

SEXUAL BEHAVIOUR, CONTRACEPTION AND FERTILITY AMONG IN-SCHOOL ADOLESCENTS IN IKENNE LOCAL GOVERNMENT, SOUTH-WESTERN NIGERIA.

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ABSTRACT

A cross-sectional study was conducted among in-school adolescents in six secondary schools in the health districts of Ikenne Local Government to assess the sexual behaviour, contraception and fertility experiences of the adolescents between the months of May and November 2002. Relevant information was collected from 1140 in-school adolescents with the aid of pre-tested, structured, self-administered questionnaires, selected by using multistage and stratified random sampling techniques. Information sought from the questionnaires included socio-demographic characteristics of the respondents, parental background, their sexual behaviour, knowledge and use of contraception, human development, pregnancy and fertility experiences, information on sexually transmitted infections (STIs) and HIV/AIDS. During the same period, twelve (12) Focus Group Discussions (FGDs) sessions were conducted using an FGD Guide in the selected schools to highlight differences in opinions of students and also to highlight identification of the group consensus.

The mean ages at first intercourse were 13.9 ± 2.8 years and 14.8 ± 2.4 years for males and females respectively. Boys initiated sex earlier than girls. This difference was found to be statistically significant ($p < 0.05$). Sexual intercourse had been experienced by 28.5% of the adolescent students, significantly more males (37.6%) than females (20.4%). The school adolescents that responded as being married were 4.5% (26 males, 23 females) of the respondents.

Knowledge on contraception was 36.9% and 22.1% for male and female students respectively, more males than females had knowledge of contraception in a significant proportion, apparently due to increase awareness of the male condom among males.

Current use of contraception was equally low, and was found to be 10.9% and 6.0% for males and females respectively. The reasons for non-use were mainly that of non-availability (22.3%), cost (11.8%) negative attitude towards contraception due to societal disapproval (33.2%) and lack of knowledge of how to use them (21.3%). The proportion of adolescents that had ever experienced symptoms associated with Sexually Transmitted Infections (STIs) was 26.8%. Multiple factors were found to be responsible for the deplorable reproductive health situation of the adolescents in this community.

The need for provision of sexuality and life planning education in schools including the provision of Youth friendly health services in the community were highlighted.

Key words: Adolescents, Sexual behaviour, Sexuality and Life Planning Education

INTRODUCTION

Concern among the increase in unmarried adolescent pregnancy has been expressed throughout Africa. There is consensus that this is a phenomenon with detrimental effects for African society. According to WHO situation analysis in adolescent's sexual and reproductive health, adolescent boys and girls in most countries of Africa become sexually active around the age of 12 to 13 years without any preparation about sexuality and life planning. By the age of 15 years, 56% of them have regular, often unprotected premarital encounters leading to the including HIV/ AIDS and adverse social consequences such as dropping out of school and unintended pregnancies and unsafe abortion, acquisitions of sexually transmitted infections

early marriage. The observed consequences include contribution to higher infant mortality, potential barriers to the development of the woman, increased maternal morbidity and mortality, and the spread⁴ of sexually transmitted diseases. Other causes of increased unmarried adolescents pregnancy is said to be largely attributable to a general decline in the traditional norms which prevented unmarried adolescent pregnancy, due in part to development and westernization, earlier physical maturity, and lack of social alternative for family guidance^{1,2}

In Nigeria, research data and demographic trends reveal that adolescents (those between the age of 10 and 19 years) constitute 23% of the total population of 120 million. By the age of 19 years, 70% of the adolescents are sexually mature. Adolescents constitute 80% of the hospital cases of complications from unsafe abortion and also have

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total cumulative cases of HIV/AIDS of 62% of the total in Nigeria. Adolescent fertility, sexuality and pregnancy have received little attention until recently. The percentage of births to young married and unmarried adolescents compared to other age groups is growing, and the incidence of premarital sex and pregnancy among adolescents is increasing. Adolescents in many areas are sexually mature and capable of reproduction at a younger age than their parents were. Girls are becoming sexually mature at an early age than their previous generations.³

Early teenage pregnancy, child bearing, particularly among teenagers has a negative demographic, socio-economic and socio-cultural consequences, teenage mothers are more likely to suffer from severe complications during delivery which result in higher morbidity and mortality for both themselves and their children. In addition, the socio-economic advancement of teenage mothers in the areas of educational attainment and accessibility to job opportunities may be curtailed. It is important to have a deeper understanding of the social factors, which contribute to unplanned, unmarried adolescent. A study carried out in the five (5) health districts making up the Local Government between June and December 1995, found the teenage pregnancy rate to be 24%. This was found to be higher than the national average of 22%.^{2,3,4}

The Nigerian Government in a 1988 policy on population identified targets and strategies, which among others include Family Life Education and services to all adolescents in formal and vocational training. However, sexuality Education is not yet included in the school curriculum owing to controversies surrounding the subject, as some people are of the opinion that this subject could encourage sexual activity among adolescents, while some opined that such an education would empower adolescents for an informed choice, which will enhance responsible sexual behaviour.

