female adolescents in secondary schools are poorly informed about the basic sexual and reproductive health topics as reproductive physiology, contraception, health effects of STDS. (UNDP/UNPPA/WHOH/WORLD BANK 2002), Young female adolescents need expanded information, skills and services concerning sexual and reproductive health. Every girl should have the right to information which will enable her to assess the alternatives and make an informed decision. The aim of this study therefore is to investigate sexual behaviours and level of knowledge of reproductive health among in-school female adolescents. It is hoped that the information collected will be useful in planning effective reproductive health programmes for in-school female adolescents.

Statement of the Problem

In the traditional African society according to Barnett (1999) virtue and abstinence were glorious and cultural ethos precluded premarital sex experiences. During that time, the most cherished virtue for a girl was to preserve her virginity till marriage. However, in the wake of civilization permissiveness has broken the bonds for conformity with norms cherished in the traditional society. Many adolescents are reckless with sexual practice resulting in unwanted pregnancies, high rate of maternal mortality, unsafe abortions, reproductive track infections, infertility, ectopic pregnancy, cervical cancer, genital fistulae, menstrual and sexual abnormality (Ariba 2000). It does appear that those sexually active adolescents do not receive special family planning information and those who become pregnant drop out of school. These adolescent mothers are not economically self-supporting. Young female adolescents need expanded information, skills and services concerning sexuality and reproductive health so research is needed in this area.

The Study is Guided by the Following Research Questions

1. What are the sexual behaviours of in-school female adolescents?
2. What level of knowledge do in-school female adolescents have about reproductive health?
3. How do in-school female adolescents access information on reproductive health?

Hypotheses

The following hypotheses were stated and tested at 0.05 level of significance.

1. There will be no significant difference in reproductive health knowledge of sexually active and sexually inactive in-school female adolescents.
2. Urban and rural in-school female adolescents will not differ significantly on the level of knowledge of reproductive health.

Methodology

The study adopted a descriptive survey design aimed at determining the sexual behaviours and level of knowledge of reproductive health among in-school female adolescents.

The population of the study consisted of 12,406 SS1 and SSIII in-school female adolescents in Awka Education Zone (Anambra State Post Primary Service Board Statistic Division, 2013). A sample of 1192 respondents made up of 612 SSI students, 480 SSII students and 100 SSIII Students was used for the study. Stratified random sampling technique was used to draw the sample to take care of location and type of schools.

A structured questionnaire designed by the researchers was used for data collection. The questionnaire was titled "Sexual Behaviours and Level of Knowledge of Reproductive Health" (SBLKRH). SBLKRH has four major sections A, B, C and D. Section A dealt with personal data of the respondents. Section B consisted of 8 items which requested information on sexual behaviours of the respondents. Section C consisted of 33 items on knowledge of components of reproductive health. Section D is made up of 10 items which sought to find the sources of reproductive health information.

The instrument was validated by two experts in Guidance and Counselling and two health workers. Feedback was given regarding question clarity, comprehensiveness and acceptability. All their corrections were effected in the final version of the instrument. The reliability of the instrument was established through test re-test method. Forty copies of the instrument were administered to in-school female adolescents from two secondary schools in Onitsha Education Zone. After two weeks, forty copies of the same instrument were re-administered to the same students. Data obtained were analyzed using Pearson Product Moment Correlation. A value of 0.81 was obtained. The instrument was statistically adjudged reliable and considered suitable for the research.
The researcher with the help of two trained research assistants administered the questionnaire on 1300 respondents. The purpose of the study was explained to the respondents who were assured of confidentiality to encourage honest responses. Out of 1300 copies of questionnaire distributed, 1192 were collected back duly filled, representing 91.7% return rate. The data collected were analyzed using percentages, mean, standard deviation and z-test.

Results

Table 1: Percentage of in-School Female Adolescents that have Engaged in Sexual Intercourse

	Frequency	**Percent**
Yes	400	34.2
No	784	65.8
Total	1192	100.0

Of the sample of 1192 students, 408 representing 34.2% said they have had sexual intercourse while 784 (65.8%) respondents said they have not had. This shows that, although greater proportion have not had sexual intercourse, a significant proportion have engaged in sexual intercourse.

