

AIDS Prevention Programs and Sexual Behaviour Among Secondary School Adolescents in Delta State, Nigeria.

Victor O. Oboro¹ and Tabs O. Tabowei²

¹Department of Obstetrics and Gynaecology, General Hospital, Kwale, Delta State, and

²Delta State Ministry of Health, Asaba, Delta State, Nigeria.

Abstract

Context: For the most part, adolescents are informed about HIV, its means of transmission and its method of prevention, but a large proportion of them still engage in patterns of sexual behaviour that may expose them to contracting HIV infection

Objective: To examine the pattern of sexual behaviour of Nigerian adolescents and its possible determinants, so as to identify areas requiring emphasis in existing HIV/AIDS prevention programs

Design, Setting and Subjects: A questionnaire survey was carried out on 516 adolescent secondary school pupils in five urban centres in Delta State, Nigeria to obtain socio-economic and demographic data, and information about the level of HIV awareness, methods of prevention and sexual behaviour.

Results: Nearly all (94%) of the adolescents had heard about HIV/AIDS and knew that it is sexually transmitted. Despite this, 69% of them were sexually active at the time of the survey, and about one-third had multiple sexual partners, with less than 20% using condoms. Moreover, over half had engaged in casual sex in the preceding 12 months. Poverty and family instability were significantly associated with risky sexual behaviour.

Conclusion: Informing and educating young people about HIV/AIDS does not seem to be sufficient to motivate them to change their sexual behaviour. Consequently, AIDS prevention programs should place greater emphasis on encouraging abstinence, fidelity, reducing the number of sexual partners, the use of condoms, and economic empowerment of adolescents.

Key Words: HIV, AIDS, Sexual Behaviour, Adolescent, Prevention. [Trop J Obstet Gynaecol, 2003, 20: 16-19]

Introduction

Considerable research has focused on the sexual behaviour of young people as part of the growing concern over adolescent pregnancy and the spread of HIV and other sexually transmitted diseases (STDs)^{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}. Indeed, adolescents' sexual behaviour has become a focus of programmatic efforts for reducing pregnancy and STDs. Sensitisation and information programs on AIDS are being implemented in Nigeria, along with efforts to promote the use of condoms. However, the effects of these programs are uncertain. Moreover, an appreciable increase in the level of awareness about AIDS has not translated into adoption of healthy sexual behaviours in some strata.^{1, 2} As a result, the prevalence rate of HIV/AIDS continues to increase in Nigeria and other sub-Saharan Africa, with disastrous psychosocial, demographic and socio-economic repercussions.

Since HIV awareness among Nigerian adolescents is high, yet risky sexual behaviour continues among them unabated,^{3, 4, 5, 6, 7, 8, 9, 10}, this study was carried out to further examine factors that may be associated with high-risk sexual behaviour in some Nigerian adolescents. The result would be useful in the development of appropriate intervention measures and the modification of existing ones^{11, 12, 13}.

Subjects and Methods

This study used data from the survey on the sexual behaviour of 516 pupils in secondary institutions in Delta State of Nigeria conducted by the Scientific Committee of the Delta State chapter of the Nigerian Medical Association in April 2001. A multistage sampling technique was used for the survey. A simple random sampling method with the aid of a table of random numbers was used to select 10 schools from 28 secondary schools that were in session in five towns, namely Warri (3 schools), Ughelli (2), Sapele (2), Asaba (2), and Agbor (1), at the time of the survey. In each school, selection of respondents was by a simple random technique using a table of random numbers. Each eligible candidate was given an identification (ID) number, to generate a sampling frame, from which selection was made after identifying a starting place in the table at random. A pre-tested, self-administered questionnaire was given to each unmarried pupil aged 16-19 years selected from the institutions. The content of the questionnaire was explained to them.

Correspondence: Dr V.O. Oboro, Department of Obstetrics & Gynaecology, LAUTECH College of Health Sciences, PMB 4400, Osogbo, Osun State, Nigeria. E-mail: oborovo@yahoo.com.