In a revision of the National Policy in January 14, 2004, the specific goals added among others included improvements in the reproductive health of all Nigerians at every stage of the life cycle, and acceleration of a strong and immediate response to curb the spread of HIV/AIDS and other related infectious diseases. To achieve these goals, the 2004 population policy sets out among others with the objective of improving the quality of reproductive and sexual health care services and intensify the coverage of population and Family Life Education programmes among adolescents and young people.⁵

This study reports the sexual behaviour, knowledge, attitude and practice of contraceptive as well as pregnancy/fertility among in-school adolescents in Ikenne Local Government, in order to enhance adolescents' reproductive health services in Nigeria and as a needs assessment on the

reproductive health situation of adolescents that will be useful in designing intervention programmes for the adolescents in this community.

SUBJECTS AND METHODS

Background information and study population.

The community Ikenne Local Government is situated in Ogun state in the southwestern part of Nigeria. The Local government, which has Ikenne Remo as its headquarters, was created on September 1991 from the defunct Remo Local government. It has a size of about 137.14 square kilometers and Obafemi Owode Local Government bound it on the west, on the southwest by Sagamu Local Government and in the northern and eastern sides by Odogbolu Local Government. It has a population of about 84,293 inhabitants using the 1991 National Population Commission census figures projected to 2003.

The Local Government as a whole is semi-urban and comprises of five health districts or towns namely; Ikenne, Ilisan, Iperu, Ogere, and Irolu districts. It has 8 government-owned health institutions. The local government has 24 primary schools, 11 secondary schools and 2 tertiary institutions. The tertiary institutions include Babcock University at Ilisan, the Ogun state owned institute of social development at Shasha, Iperu, which is affiliated to Olabisi Onabanjo University, and Obafemi Awolowo College of Health Sciences, which has just recently taken off.

Ikenne local Government is situated in the rain forest belt of the south-western part of Nigeria, which made the study area favourable for the inhabitants to engage mainly in agriculture. The people are involved in planting of crops like maize, cassava, rice, pineapple, cocoa yam and cash crops like kola nut, oil palm trees, rubber and timber.

The major religions practiced are Christianity, Islam and the African Traditional Religion⁶

METHODS.

The methods used were both qualitative and quantitative consisting of twelve (12) Focus Group Discussion sessions and a cross-sectional study, using multistage and stratified sampling techniques. Six secondary schools were selected with at least one secondary school from each of the five health districts making up the Local Government. All the schools were mixed schools.

Collection of Qualitative Data.

With the aid of a Focus Group Discussion (FGD) guide, 12 FGDs were conducted in 6 schools. Six (6) FGDs were conducted for female adolescents while six (6) FGDs were conducted for male school adolescents. Two separate FGD sessions were held in each school, one for the male group, and the other for the female group. Each group was led by a

facilitator/moderator and the discussions were either written or recorded or both. The topics discussed included knowledge on human development and reproductive biology, personal skills, sexual health, knowledge on prevention of unwanted pregnancy, contraception, abortion issues, sexually transmitted infections (STIs) including HIV/AIDS, sexual abuse and other matters relating to reproductive health including relationships. There were separate groups for boys and girls and each FGD session conducted lasted about one and half hours.

Collection of Quantitative Data

With the aid of pre-coded, pre-tested, structured, self-administered questionnaires, 1140 students were selected in the six selected secondary schools from the five health districts of the Local Government Area, using multistage and stratified random sampling techniques. At least one school was selected from each of the five health districts (or zones). Two schools were selected in Ikenne Health District in view of its size, the numerous secondary schools existing in it, and being the headquarters of the Local Government. Both Junior Secondary School (JSS) and Senior Secondary School students (SSS) were represented in the study. The students were selected across the classes from JSS1-SSS3 in the six selected schools by taking into consideration the total population of each school selected, the sex ratio, and the size of the classes in the selected schools (JSS1-SSS3). A sample size of between 15-20% of the total population of the six schools (6320) were drawn into the study. The data were collected in July-Sept, 2002. To ensure confidentiality, respondents' names were not required. The data were collected in July-Sept, 2002.

The questionnaires were designed to obtain information about the socio-demographic characteristics of the respondents, their sexual behaviour, knowledge, attitude and practice of contraception, and pregnancy/fertility experience. Information on human development / reproductive biology, sexually transmitted infections, and consequences of teenage pregnancy were also obtained. Sexual experience is defined as ever having had sexual intercourse.

The data were analysed using SPSS computer software package

Findings on Focus Group Discussion

Male participants were of the opinion that early sexual activity is caused by girls dressing provocatively to attract boys and that students often watch sex films, video, etc, while some participants talked of parents encouraging their female children to wear 'expensive' clothes for the same purpose. These facilitated them to go into the actual sex act.

Female participants were of the opinion that early sexual activity is brought about by parents not taking proper care of their daughters. Lacking necessary materials, girls go into early sexual act in exchange for money, which they think parents cannot afford, and they suggested free education as a way of preventing unwanted pregnancies.

Both male and female participants affirmed that boys and girls get involved in sexual act even from JSS1, which is the first year of their secondary school, most especially the girls. Some participants narrated the attitude of boys when they impregnate a girl: some said they would run away from school and even from their parents at home. Most of the participants were aware of the medical and social consequences of early sex, such as unwanted pregnancy, infections including HIV/AIDS and could lead to early school drop out. Some thought early sex is caused by girls going to boys' houses alone, looking for help or to chat and make love while some female participants stated that boys convinced them of early sex to prevent "abdominal pain". Some participants were of the opinion that parents contribute to the boys going into sexual activity by encouraging their sons to go out with girls so as to prepare their manhood.

