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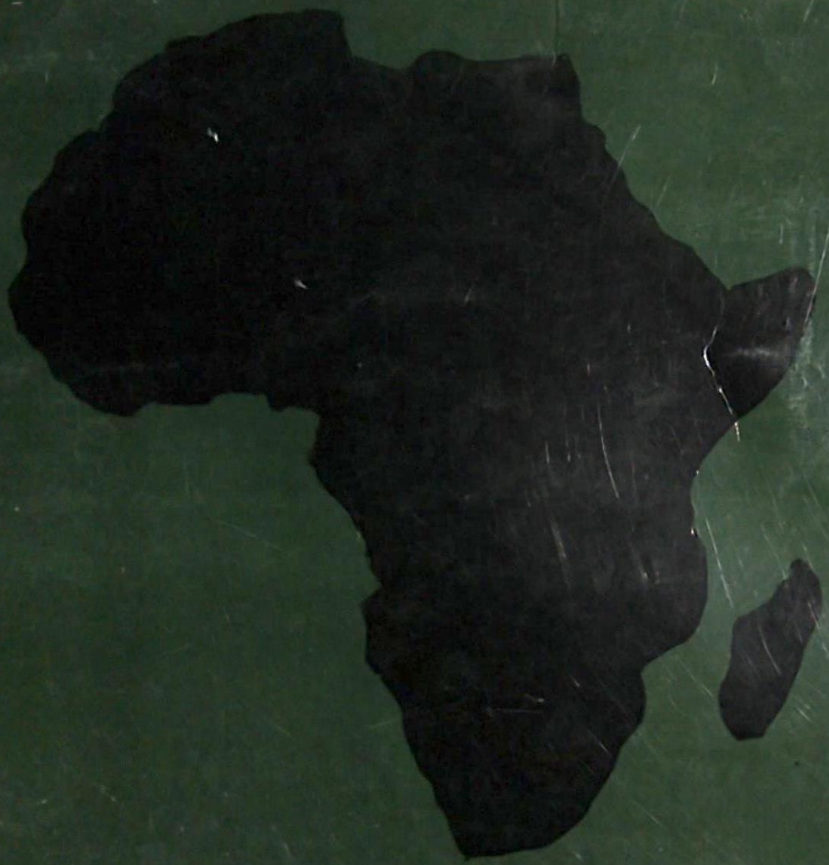

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Sexual activity among adolescents in Ilorin, Kwara State, Nigeria

AA Abdulkarim, OA Mokuolu and A Adeniyi
Department of Pediatrics/Child Health, University of Ilorin Teaching Hospital, Ilorin, Nigeria

Summary

With the aid of a self-administered questionnaire, sexual activity was investigated among 1,200 students aged 10-19years. Two hundred and sixty-four (23.7%) respondents indicated they were sexually active. The mean age at first intercourse was 11.3 years (SD=5 8 years), while the average number of sex partner was 2-3. Multiple sexual partners were found in 99 (69.2%) of the males and in 16(32.7%) of the females ($P < 0.05$). Males were more sexually active, 189 (32.8%) compared with 73(13.7%) females (P=0.000001; RR=2.4 (1.88-3.05). Two hundred and fifty-three (23.4%) of those respondents who claimed to be highly religious had sexual intercourse compared with 7 (50%) of those who claimed not to be religious (P=0.02; PR = 0.47 (0.27-0.80). Those whose parents lived together were less likely to be sexually active. 184 (21.2%) versus 47 (34.8%) (P=0.005). It is therefore concluded that our adolescents especially males remain sexually active. It also demonstrates the dramatic lowering of age at first intercourse Family supervision and level of religious activity were recognized as factors that have significant impact on sexual activity. Preventive efforts must therefore focus on these issues with the active involvement of the Pediatrician, parents and religious leaders.