Research Question 1: What are the sexual behaviours of in-school female adolescents?

Table 2: Sexual Behaviours of In-School Female Students

Aspects of Sexual Behaviour	Had Engaged in Sexual Intercourse (N=408)	
Circumstance of 1st Sexual Intercourse (%):	F	%
Forced	172	42.2
Consented	236	57.8
Age at 1st Sexual Intercourse (%):		
10 – 12	92	22.5
13 – 15	224	54.9
16 – 18	56	13.7
No – Response	36	8.8
Use of Condom on 1st Sexual Intercourse		
Yes	168	41.2
No	212	52.0
No – Response	28	6.9
Currently Engaging in Sexual Intercourse		
Yes	276	67.7
No	132	32.3
		276
Frequency of Intercourse (Per Month)		
1 – 3	177	64.1
4 – 6	78	28.4
7 – 9	14	5.0
10 – 12	7	2.5
Number of Partners	112	40.6
One Partner	164	59.4
More than one Partner		
Use of Condom	144	52.2
Yes	132	47.2
No		

Of 408 that had sexual intercourse, 42.2% were forced while 57.8% said they consented to the act. This shows that greater number of the students engaged in sexual relations with their consent.

Results also show that most of the students who had experienced sexual relationship, were between the age range 13–15 (54.9%). This was followed by those within the age range 10–12 years (22.5%) while the least proportion were within 16–18

years. This shows that most of the students engage in sexual behaviour at very young age.

On whether, they used condom on their first experience of sexual intercourse, greater proportion 212 (52%) said they did not, while 168(41.2%) said they did. Twenty-eight (6.9%) did not respond. This shows that most of the respondents have had unprotected sex sometimes in the past.

Furthermore, of the 408 students who have engaged in sexual intercourse, 276(67.7%) said that they are currently engaging in sexual intercourse while 132 (82.3%) said they are not. This shows that over a half of students are currently engaging in sexual relationship.

Of the 276 (67.7%), who are currently engaging in sexual intercourse greater proportion (64.1%) engaged in it between 2–3 times per month. This was followed by 28.4% who engage in sexual intercourse between 4–6 times while the least proportion (2.5%) engage in it between 10–12 times.

Results show that greater proportion of the respondents (59.4%) engage in sex with multiple partners (more than one) while 40.6% said they have just one sex partner. This is an indication that most of the students that currently engage in sex have risky sexual behaviour.

Of the 276 (23.2%) respondents currently engaging in sexual intercourse, greater proportion (52.2%) do not use condom, while 132 (47.2%) said they use condom. This result shows that greater proportion of those currently engaging in sexual intercourse, do so without protection.

Research question 2: What level of knowledge do in-school female adolescents have about reproductive health?

Table 3: In-school Female Students' Knowledge of the Components of Reproductive Health

	Range	Mean	Std. Deviation
Method of preventing unwanted pregnancy.	0.00 – 700	4.93	1.68
Sexually Transmitted Diseases (STD) including	0.00 – 12.00	8.75	1.89
HIV/AIDS Health effects of STD/AIDS.	0.00 – 6.00	4.14	1.52
Treatment/management of STD.	0.00 – 8.00	4.77	1.36
Overall knowledge of Reproductive Health Matter.	0.00 – 29.00	22.58	3.64

Table 3 shows from a range of possible scores 0-7, 0-12, 0-6 and 0-8 for method of preventing unwanted pregnancy, Sexually Transmitted Diseases including HIV/AIDS, Health effects of STD/AIDS and the Treatment/Management of STD,

students scored 4.93, 8.75, 4.14 and 4.77. These scores are little above average. This shows that the students' knowledge of various components of reproductive health were mostly slightly above average.

Research question 3: How do In-School Female Adolescents Access Information?