Confidentiality was assured, as the identities of the participants were not required. Verbal consent was obtained from each participant. Each survey session was completed in approximately 40-45 minutes. The completed questionnaires were immediately sealed in envelopes and delivered to the lead researcher for analysis.

The information collected in the survey included the participants' social, economic and demographic characteristics, the characteristics of the adolescents' household and family environment. Participants were also asked about family life education by parents, guardians or teachers, awareness of HIV/AIDS, knowledge about HIV/AIDS prevention methods, and sources of information. Their attitude about sex and HIV/AIDS, the methods they had taken to prevent the disease and their sexual patterns were explored.

Statistical Analysis

The data from the survey were entered into a personal computer and analysed using the SPSS for Windows, Release 7.5¹⁴. Study variables were categorised and analysed to detect association with risky sexual behaviour using the χ^2 test. The levels of significance were set at $p < 0.05$.

Results

Twenty classes from the ten selected institutions were surveyed. Although the response rate was 100%, we excluded 77 out of the 593 respondents because of observed inconsistency in response to questions regarding demographic information and sexual activity status. The remaining 516 were retained for analysis. Males were more heavily represented than females in the sample [304 (59%) vs 212 (41%)]. The mean age and standard deviation [SD] of the respondents was 17.2 (1.1) years. Nearly two-thirds lived at home with their parents, and 55% had been raised by both of their biological parents. Some 63% of respondents were Roman Catholic, and 71% attended religious service more than thrice a month. The prevalence of smoking and alcohol intake among participants were 16% ($n = 83$) and 12% ($n = 62$) respectively. The great majority (89%) of the adolescents were sexually active at the time of the survey and 351 (68%) had multiple sexual partners. In the preceding 12 months, 335 (65%) had engaged casual sex. Despite this, the rate of condom use was very low [$n = 67$ (13%)]. There was a marked difference by gender in the rate of condom use, with boys being more likely to use condoms than girls (18% vs 5%, $\chi^2 = 19.356$, $df = 1$, $p < 0.001$).

Concerning family life education, about 439 (85%) of adolescents admitted that they discussed sexual matters with their peers. However, only about 25% discussed such issues in a family setting. Of those who responded that they discussed sexual matters, 366 (71%) discussed only with their brothers or sisters, 77 (15%) with their mothers, while only 10 (2%) discussed sexual issues with their fathers (7 girls, 3 boys). The ideal age in years for first sexual intercourse was thought by the adolescents to be 12.7 (SD 1.7) for girls and 14.7 (SD 2.0) for boys.

Majority of the respondents demonstrated high HIV/AIDS knowledge. Four hundred and eighty-five (94%) of the adolescents had heard of HIV/AIDS, 299 (58%) from friends or school. There was no significant variation by gender in the level of HIV/AIDS awareness. Sexual intercourse was identified by most of the adolescents as a way of HIV transmission (93%). The group at greatest risk of contracting the virus was reported as prostitutes (96%). Condom-use was the most commonly mentioned method of preventing HIV/AIDS (93%). Again there was no significant gender variation in response. The main measures that respondents have adopted to prevent HIV/AIDS were abstinence (24%) and faithfulness to one partner (19%); females were more likely than males to have adopted these prevention methods {147/212 (69%) vs 75/304 (25%); $\chi^2 = 101.663$, $df = 1$, $p < 0.001$ }.

Data on the characteristics of the respondents' first sexual experience revealed that 51% of the adolescents had engaged in coital acts before the age of 16 years, and 69% by the age of 19 years. The median age at first sexual intercourse was 13 for males and 15 for females ($p = 0.66$). Most females had their first sexual experience with someone older than themselves (77%), while most males had done so with someone of their age group (51%) or younger (47%). Overall, the coitarche was reportedly not voluntary in 35% of the cases. The commonest motivation for the first coital act was curiosity in over half of male respondents. Overall, there was little intention to marry first partner (20%), but with an intention to continue having a relationship with the first partner (71%).