Students narrated their experiences on consequences of abortion, which led to the death of some of their female colleagues. They stated that the abortion by their female colleagues was often performed using traditional methods, which to them were harmful and can lead to 'death'. Most participants in the group talked about how their colleagues committed abortion using dangerous chemicals and traditional concoction such as lime, potash, herbs, unripe fruits, "alabukun" and 'seven-up', ogogoro, alcohol, Epsom salt, Lipton tea or by consulting a chemist.

Most participants agreed that pregnancies during adolescence are unwanted and untimely but opinions were divided about whether it is right or wrong to abort pregnancies. Some other participants narrated that parents encourage their female children to have abortion done mostly using traditional doctors and even take them there. Girls are believed to commit abortion because most parents will reject the girl if she gets pregnant too early in life and may have problems when they eventually get married.

Some participants highlighted the benefits of having relationships with the opposite sex, such as companionship and at times financial support.

Girls' participants were also of the opinion that early sex is caused by 'deceptive love' and 'lust' by boys. Some participants clarified the difference between "loving" and mere friendship, stating the advantages of having friends of the opposite sex as helping in academics in school and also as advisers.

Some of the participants suggested that to stop early sex, there should be separate schools for boys and girls, while some participants are of the opinion that, the government should educate girls not to dress with intent to entice.

Girl participants stated that they started having sexual desire between the ages of 13-15 years. Some said they have boyfriends to enable them have some money and sometimes to assist them when they have difficulties but opinions were divided as to why students should have relationships. Some believed that early sex 'spoils' the girl's life, while some believed that relationships are good if it does not involve early sex but just to help academically.

The FGD sessions affirmed a good knowledge of reproductive tract and physiology, low usage of contraception, as well as high awareness of consequences of teenage/unwanted pregnancy. There was however a little or low knowledge of STIs, as reflected by many who mentioned cholera and tuberculosis as STIs.

RESULTS

Socio-Demographic Characteristics of Adolescents Studied. Males constituted 46.1% (526) of the students interviewed, while females constituted 53.9% (614). Secondary school students in the age group of 13-18 years constituted the bulk, 71.1% (810) of the respondents, students in age group 10-12 years were 15.0% (171), while those aged 19-24 years were 13.9% (159). Those in the Junior Secondary School category were 42.2% (482), while 57.8% (658) were in the Senior Secondary School category.

By marital status, 4.5% (49) of the respondents were married (26 males and 23 females) Most of the students 82.6% (914) interviewed belonged to the Christian faith, while 16.4% (182) were of the Islamic faith, with 1% (10) belonging to the traditional religion. Also, 18.4% (201) of the secondary school students were boarders, living within the school premises, while the majority of secondary school students of 81.6% (894) were day students. 35.7 % (66) of the students' respondents had 7 or more siblings, 27.6 % (51) have 3-4 siblings, 23.2 % (43) of the respondents had 5-6 siblings, while 13.5 % (25) of the respondents had 1-2 siblings. The culture of this community is characterized by raising large families irrespective of educational or socio- economic background

Family/ Parental Background

83.7 % (952) students' fathers were alive, while 12.3% (134) of the fathers were deceased. Also, 91.5% (937) of the student' mothers were alive, while 8.5% (87) of the mothers were deceased. 43.9% (465) were found to be living with both parents, 29.2% (309) were living with their mothers

only, while 17.8% (189) were living with their fathers only. 4.3% (46) were living with their elder brother or sister, while 4.3% (48) were living with other relations. Those living with either schoolmate or friend or guardian were found to be 1.6% (17). An insignificant proportion of the students 3.1% (33), 19 males and 14 females, were living alone without the supervision of an adult. On socio-economic status of parents, 53.1% (297) of the fathers were found to be of the high socioeconomic class, mostly professionals, (i.e. Architects, Bank Managers, Accountants, Building contractor, Cocoa exporter, Computer Engineers etc.), while 37.9% (194) of the mothers were also found to be in this professional group. 10.9 % (61) of the fathers were in the skilled workers' category while 8.0 % (41) of the mothers were also in this category 30.4 % (170) of the fathers were in the semi-skilled category, while 51.8 % (265) of the mothers were also found to be in this category. Only 5.6 % (31) of the fathers and 2.3 % (12) of the mothers were found to be in the unskilled category.

Educational Background of Students' Parents

17.8% (185) of the respondents' fathers received post-secondary education, while 21.6% (225) received secondary education. 35.9% (373) of the students did not know their fathers' level of education. Also 33.2% (313) of the students' mothers received secondary school education, while 21.7% (206) mothers received post -secondary education. 17.6% (167) of the secondary school respondents did not know their mothers' educational status.

Sexual behaviour.

Surprisingly, 4.5 % (49) of the secondary school students were married, (26 males and 23 females) while 95.5 % (1030) of the students were expectedly single.