Table 4: In-school Female Adolescents' Sources of Information on Reproductive Health

Sources	N	Percent	N	Percent
Parent	1028	86.2	164	13.8
Teachers	1072	89.9	120	10.1
Mass Media, TV, Newspaper, Magazine	1016	85.2	176	14.8
Peer (Girl friends, classmates, schoolmates)	796	66.8	396	33.2
Boy friends	436	36.6	756	63.4
Religious organizations/Leaders	888	74.5	304	25.5
Health Workers	868	72.8	324	27.2
School Guidance Counsellors	892	74.8	300	25.2
School Subjects	788	66.1	404	33.9
Youth Organizations	768	64.4	424	35.6

Table 4 above indicates the sources of information on reproductive health. Result shows that teachers come first with 89.9% followed by parents with 86.2%. then mass media came third with 85.2%. The least source of reproductive health information was boyfriends with 36.6%.

Hypothesis 1: There will be no significant difference in reproductive health knowledge of sexually active and sexually inactive in-school female adolescents.

Table 5: Z-test analysis on Reproductive Health by Sexually Active and Inactive In-School Female Adolescents

Components of Reproductive Health		N	Mean	Std. Dev.	df	Z-cal	Z-crit	Decision
Method of preventing unwanted pregnancy.	Yes	276	5.29	1.43		11.43	1.96	*s
	No	916	3.97	1.76	1190			
Knowledge of STD including HIV/AIDs	Yes	276	8.72	1.88		4.93	1.96	s
	No	916	9.40	2.03	1190			
Health effects of STD/AIDs	Yes	276	4.23	1.43		-5.51	1.96	NS
	No	916	4.40	1.70	1190			
Treatment/management of STD.	Yes	276	4.74	1.39		3.39	1.96	s
	No	916	4.38	1.61	1190			

Using z-test, there was a significant difference between those who currently engage in sexual intercourse and those who do not on the knowledge of the components of reproductive health as shown by the z-calculated values (11.43, -4.93 and 3.39) as well as in the composite reproductive health score (z-cal = 3.30). The composite reproductive health score for in-school female students who currently engage in sexual

intercourse (22.99) was greater than those that do not (22.14). It was therefore concluded that in-school female students who currently engage in sexual intercourse differ significantly from those who do not in terms of knowledge of reproductive health.

Hypothesis 2:
Urban and rural in-school female secondary students will not differ significantly on the knowledge of reproductive health.

Table 6: Z-test Analysis of Level of Knowledge of Reproductive Health by Urban and Rural Female Adolescents

Components of Reproductive Health	School location	N	mean	Std. Dev.	df	Z-cal	Z-crit	decision
Method of preventing unwanted pregnancy.	Urban Rural	676 516	3.98 4.65	1.86 1.59	1190	6.55	1.96	*s
Knowledge of STD including HIV/AIDs	Urban Rural	676 516	9.41 9.02	2.03 1.98	1190	3.32	1.96	s
Health effects of STD/AIDs	Urban Rural	676 516	4.18 4.60	1.72 1.50	1190	-4.34	1.96	s
Treatment/management of STD.	Urban Rural	676 516	4.75 4.09	1..40 1.69	1190	7.36	1.96	s

The z-test above shows that there was a significant difference between urban and rural in-school female adolescents in their knowledge of components of reproductive health as shown by z-calculated values (-6.55; 3.32; -4.34; and 7.36) were greater than the critical z-value (1.96). It was therefore concluded that urban and rural in-school female adolescents differ significantly on the knowledge of reproductive health. 2The z-test above shows that there was a significance difference between urban and rural in-school female secondary students in all of components of reproductive health score. As shown in the table**,** urban students were more knowledgeable than rural in methods of preventing unwanted pregnancy (9.45 vs 9.02) and in treatment and management of sexually transmitted diseases (4.75 vs 4.09) but were less knowledgeable than the rural students in methods of preventing unwanted pregnancy (3.98 vs 4.65) and health effects of STD/AIDS (4.18 vs 4.60). However, on the composite score on knowledge of reproductive health (22.33 vs 22.36), urban and rural in-school female students did not differ significantly. It was therefore concluded that urban and rural in-school female students do not differ significantly on the knowledge of reproductive health.

