

## PREDICTORS OF CONDOM USE AT SEXUAL INITIATION AMONG UNMARRIED MALE YOUTH

### BACKGROUND

Adolescence is a time when many young people experience critical life-defining challenges such as their first sexual experience, marriage, pregnancy, and parenthood. Initiation of sexual intercourse has been described as a milestone in the physical and psychological development of men and women in all societies (Singh, *et al.*; 2000). This episode in life is taking place in a different socio-economic context from previous generations. Studies from different cultural settings have revealed that the circumstances of adolescents' first sexual encounters have immediate and longer term consequences for their sexual health in later life (Forste and Heaton, 1988; Gueye, *et al.*, 2001). Some instances of very early sexual intercourse are involuntary – for example, when a young person is raped, or is a victim of incest or turns to prostitution because of financial need (Singh, *et al.*, 2000; Rwenge, 2000). A study of 330 female rape victims in Benin City, Nigeria, revealed that majority of rape victims were females ages 13 -19; 48 percent were under age 13 (Omorodion and Olusanya, 1998). Ajuwon, *et. al.*, (2001) reported that 8 percent of in-school and 5 percent of apprentices adolescents in Ibadan had been raped. Slap, *et. al.*, (2003) reported that 11 percent of secondary school student aged 12-21 in Plateau State had had forced sexual intercourse.

Adolescent sexual behaviour is important not only because of the possible reproductive outcomes, but because risky sexual behaviour is associated with HIV/AIDS infection. Early sexual initiation poses health risks for both young men and women. Most young adults who enter into a sexual relationship for the first time do not use any form of contraception and were ignorant of the consequences of their acts (Magnani *et. al.*, 2001; Oyediran, *et. al.*, 2002) leaving them vulnerable to unintended pregnancies and unplanned parenthood. For instance, Magnani

*et al.*, (2001) in a study of adolescent sexuality in Peru observed that 38 percent of male youth reported that they used condom at the time of first intercourse. Oyediran, *et. al.*, (2002) observed that 43.9 percent of in-school adolescents with single parents in Ibadan do not know that pregnancy could follow exposure to first coitus. Furthermore, the visible consequences of teenage sexual behaviour in Nigeria are high rates of adolescent out-of-wedlock, pregnancies, abortions and sexually transmitted diseases which increase the risk of HIV infections (Archibong, 1991; Brabin *et al*, 1995; Ekweozor *et al*, 1995; Bello *et al*, 1997; Arowojolu *et al*, 2003). For example, forty-two percent of adolescent girls in a rural community in Rivers state had had induced abortion or STI including gonorrhoea (Brabin *et al*, 1995). In Jos, 24 percent of patients attending an STI clinic are aged less than 25 years (Bello *et al*, 1997). In Calabar, 72 percent of patients admitted for complications of abortion are aged between 12-20 years (Archibong, 1991).

In Nigeria, sexual activity among adolescent is a public health priority and concern for government officials, donors and programme managers because of the serious outcomes usually accompanying teenage unprotected sexual exploit (Isiugo-Abanihe, *et. al.*, 1999; Moronkola and Idris, 2000; Esiet, 2003). This growing concern is reflected in the number of reproductive health interventions aimed at unmarried youth that have been implemented in many settings in recent years and increasing level of resources earmarked to such programmes. Studies on adolescent sexuality suggest that Nigerian youths are becoming sexually active at an earlier age (Nichols, *et. al.*, 1986; Feyisetan and Pebley, 1989; Makinwa-Adebusoye, 1992; Oyediran, *et. al.*, 2002; Isiugo-Abanihe and Oyediran, 2004). According to the 2003 NDHS, 75.5 percent of women age 25-49 had sexual intercourse by age 20 and 39.3 percent of men aged 25-59 had sexual intercourse by age 20. In a related analysis of the 1999 NDHS, Isiugo-Abanihe and Oyediran (2004) found that

31.5 percent of unmarried female youth (15-24 years old) were sexually experienced and the median age of sexual debut was 16.6 years. Only one-fifth of these sexually active unmarried female youth however, used a condom at last sexual intercourse, hence making them vulnerable to unplanned parenthood and sexually transmitted infections, including HIV/AIDS.

Furthermore, sensitization and information on the consequences of unprotected sexuality including AIDS have been implemented along with efforts to promote the use of condoms. These programmes have, however, had limited impact in the translation of knowledge about HIV/AIDS and prevention methods into the adoption of healthy sexual behaviour (Brieger, *et. al.*, 2001). In addition, adolescents are poorly informed and ignorant of the implications of unprotected sex, especially first sexual coitus (Makinwa-Adebusoye, 1991; Oyediran, *et al.*, 2002). For instance, Oyediran, *et. al.*, (2002) in a study of in-school adolescents in the city of Ibadan, Nigeria noted that the majority of sexually active adolescents were not aware of the possible occurrence of pregnancy at first intercourse. The study revealed that 70% and 60% of male and female adolescents respectively were not aware of the possible occurrence of pregnancy at first sexual intercourse. Also, Makinwa-Adebusoye (1991) in a study of youth in five Nigerian cities reported that one-third of non-contraception and sexually active youths did not realize that first coitus could result in pregnancy. This lack of knowledge may translate into non-use of protective measures for unwanted pregnancy as well as sexually transmitted infections (STIs).