Keyword: *Adolescents, sexual activity; lowering of age*

Résumé

L'activité sexuelle etait investiguée a l'aide un questionnaire libre parmi 1200 étudiants agés de 10-19 ans .Deux-cent soixante quatre (23.7%) des participants indiquaient qu ils étaient sexuellement active. La moyenne d'age au premier rapport sexuel etait de 11 3 ans (SD-5.8ans). Cependant la moyenne du nombre de partenaire était de 2-3 chez 99 (67.2%) des males et16 (32.7) des femeles etaient des partenaires multiples (P<0.05). Les males etaient plus sexuellement active comparé (13.7%) des femeles (P==0 0001, PR= 2-4 (1.88-3.05) Deux cent trente trois (23.4%) des participants se montraient trés religieux, avaient plus de rapport active (32.7%) sexuelle comparé a 7(50%) des non-religieux (P=0.02, RR= 0.47(0.27-0.80). Ceux que les parents vivent ensemble étaient moins active sexuellement (187 (25.2%) contre 47(34 8%) P=0.005). C'est ainsi conclu que les adolescents especilament les males restent sexuellementt active Ceci demontre aussi la réduction dramatique de l'age du premier rapport sexuelle. La supervision familiale et le niveau de l'activité religieuse étaient connu comme facteurs qui ont l'impact significative sur l'activité sexuelle. Les efforts preventives doivent etre pointés sur ces problémes avec l'appui active des pédiatres et des chefs religieux.

Introduction

Sexual activity has been recognized among adolescents and its consequences have been a source of concern for ages [1-5]. Aristotle [2] complained that "In regard to sexual desire, they (adolescents) exercise no restraint", and the dilemma of adolescents lies in the discrepancy between physical and cognitive maturity" [2]. Sexual activity among adolescent is often characterized by experimentation, exploration, guilt, sheer excitement, and a sense of adventure. Peer influence, parental supervision and moral value, religiosity, role models, societal and cultural permissiveness have all been found to influence an adolescent's sexual behavior [2-6]. Though the data is different from many areas of the world, between 20-65% of the adolescent population remain sexually active [1-5].

The consequences of sexual activity among adolescents remain the dilemma of modern day societies. Unwanted pregnancies, with attendant high morbidity and mortality in the mother and infant, are the most obvious result of their sexual experiences [2]. An increasing number of neglected and abandoned children in Africa have also been attributed to this [7]. Sexually transmitted diseases (STDs) and HIV/AIDS are emerging in epidemic proportions among adolescent population and pose new challenges [5,8]. The sequelae of STDs include infertility, ectopic pregnancies, and spread of the disease among partners as adolescents are more likely to have multiple sex partners [4,5]. Of concern to Pediatricians is the fact that health risks from sexual activity increases steadily each year from ages 11-16 years [5].

While clear data on sexual activity among adolescent can be said to be available in many developed countries, such information is not freely available in our environment. This work was carried out as part of a major research in Ilorin metropolis, in Kwara State of Nigeria in order to update our knowledge on adolescent sexual activity and some factors that affect it so as to enable us create a meaningful adolescent sexual health programme.

Methods

The study was conducted in Ilorin metropolis located in the North central region of Nigeria. Data was collected over a week period in Nov. 2000. A multi-staged random sampling method was used to select the schools of respondents. The number of schools in Ilorin metropolis totaled 52. The schools were stratified into single sex and co-educational schools, these were 8 single sex (4 boys and 4 girls only) and 44 co-educational schools. Further stratification was carried out based on ownership:- government (30 state and 1 federal), Community (13) and missionary (7). The only private institution was no longer functioning at the time this study was conducted. All community, federal and missionary schools and 22 state schools were co-educational. Eight of the state schools were single sex schools. A school each was selected from each of the stratum via balloting. Federal, community and missionary mixed, and three state owned schools, one mixed, and one each of single sex schools were selected.

Ethical approval was obtained from the University of Ilorin Teaching Hospital management. An official permission was sought from the ministry of education. The consent of the various principals was obtained. A familiarization visit was made to each of the selected schools, and dates for the study was communicated to the authority in each of the schools.