Discussion

The result of the study revealed that majority of the adolescent girls (65.8%) said they have not had sexual intercourse, while significant proportion (34.2%) said they have engaged in sexual intercourse. The finding of this study is surprising when one observes the incidence of sexual promiscuity prevalent in the society. The finding agrees with the work of Karra and Haile (1999) in Ethiopia where majority of the females sampled reported that they have not experienced sexual intercourse. The findings disagree with that of Okpani and Okpani (2000) where 78.8% of the respondents admitted being sexually active. Also, the finding is contrary to the study of Situmorang (2001) who found that sexual intercourse among Indonesia young people is common.
Further, the study found that most of the adolescents who had experienced sexual relationship were between 13 – 15 years. A study carried out by Onuigbe and Osafu (n.d) showed that the age at which sexual activity started ranged from 11 – 18 years. Also Okpani and Okpani (2000) found that the youngest age of initiation of sexual activity was 12 years.

The study showed that greater proportion have multiple sex partners and do not practice the use of condom during sexual intercourse. This seems to give credence to the findings by many scholars, Owuamanam (1995), Okpani and Okpani (2000), Onuigbe and Osafu (n.d) that a high percentage of adolescents admitted having multiple sexual partners with only small proportion using condoms. These results seem to show that adolescent girls have poor perception about the effect of their sexual habits. Access to a variety of entertainment facilities, including night clubs, and pornographic materials through movies, videos, magazine, books and the internet, may encourage adolescent girls to experiment more with their natural curiosity. Many of them engage in sexual behaviour, they practice unprotected sex with multiple sex partners. These place them at high risk of unwanted pregnancy, abortion and STDs including HIV.

The study also revealed that students level of knowledge of various components of reproductive health were slightly above average. This agrees with the finding of Okpani and Okpani 2000 that there is a high level of awareness of reproductive health issues. However, this contradicts the finding by Idoko (2001), Lee, Chen, Lee, Kaur (2006) who found that adolescents have a limited knowledge on sexual and reproductive health components. This finding is not surprising because knowledge of reproductive health may not lead to increase in sexual activity. Instead it may delay the first intercourse. This may be why the majority of the adolescent girls have not had sexual intercourse.

On sources of reproductive health information, the study also showed that the major sources of reproductive health information are teacher (89.2%) and mass media (85.2%). The least source of reproductive information is from boyfriends. This finding is

significant because it gained empirical support from previous study in which Nwogwu (2007) found that parents and teachers are the major sources of reproductive health information. Also majority of the students reported that they had heard about reproductive health information through mass media such as television, magazines etc. There is a need to check the type of information obtained through the mass media because there is always a danger that unfiltered information given the media may promote sexual intercourse rather than educating them regarding sexual and reproductive health. However, the finding disagrees with the studies by Kaiser, Hoff, Green & Davis (2003) who found that peers were the most common source of reproductive health information.

The study also found that there was a significant difference between urban and rural in-school female adolescents on the knowledge of reproductive health. The outcome of this study agrees with the findings of Rahman, Rahman, Ibrahimd, Sallen (2011) who found that female adolescents in urban areas are more knowledgeable about reproductive health than female adolescents in rural areas.

Conclusion/Recommendations

Interest in female adolescent sexual behaviour and reproductive health has begun to grow in Nigeria and particularly in Anambra State. This is because of real or perceived increase in sexual activities, rates of pregnancy and high rates of HIV infection among female adolescents. The study investigated the sexual behaviour and level of knowledge of reproductive health among in-school female adolescents. The study revealed among others that majority of the adolescents said that they have not had sexual intercourse, but a significant proportion indicated they have engaged in sexual intercourse. Majority of those who have sexual intercourse have multiple sex patterns and most of them do not use condom. The study also found that teachers, parents and mass media are the major sources of reproductive health information. In-school female adolescents in urban areas are more knowledgeable about reproductive health than those in the rural areas.

Based on the findings, the following recommendations were made:

1. Teachers and parents should use every opportunity available to educate the female adolescents, particularly on the dangers of premarital sex and the need for abstinence.
2. The teachers should endeavour to provide age-appropriate reproductive health information to the students. This will help them develop more rational and responsible sexual behaviours.
3. Guidance counsellors should provide sexuality information during individual and group counselling.

4. Reproductive health programmes should be planned for in-school female adolescents.

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