The proportion of the students that ever had intercourse was found to be 28.3% of those interviewed. Gender analysis showed that a significantly higher proportion of males, 37.6%(198) than females, 20.4%(125) acknowledged having experienced sexual intercourse. ($P < 0.05$)

The mean age at first sexual intercourse among the male respondents was found to be 13.9 ± 2.8 years, while the mean age for the females at first intercourse was found to be 14.8 ± 2.4 years. Boys initiated sex earlier than girls. The overall mean age for sexual initiation for both the respondent's boys and girls was found to be 14.3 ± 2.6 years of age. Focus Group Discussion reports had earlier revealed that girls start having sexual desire between the ages of 13-15 years. Quantitative analysis confirmed this fact that even though boys initiated sex earlier than girls, the age of sexual initiation was between 13-15 years. On the response to the question of how old the sexual partners were at the first intercourse, majority

of them could not answer, but the believable responses were between the ages of 10-35 years (129 responses). Gender analysis could not be done because many did not know the ages of their first sexual partners.

On the source of information about sex, majority of the students 23.4 % (211) interviewed acknowledged having this information from classmates or schoolmates, while 19.6 % (177) of the respondents acknowledged collecting this information from radio/television, news magazine or by watching sex films. 16.6 % (150) said they collected the information on sex from their teachers (probably during biology sessions). Fathers do not seem to be a source of information on matters relating to sexual act. Only 3 % (27) acknowledged the source of information about sex from their fathers.

On who the first sexual partner was by occupation or status, majority were found to be students. Out of 459 respondents, 73.0 % (335) said their first sexual partner were students. 13.3 % (61) were casual and they could not have much information on them. 16.1 % (88) of the respondents acknowledged receiving money in exchange for sex. When further asked how much was received, 38 students (8.3%) responded to receiving between N50 and N6000. On the responses of the secondary school students on the circumstances that led to their first sexual intercourse, playing together constituted the majority. This was 45.5 % (214) out of 470 respondents. This is followed by affection and love 18.7 % (88), casual sex 15.3 % (72), meeting in a party 7.7% (36), persuasion into sexual act 6.6% (31), financial problem 2.1% (10), forced or raped 1.7% (8), starting marital life 1.5% (7) and the least was due to curiosity, 0.9% (4). 3.4% (31) of the males confessed to having made a girl pregnant, while 18 % (6 females) acknowledged having been pregnant. Gender analysis revealed that more males than females have been involved in sexual act that resulted in pregnancy.

On the number of sexual partners, out of 1113 respondents 11.1% (123) said they had only 1 sexual partner, 4.6% (52) said they had 2 sexual partners, 2.8% (30) said they had 3 sexual partners, 1.9% (22) said they have 4 sexual partners, while others 5.4% (60) said they have between 5 to 9 sexual partners. 74.2% (826) responded as being single

Some of the students were aware of somebody having sex with their partners 10.6 % (92) of the respondents, 53 males and 39 females acknowledged that their partners did have sexual act with someone else, 42.7 % (371) thought otherwise, while 46.7 % (405) had little or no information on this issue.

Contraception

Only 328 (28.9%) of the adolescents have heard about contraceptives. More males knew about contraception than females. This was found to be statistically significant ($p < 0.05$). This is due to increased awareness of the male condom use among males. A higher percentage of males were more aware of male condom use than females. This is obviously due to unpopularity of the use of female condom among females.

Prevalence of Sexually Transmitted Infections (STIs)

In this study, the proportion of adolescents that had ever experienced symptoms associated with STIs was 26.8% (306). These symptoms ranged from burning sensation during urination -5.9% (68) milky discharge 6.4% (77), difficulty in urinating 44 (3.8%); swollen glands (4.1%) 47, irritating vaginal discharge (3.4%) 39; sores on genital area 6.2% (71); to having painful coitus (6.8%). A total of 193 (36.7%) of the male respondents and 113 (18.4%) of the female respondents were found to have symptoms suggestive of STIs. Gender analysis revealed that a significantly higher proportion of males than females had symptoms suggestive of STIs ($p < 0.05$).

This relatively high prevalence of experience of symptoms of STIs among the sexually active male adolescents can be explained by the relatively low usage of condoms and low utilization of Health Facilities, as only 4.9% (21) sought for help from a Health Facility or Health Worker.

Pregnancy/Fertility

The mean age at menarche for the sampled adolescent students was 13.4 years. 3.4% (34 males) admitted having made somebody pregnant before, while 16 females admitted that they have been pregnant before. On the issue of Abortion, all the adolescents questioned were aware of the risk of Abortion, but opinions were divided as to whether it is right to abort or not.

Table 1: Distribution of Respondents According to Background Characteristics.

Characteristics	Total No of respondents	% of respondents
Sex:		
Male	526	46.1
Female	614	53.9
N	(1140)	
Age:		
10-12	171	15.0
13-18	810	71.1
19-24	159	13.9
N	(1140)	
Class		
JSS	482	42.2
SSS	658	57.8
N	(1140)	
Marital Status		
Single	1030	95.5
Married	49	4.5
N	(1079)	
Religion		
Christianity	914	82.6
Islam	182	16.4
Traditional	10	1.0
N	(1106)	
Residence		
Boarding	201	18.4
Day	894	81.6
N	(1095)	
Father's State of Being		
Father Alive	952	83.7
Father Dead	134	12.3
N	(1086)	
Mother's State of Being		
Mother Alive	937	91.5
Mother Dead	87	8.5
N	(1024)	
Distribution of the Respondents by their Responses to whom they live with:		
Both Parents	465	43.9
Mother	309	29.1
Father	189	17.8
Relations	46	4.3
Guardian	17	1.6
Friend/schoolmate	33	3.1
N	(1059)	

Educational Background Of Students Parents.