Correspondence Dr A A. Abdulkarim, Department of Paediatric/Child Health, University of Ilorin Teaching Hospital, Ilorin. E-mail: aishakarim@yahoo.com

Following the apriori determination of sample size [9] of the required number of respondents, a systematic random sampling using class register was undertaken. The first student was selected in SS1 to SS3 in each school by using the table of random numbers. Our pilot study indicated that students in the junior classes were not capable of objectively answering most of the questions. For the students participation was voluntary and informed verbal consent was obtained. Trained supervisors recruited among medical students assisted the researchers in the main study. All selected students were gathered in one hall in each of the schools. The questionnaires were distributed and explanations were given on how to answer the various questions. Teachers were not allowed into the hall during the exercise and students did not communicate with one another. The investigator was always there for final clarification and to ensure the questionnaires were properly filled. The filled-in questionnaires were collected immediately after the exercise. All respondents were acknowledged for their co-operation.

Data was analyzed using the EPI-Info version 6. Frequency counts and cross tabulations of relevant variables were made. The association between categorical variables was tested using chi-square while those of continuous variables were tested using Students t-test. For all statistical analysis, p-value = 0.05 was considered significant.

Results

A total of 1,200 students were sample of which 1181 (98.4%) responses were complete. The age distributions of the respondents are as follows: 10-14 years were 184 (16.3%) and 15-19 years were 944 (83.7%), with the mean age being 15.9 year. There were 680 (51.9%) males and 563 (48.1%) females, with a male: female ratio of 1.1:1. With respect to religion, 611 (52.4%) were Muslims, 539 (46.2%) Christians and 16 (1.4%) were traditionalists. The family distribution showed that 911 (84.3%) of the respondents' parents were married and lived together, 127 (11.7%) were married but live apart, 16 (1.5%) came from divorced or separated homes (Table 1). Seven hundred and sixty-two (65.8%) of the respondents were in mixed schools while others attended single sex schools. Two hundred and sixty four (23.7%) of the students were sexually active with significant difference between the sexes 189 (32.8%) males and 73 (13.7%) females (Tables 2) Average age at first intercourse was 11.3 years (S.D=5.8yrs) and 81(36%) were 10 years and below (table 3). Mean age for male = 11.0, for females = 9.8years. The average number of sex partners was 2-3. Only 77 (39.6%) had single partners and 46 (24.2%) had five or more partners, 41 (21.1%) had 2 partners, 16 (8.2%) had 3 partners and 14 (7.2%) had 4 partners. Multiple partners were found in 99 (69.2%) males and 16 (32.7%) females ($X^2 = 20.33$; df = 1; $P = 0.000006$).

Table 1: Background characteristics of the study population

Characteristics	No of Respondents (%)
Sex	
Male	608 (51.9)
Female	563 (48.1)
Total	1171
Age	
10 – 14 yrs	184 (16.3)
15 – 19 yrs	944 (83.7)
Total	1128
Religion	
Islam	611 (52.4)
Christianity	539 (46.2)
Traditional	13 (1.1)
None	3 (0.3)
Total	1166
Family Setting	
Married & live together	911 (84.3)
Married but live apart	127 (11.7)
Divorced / Separated	16 (1.5)
Widowed	27 (2.5)
Total	1081

Table 2: Sexual activity by gender

Gender	Sexual activity Yes(%)	No(%)	Total	X^2	P-value
Male	189 (32.8)	387 (67.2)	576	55.83	0.000001
Female	73 (13.7)	459 (86.3)	532		
Total	262	846	1108		

Table 3: Age at first intercourse

Age in Years	No of respondents (%)	Cumulative frequency (%)
10yrs	81 (36)	36
11	6 (2.7)	38.7%
12	15 (6.7)	45.3%
13	13 (5.8)	51.1%
14	16 (7.1)	58.2%
15	42 (18.7)	76.9%
16	14 (6.2)	83.1%
17	16 (7.1)	90.2%
18	14 (6.2)	96.4%
19	8 (3.6)	100%
Total	225	

In the "very religious category, out of a total of 973, 492 (50.6%) were males and 481 (49.4%) were females. In the just religious group, 97 (59.1%) were males and 67 (40.9%) females. In the non-religious category, 7 (53.8%) were males, 6 (46.2%) females, ($X^2 = 4.16$, P=0.12). Level of religious activity of respondents was similar for both sexes.