Some socio-economic, demographic and environmental factors were identified as potential determinants of risky sexual behaviour, defined as any of (i) sexually active at time of survey, (ii) having multiple sex partners, (iii) had casual sex in the past 12 months and (iv) non-use of condoms. Risky sexual behaviour was significantly more common among the boys ($p < 0.001$), in those from a polygamous family ($p < 0.05$), in cases where the

parents were not living together ($p < 0.05$), in those from poor households [estimated monthly income less than N25,000.00] ($p < 0.05$), in those having first sexual intercourse before age 16 years ($p < 0.05$), in those with sisters who had teenage pregnancy ($p < 0.05$) and those who had poor communication with their parents about sex ($p < 0.05$). Those raised by or currently living with both parents ($p = 0.61$), those of Protestant sect ($p = 0.72$) and those who attend religious service more than thrice a month ($p = 0.12$) were less likely to engage in risky sexual behaviour, although these differences were not statistically significant.

Discussion

Premarital sexual activity is highly prevalent among Nigerian adolescents^{2, 3, 4, 5, 6, 7}. This puts them at a significantly high risk of acquiring HIV/AIDS infection. As the level of perception of sexual behaviour and knowledge about sexually transmitted diseases appears to be high among Nigerian adolescents^{2, 3}, factors other than their knowledge or awareness might be responsible for their risky sexual behaviour. These factors, when identified, could be incorporated into designs of youth-friendly programs and assist in the modification of existing HIV/AIDS prevention programs.

The low level of family life education in the family setting observed in this study is consistent with findings from other African countries that the level of communication between adolescents and their parents or guardians on the subject of sex was poor.⁷ This may be due to lack of adequate parental knowledge about the subject and because cultures placed little emphasis on explanation and verbalisation.¹ Consequently, AIDS prevention programs should incorporate educational programs to improve parents' knowledge of the reproductive health of young people, to prepare them for establishing good and open relationships with their children and to give appropriate advice in the area of sex education. These results also point to the need for introducing family life education programs in schools and youth centres.

The young people surveyed in this study were well informed about HIV/AIDS, its main modes of transmission and methods of prevention, but they continued to engage in patterns of sexual behaviour that exposed them to infection. Thus, informing and educating young people about sex and AIDS does not seem to change their sexual behaviour much, as

reflected by the high percentage of those engaged in sexual activities, having multiple sex partners, having casual sex and not using condoms among the respondents. Therefore, it is suggested that AIDS prevention programs place a greater emphasis on abstinence, fidelity, reducing the number of sexual partners and using condoms.

The finding that almost four in ten adolescents said that their first sexual experience was not voluntary is similar to findings in Cameroon¹ and suggests that parents need to mobilise their communities against sexual violence towards women.

That non-cohabitation and conjugal instability among parents are potential determinants of risky sexual behaviour, which was observed in this study, supports previous observations of a similar nature in Cameroon and Uganda^{1, 11}. It suggests that most of the students' sexual activity occurred when parents were away or when the students were staying with relatives, and that orphans and children living with single parents were more likely to engage in sexual acts. It appears that young people living with their parents are more likely to be under parental control, and less likely to have emotional problems that may predispose them to seeking sexual gratification¹². Consequently AIDS prevention programs should incorporate parental sensitisation about these problems to minimise high-risk adolescent sexual behaviour.

Poor socio-economic status is a risk factor for risky sexual behaviour among adolescents as observed in this and other studies.^{5, 6, 7, 8, 10}. This may partly explain the high percentage reporting economic reasons as motivation for engaging in sexual activities. This is particularly so in girls, which may partly explain the high rates of non-use of condoms among girls compared to boys. Engaging in risky sex for material gains may negatively influence the power of the girls to require the use of condoms during sexual intercourse^{1, 12, 13}. Improvement in the socio-economic conditions of families, especially those with adolescent daughters, might well reduce the transmission of HIV over the long run.

In conclusion, adolescents with few economic resources and those with less stable environments are more likely than their peers to engage in sexual behaviour that puts them at risk of contracting HIV. Improving the living conditions of families and stressing the need for condom use could help curb the spread of HIV/AIDS among the youth.

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