Educational Background	No of Respondents	%
Mother:		
None	33	3.5
Primary	155	16.3
Secondary	315	33.2
Post Secondary	206	21.7
Other Technical	73	7.7
Don't Know	167	17.6
N	(947)	100.0

Father:		
None	56	5.4
Primary	153	14.7
Secondary	225	21.6
Post Secondary	185	17.8
Don't know	419	40.4
N	(1038)	99.9

Socio-Economic Background of Students' Parents.

	Socio-Economic	No of Respondents	%
Father:			
Professional		297	53.1
Skilled		61	10.9
Semi-Skilled		170	30.4
Unskilled		31	5.6
N		(559)	100.0
Mother:			
Professional		194	37.9
Skilled		41	8.0
Semi-Skilled		265	51.8
Unskilled		12	2.3
N		(512)	100.0

Responses to the Total Number of Siblings

No of Siblings	Frequency	%
1-2	25	13.5
3-4	51	27.6
5-6	43	23.2
≥ 7 Siblings	66	35.7
N	(185)	100.0

Table 2: Sexual Behaviour of Respondents

Characteristics	No. (%) of respondents		
	Male	Female	Total
Sexual Experience	198 (37.6%)	125 (20.4%)	325 (28.5%)
	526	614	1140
Age at first intercourse (in years)			
10	23(20.2)	1(1.2)	24 (12.0)
11	3 (2.6)	5(5.8)	8 (4.0)
12	14 (12.3)	10(11.6)	24 (12.0)
13	6 (5.3)	10(11.6)	16 (8.0)
14	10 (8.8)	13(15.1)	23 (11.5)
15	24 (21.0)	15(17.4)	39 (19.5)
16	15 (13.1)	14(16.3)	29 (14.5)
17	10 (8.8)	7 (8.1)	17 (8.5)
≥18	9 (7.9)	11(12.8)	20(10.0)
N	114(100.0)	86(99.9)	200(100.0)
Mean Age at first intercourse (in years)			
	13.9±2.8	14.8 ±2.4	14.3±2.6
No. of Sex Partners			
None	826(74.2)		
Single	123(11.1)		
Multiple	164(14.7)		
N	1113(100.0)		

Table 3: Knowledge on Contraception, Contraceptive Methods Currently used, and Reasons for Non-Use

No & % of Respondents			
Knowledge on Contraception	Male	Female	Total
Condom	121 (23.0)	59 (9.6)	180(15.8)
Injectables	17 (3.2)	13 (2.1)	30(2.6)
Foaming Tablets	7 (1.3)	11 (1.8)	18(1.6)
Oral Pills	13 (2.5)	4 (0.7)	17(1.4)
IUCD/Copper T	7 (1.3)	4 (0.7)	11(1.0)
Others (Traditional)	29 (5.5)	45 (7.3)	74(6.5)
Don't Know	332 (63.1)	478 (77.9)	810(71.1)
N	526 (99.9)	614 (100.0)	1140(100.0)
Type of Contraceptive methods ever used by the respondents.			
Condom	59(95.2)	- (0.0)	59(65.6)
Foaming Tablet	3(4.8)	3(10.7)	6(6.7)
Diaphragm	-	2(7.1)	2(2.2)
IUCD/Copper T	-	8(28.6)	8(8.9)
Oral Pills	-	5(1.8)	5(5.6)
Injectables	-	10(35.7)	10(11.1)
N	62(100.0)	28(99.9)	90(100.0)
Source of Contraception			
Medicine Stores	59 (26.8)	21(24.4)	80(26.1)
Friends	41(18.6)	15 (17.4)	56(18.3)
Pharmacy	41 (18.6)	11 (12.8)	52(17.0)
Health Facility	74 (33.6)	34 (39.5)	108(35.3)
Others	5 (2.3)	5 (5.8)	10 (3.3)
N	220(99.9)	86 (99.9)	306(100.0)
Use of Contraception for the most recent intercourse			
Yes	31(10.9%)	14(6.0%)	45(8.7%)
No	254(89.1%)	219(94.0%)	473(91.3%)
N	285(100.0)	233(100.0)	518(100.0)
Reasons for Non-use			
	No. & % of Respondents		
	Male	Female	Total
Not Available	35(28.9)	12(13.3)	47(22.3)
Too Expensive	20 (16.5)	5 (5.6)	25(11.8)
Partner Objected	16 (13.2)	8 (8.9)	24(11.4)
Don't like Contraceptives	30 (24.8)	40(44.4)	70(33.2)
Don't Know how to use them	20 (16.5)	25(27.8)	45(21.3)
N	121 (99.9)	90(100.0)	211(100.0)
Prevalence of Sexually Transmitted Infections (STIs)			
	No & % of Respondents		
Symptoms suggestive of STIs(painful urination, Milky discharge, sores in the genitalia etc)	Male	Female	Total
	193 (36.4)	113 (18.4)	306 (26.8)
N	526	614	1140