A total of 1,080 respondents constituted the very/just religious (pray daily/at least once/week) category. While 14 of the students were not religious (hardly prays). Out of those in the religious group 253 (23.4%) were sexually active while 829 (76.6%) were not. Of the 14 who hardly prayed, 7 (50%) were sexually active while the other 7 (50%) were not (X^2=5.41; df = 1; $P = 0.02$; RR = 0.47 (0.27 – 0.80).

Sexual intercourse was reported among 6 (37.5%) of respondents whose parents were divorced/separated, in 41 (34.5%) of those whose parent were married and lived apart, and in 184 (21.2%) of those who had parents that were married and lived together (X^2=12.19; df = 2; $P = 0.002$). Of a total of 866 responders whose parents lived together, 184 (21.2%) had had sexual intercourse. Of 135 respondents from separated/

divorced homes combined with those whose parents were married but lived apart, 47 (34.8%) had had sexual intercourse (X^2 = 12.11, df = 1; P = 0.0005)

Discussion

The present study has confirmed the continuing occurrence of sexual activity among children and adolescents in our environment. This is similar to those reported from other parts of Nigeria in the last decade [6,10]. The males were significantly more active and were won't to have multiple sexual partners. This is a fact in support of the presumption that most sexual activity is male initiated, and most sexual behavior male influenced. Moreover premarital sex in the male is viewed as a sign that he is developing within the norm, due to societal and cultural permissiveness. It is therefore clear that issue of adolescent sexual activity has to be directed at both sexes with greater focus on the male.

The significant impact of moral teachings of our religion is well reflected in the present finding, which showed that respondents with high level of religious activity were less likely to practice premarital sex. This is consistent with the finding summarized by Grant *et al* [2].

Those from a stable family unit had significantly lower level of sexual activity. This shows a protective effect of parental control and / or supervision, as well as support for the younger members of the household.

This study shows that the-not-so religious adolescent male, from a divorced/separated home, is more likely to be involved in sexual intercourse. He is also likely to have multiple partners and therefore higher risk for STDs, and HIV/AIDS. This should assist in focusing preventive strategies at adolescents who are at greatest risks for consequences such as STD's and HIV infection.

The average age at first sexual intercourse was 11.3 years, compared with 14.7 years recorded in an earlier survey in Ilorin [6]. This suggests that our adolescents are getting involved in sexual behavior at a lower age. This may partly be accounted for by the fact that children start school earlier now and are getting to secondary schools at younger ages, thereby increasing their exposure to sexual activity. Females were active at a lower age than males and it seemed likely that the younger female was usually involved with an older male. Such practice is culturally acceptable in our society and has been observed elsewhere [1]. The present findings are evidences of a changing society and decreasing moral norms. The Pediatrician should in these circumstances be ready to deal with issue that relate to STDs and their complications, contraception and unwanted pregnancies. They must anticipate sexual activity in adolescents as they are best placed to offer facts and guidance on the issues, even in the routine practice. In order to be more effective health educators, Pediatricians must move out to the schools and community. Well-researched data must be available to health professionals to enable them provide facts and guidance / counseling to those adolescents who need it most. Proper education on the effects / risks attendant on early, and unprotected sex must be communicated to all adolescents and children via the school health and community based programmes. The clear message must be that of abstinence from pre-marital sex as clear benefits exist. Only then, can the Pediatrician's role in child and adolescent advocacy be complete. Parents, teacher and other health professionals must also be actively involved in educating children and adolescents on the dangers of unprotected sex. The role of religion should carefully be considered as providing positive influence on the attitude and self control needed to improve the moral quality and tone of our youths.

Any adolescent sexual health programme must therefore be all encompassing. It must be focused at children from primary school levels, pay greater attention to the males and have the active involvement of the parents (such as parents/ Teachers associations), must have active community participation and those of religious leaders. Adequately informed adolescents with the right morals are likely to be better educators of their peers in whatever programme is put in place. All stakeholders in this issue must shape such a programme.

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