DISCUSSION

The results of this study showed the deplorable reproductive health situation of in-school adolescents in this community, despite the high educational and the socio-economic status of the parents. The study also provided further evidence of the extent of adolescents involvement in premarital sexual intercourse, which could have accounted for the high teenage pregnancy rate earlier reported in previous studies carried out in this community. The prevalence

of teenage pregnancy rate in the community from previous studies was found to be 24%, which was far above the national average of 19.2%^{1,7}

The study also showed that multiple factors were responsible for the deplorable reproductive health situation of the adolescents in this community. Remedy therefore should involve all hands, including the effective contributions of educational administrators, peer educators for effective peer education programme and harmonious approach

from parents/ teachers. This should also include contributions from government/ NGOs on policy, law and rights. Moreover, parents should endeavor to give more attention to their children while they are in school despite the sexual exposure of both sexes and the high knowledge of the consequences of teenage pregnancy, there was low contraceptive usage. However, constant use of contraceptive methods was not examined in this study. About 4.5% of these respondents between the age of 12 and 24 years (26 males, 23 females) responded that they were married. Obviously, they will need contraceptives if they must continue pursuing their secondary education at the time of the study.

Even though there were more Christians than Muslims, religion did not appear to significantly influence the sexual behaviour of these adolescents. This finding is consistent with previous studies even in Nigeria where religion does not play any significant part. A higher percentage of school adolescents in this community are having sexual intercourse earlier than 14 years of age as seen in the previous studies. 22% of boys and 26% of girls have had sexual intercourse before the age of 14 years among the respondents. This is also higher than a previous study carried out in 1994 in USA, where it was found out that 18% of the boys and 16% of girls had sex before the age of 14 years. In Nigeria, research data have shown that whilst age at menarche is dropping, there is increasingly high incidence of teenage pregnancy. Teenagers account for over 60% of unsafe abortion complications treated in hospitals and the incidence of STIs infections is highest among young people within the country. The low percentage contraceptive usage among sexually active adolescents is particularly contributory to the high level of teenage pregnancy, unsafe abortions and maternal mortality, among others^{3,7,8}.

52.5% of those who have had sexual intercourse had their first sexual exposure between age of 10 – 17 years. Age of sexual initiation for male students range from 10 – 24 years with a mean of 13.9±2.8 years while the female age of sexual initiation ranged from 10 -22 years with a mean age of 14.8±2.4 years. The overall mean age for sexual initiation for both sexes was 14.3±2.6 years.

This age of sexual initiation was found to be slightly higher than previous studies in Nigeria. A study carried out in Lagos Mainland Local Government Area of Lagos State in the year 2001 among in – school adolescents found that the age of sexual initiation for male students ranged from 7 to 20 years with a mean age of 13.1years, while the female age of sexual initiation ranged from 10- 19 years with a mean age of 14.6years. The overall mean age for sexual initiation for boys was 13.5years. The results are consistent with the observation that the male students are more active and initiate sex earlier than the girls⁹.

About 26.8% (306) had ever experienced symptoms associated with STI's ranging from burning sensation during urination -5.9% (68) milky discharge 6.4% (77), difficulty in urinating 44(3.8%); swollen glands (4.1%) 47, irritating vaginal discharge (3.4%) 39; sores on genital area 6.2% (71); painful coitus (6.8%) 45.5%(193) of the male respondents and 26.6% (113) of the female respondents were found to have symptoms suggestive of STIs among a total of 424 responses. Gender analysis revealed that a significantly higher proportion of males than females had symptoms suggestive of STIs ($p=0.04$) This relatively high incidence of experience of symptoms of STIs among the sexually active male adolescents can be explained by the relatively low usage of condoms and low utilization of Health Facilities by the adolescents, as only 4.9%(21) sought for help from a clinic or Health Worker.

The prevalence of STIs in this study is higher than many previous studies done in Nigeria. NDHS1999 reported a prevalence of less than 1 percent in women and only 4 percent of men reported of having any such disease in the 12 months before the survey. This was thought to be an under estimation because many STIs were not usually reported. According to WHO, 333million new cases of STIs occur worldwide each year, and at least 111 million of these cases occur in people under age 25^{2, 5,10}.

Adolescents have the right to clear and accurate information about Contraceptive methods, including correct use, side effects, and how to reach a health care provider with concerns⁸

Although the condom was the commonest method of contraception used by the adolescent students, the proportion of users among all the sexually experienced adolescents was low. Contraceptive use at first sexual intercourse was lower than in the developed countries like U.S, where it was found that 62% of males and 59% of females aged 15-19 years used contraceptives. There were also similar findings in Sweden (73%) among high school students. The high teenage pregnancy rate in this community is therefore not surprising because youth friendly health services are not available. In general, adolescents are healthy and not yet affected by adult health issues such as high blood pressure or chronic diseases. As a result, they can choose a wide range of contraceptive options, although condom will be better because of the synergistic protection against STIs. Although abstinence is the best and safest option for preventing the adverse consequences of sexual activity, many young people do however engage in sexual activities and suffer the negative consequences such as unwanted pregnancies, unsafe abortion and the sexually transmitted diseases. Provision of youth friendly health services, sexuality and Life Planning Education (LPE) in schools will nose dive the high rate of teenage pregnancy among in-school adolescents. Importantly, LPE helps youths develop

positive and healthy attitudes about their bodies, feelings and relationships.^{15,12,13,14}

The terrible result of unprotected sexual activity among adolescents is glaring and devastating. The most visible results are not only that of the high rate of unwanted teenage pregnancies, but also the high incidence of HIV/AIDS among them. FGDs with young people revealed that no one had taught them about sex. They got their information from peers, news magazines and biology classes. While a high percentage of them believe that they should not engage in premarital sex, 24% to 46% of them were sexually active, perhaps due to mixed messages they received from peers, parents, the society in general. 22% of the young girls questioned stated that their first experience of sex was rape or was one in which they were forced to have sex. Although we deny information to young people about sexuality, boys and girls inevitably mix freely at school at a stage of development when the sexual drive is intense. It should therefore be no surprise that 2 out of every 5 secondary school girls have had at least one previous pregnancy, 150 out of every 1000 women who give birth are 19 years old and under, over 60% of patients presenting at Nigerian hospitals with abortion complications are adolescent girls, abortion complications account for 72% of all deaths among young girls under the age of 19 years and 50% of the deaths in Nigeria's high maternal mortality rate are adolescent girls, due to illegal abortion. Experience has shown that when schoolgirls get pregnant, over 50% are usually expelled from school, 20% or more are usually ashamed to return, 15% or more would not return because their parent refused to pay tuition and 5% or more are forced to marry. One of these feasible alternatives is to give knowledge about sexuality to young people so that they can take responsibility for their actions. Allowing them to live and act in ignorance is destructive to them and the society.^{3,16}

The adolescents bear the greatest brunt of the HIV/AIDS disease and its spread is most rapid among them. They are therefore at the centre of the epidemic. To tackle the disease effectively, their social environment must be transformed so that they can form relationships between themselves and their peers, parents and teachers, the health services and religious groups in order that they can acquire appropriate knowledge, life skills and attitudes. The youths bring to this situation, sharp and engaging minds, and eagerness to absorb new knowledge, a readiness to challenge accepted norms and press vigorously for change- a situation for which adults are often unprepared. They therefore perceive the youths as the problem rather than seeing the need to change their own attitudes and seize the opportunity, which the situation presents for social transformation.¹⁶

Reproductive health is not just a concern during

a woman's so called "reproductive years", customarily defined as ages 15 - 49 years. Rather, reproductive health is a lifetime concern for both women and men, from infancy to old age. In many cultures, discrimination among girls and women begin in infancy and this determines their life course. Issues of education appropriate for health care should arise and be given in childhood and adolescence. These should continue to be issues in the reproductive years, along with information on family planning, STIs and reproductive tract infections, adequate nutrition and care in pregnancy, including the information to enhance the social status of women.

Health information on old age including chronic infections and increasing concerns about cervical and breast cancer should also be given. Male attitudes towards gender and sexual relations arise in boyhood, when they are often set for life. Men need early socialization in concepts of sexual responsibility and education and support for healthy sexual and family formation and behavior. Women and men both need reproductive health care appropriate for their situation in the life cycle. Sexual development is a normal part of adolescence. Fortunately, most adolescents go through these changes without significant problems. Nonetheless, all adolescents need support and care during this transition to adulthood, and some need special help. The lives of millions of adolescents worldwide are at risk because they do not have all the information, skills, health services and support they need to go through sexual development during adolescence and postpone sex until they are physically and socially mature, and able to make well informed and responsible decisions.¹⁶

Even though the main issues in adolescent sexual and reproductive health are that adolescents are at risk of STIs including HIV/AIDS, unwanted and unsafe pregnancies, the causes of these are usually multi-factorial. An important factor is the social and economic aspect. For millions of adolescents, sex is linked with coercion; violence and abuse- sometimes even by family members or adults with privileged relations. In many societies, women are conditioned to be submissive to men, and they find it difficult or impossible to refuse early marriage, to space births or to refuse to have unprotected sex with an unfaithful spouse or partner. Additionally, the social environment is critical to healthy adolescent development. These are key aspects of this environment, which can prevent adolescents from engaging in unsafe/ unwanted sexual behavior, for example, a strong relationship with parents, a connection to school and open communication with sexual partners.

Another aspect is that adolescents should benefit from information and skills (life and livelihood) to enable them pass through this period without adverse

social and health implications. In most countries, the great majority of adolescents are poorly informed about sexuality and reproduction. Often policy makers, public opinion leaders and parents believe that withholding information about sexuality and reproduction from young people will dissuade them from becoming sexually active. In fact, good quality sex education does not lead to earlier or increased sexual activity among adolescents. Adolescents need life skills in order to face the challenges of adulthood. During personal development, an adolescent's competence develops whenever there are opportunities to practice certain skills by understanding and using social conventions. Adolescents also prioritize livelihood skills and opportunities as very important to them. Many adolescents are victims of exploitative sex because they lack livelihood skills and opportunities¹⁶.

Adolescents should be given unrestricted access to health services. Most adolescents (boys and girls, married and unmarried) become sexually active before the age of 20, but generally lack access to family planning services, prevention and care of sexually transmitted diseases, and pregnancy care. For many young people, the opening times or location of services make them inaccessible, or the care is too expensive.

Many health care facilities require the consent of the parents or spouses, or may be forbidden by law to provide health care services to adolescents. In addition, the judgmental attitudes of many health care professionals often discourage adolescents from seeking advice and treatment related to sexual and reproductive health. If these bottlenecks and restrictions are removed, and adolescents have and unrestricted access to health services, this intervention will hopefully reduce the high maternal mortality in Nigeria.^{16,17,18}

CONCLUSION/RECOMMENDATIONS

Multiple factors had been responsible for the deplorable reproductive health situation of in-school adolescents in this community

Improving the reproductive health status of adolescents in this community is a collective responsibility of all stakeholders in reproductive health involving parents, guardians, the education sector, religious organizations, the health sector, non-governmental organizations, the policy makers and the public opinion leaders.

Provision of youth-friendly health services in the community, involvement of youths, parents, and policy makers in the formulation of policies concerning adolescents, inclusion of modules on Sexuality and Family Life Education in the curriculum of secondary schools are feasible measures of improving the reproductive health status of adolescents in the community.

ACKNOWLEDGEMENTS

We hereby express our profound gratitude to Dreyfus Health Foundation of New York and Better Health Foundation of Nigeria for sponsoring this study. We also thank the Ministry of Education at the State and Zonal Education Office, ably represented by Mrs. T.O. Shoroye for granting us permission to collect data on Reproductive Health Issues in the schools in Ikenne Local Government.

We thank the Chairman, Caretakers Committee, Ikenne Local Government, and the Medical Officer of Health, Dr Kam Olabintan for their co-operation and endorsement of data collection.

We do express our gratitude to the principals of the six selected schools. These are the Principal of Ikenne Community High Schools, Mr. I. Karim and his Vice Principal, Mrs. V.O. Omole, the Principal of Irolu Community High School, Irolu ;Mr T.O. Adeniji, the Principal of Isanbi Comprehensive High School, Isanbi Mrs O. Sokadejo and her Vice-Principal Mrs O. Sulaimon; the principal of Ogere Community High School, Mr. A.O. Akilusi and his Vice Principal, Mrs V.A. Oyefeso, the Principal of the United High School, Mr O. Oredein, and Mrs Bose Orenaiya who later took over from him.

REFERENCES

1. **Ikenne Local Government Economic blueprint, 2004**
2. **Nigerian Demographic and Health Survey, 1999**, National Population Commission, Abuja ,December 2000
3. **Salako AA, Sofowora A.** A Study of Teenage Pregnancy and its Determinants in the Health Districts of Ikenne Local Government. *Nigerian Medical Practitioner*, Vol. 44, No 3/4, 2002. pp 38-44.
4. **Adolescent Fertility, Risk and Consequences.** Population Reports Series Number 10 July 1976, pp 157-163.
5. **Araoye MO.** Sex, Contraception and Fertility among In-School Adolescents in Ilorin. *Journal of Community medicine & Primary Health Care*, Vol. 10, December 1998. Pp 21-31.
6. **Nigeria Demographic and Health Survey, 2003**
7. **Report of the National Conference on Adolescents Reproductive Health in Nigeria:** January 1999, Abuja, Nigeria. Pp 26-29.
8. **International Planned Parenthood Federation.** Understanding Adolescent. Report on Young Peoples Sexual and Reproductive Health Needs. 1994.

9. **Human Development Initiatives, Lagos:** Reproductive Health and Rights of In-School Adolescents: Survey Report of Mainland Local Government Area of Lagos State. April 2001.
10. **Population Reports, Series M, No 17:** Adolescent Child Bearing & Trends in Contraceptive Use. pp 30.
11. **Katz K, Nare C.** Reproductive Health Knowledge and Use of Services among young adults in Dakar, Senegal. *Journal of Biosocial Science*, 2002; 34(2): pp 215-31.
12. **WHO/ RHR/01/08(2001):** Sexual relations among young people in developing Countries- Evidence from WHO case studies.
13. **Training Manual for Adolescents in (in & out of School Setting) as Peer Educators on Life Planning Education,** developed by Association for Reproductive and Family Health, Ikolaba, G.R.A, Ibadan, October 1996.
14. **Life Planning Education Manual for Nigerian Youth,** Developed by Association for Reproductive health, Ibadan, Nigeria and Advocates for Youth, Washington D.C., USA, 1999.
15. **Birdthistle I, Vince-Whitman C:** Reproductive Health Programs for Young Adults: School Based Programs, FOCUS on Young Adults Research Series, June 2, 1997, Education Development Centre Inc. Pathfinder International/.The Future Group International and Tulane University School of Public Health Tropical Medicine/USAID.
16. **Adolescent Reproductive Health: Key Issues**—<http://www.rho.org/html-keyissues.htm> ., accessed on 6/03/02
17. **Action Health Incorporated and Sexuality Information and Education Council of the United States:** Guidelines for Comprehensive Sexuality Education in Nigeria-School Age to young Adulthood, 1996.
18. **National HIV/AIDS & Reproductive Health Survey (NARHS), NIGERIA, 2003.**