Evidence also suggests that adolescents have sex because of peer pressure, curiosity, love, promise of marriage and to have fun (Radhakrishna, Gringle and Greenslade, 1997; Gueye, *et. al.*, 2001; Rosenthal, *et. al.*, 2001). Given that parents do not discuss sexual matters with their offsprings, information about sex is largely obtained from peers and garbled, inaccurate literature. Moreover, information provided by the mass media is distorted and peers tend to

misinform as they lack adequate and correct knowledge of sexual and reproductive health. Most adolescents, especially males in Nigeria, do not use pregnancy prevention methods particularly condom for a number of reasons that include false belief that their female partners will not get pregnant; unavailable youth-friendly clinics from which they can seek advice on contraceptive methods; and refusal to attend clinics for reproductive health issues due to lack of privacy.

This article examines the predictors of condom use at sexual debut among unmarried male youths in Nigeria. Condom use during first sexual experience warrants special attention in light of the spread of sexually transmitted infections (STIs) and the HIV/AIDS pandemic as well as the increase in unwanted and unplanned pregnancies that may lead to school discontinuation.

## **DATA AND METHODS**

The analysis presented in this paper uses data collected in the Nigeria Demographic and Health Survey (NDHS) conducted between March and September 2003. The survey was a national representative sample survey covering 7,864 households located in both urban and rural settings. The area-sampling frame for the survey was based on the enumeration areas (EAs) map prepared by the National Population Commission (NPC) for the conduct of the 1991 census. Sample selection was done in two stages: First, 365 clusters were selected with equal probability; second, within each of these 365 clusters, a complete listing was done of all residents in sampled households, from which male and female respondents were interviewed. A total of 7,684 households were selected for the study, of which 7,327 were found. The shortfall is largely due to structures that were found to be vacant at the time of survey. Of the 7,327 existing households, 7,225 were successfully interviewed implying 99 percent response rate. In these households, 7,985 women and 2,572 men were eligible for the individual interview. However, a total of 7,620 women aged 15-49 and 2,346 men aged 15-59 were successfully interviewed

representing a response rate of 95 and 91 percent for women and men respectively. Among the male respondents, 827 are between 15-24 years and have never married or lived together with a woman. The analysis here is restricted to this sub-population.

The analysis focused on four reproductive health outcomes: whether respondents had had sex, whether respondents had sex in the four weeks prior to the interview, whether they had used condom at first sexual intercourse, whether condom was used at the last sexual intercourse. Demographic characteristics of respondents are included in the analysis to identify factors for possible intervention and to act as control variables in the analytical models. The characteristics considered are age, highest level of education completed, place and region of residence, religious affiliation, media exposure, and wealth index. The analysis of the first outcome is based upon responses provided by the entire sample population of 827. However, the analysis of the remaining three outcomes was based on the responses of the respondents who had sexual experience.

Both descriptive and analytical analyses are conducted to ascertain the association and net effect of the key independent variables on the dependent variables (sexual activity and condom use) when the selected background characteristics are controlled. The statistical analyses were undertaken in two phases. Firstly, bivariate relationships between each of the selected characteristics/predictors and the reproductive health outcomes of interest were established. The significance of difference among categories of the discrete outcomes was tested through Pearson chi-square statistic.

Factors for which significant bivariate associations were observed were retained for subsequent multivariate analyses. Four of the five behavioural outcomes of interest (ever had sex, condom use at first sex, condom use at last sex, sexually active in the previous four weeks) are binary outcomes. Logistic regression was used in determining the effects of predictor

variables on the selected reproductive health outcomes while the proportional hazard model was used in assessing the effects of independent variables on age at sexual initiation.

## **RESULTS**

### **RESPONDENTS' PROFILE**

A total of 827 never married men age 15-24 years who were interviewed during the 2003 NDHS were analysed in this study. The basic-demographic characteristics of the study population are provided in Table 1. About 54 percent of them are 15-19 years of age while the remaining 45.8 percent are aged 20-24 years. The median age of the respondents was 19.0 years. The survey indicated that more than half of the respondents reside in rural areas and 47.2 percent had childhood place of residence in the countryside. Spatial distribution of the study population shows that 52 percent of them reside in the north, while the remaining 48.0 percent reside in the three-regions in the southern part of the country.

Data on educational attainment indicate that the majority (about 70 percent) of the youth under study have had some secondary education. Only six per cent of them have post-secondary education and 8.6 percent have no formal education at all. Christians constitute a majority of the sampled population with three out of five male adolescents being Christians. Muslims constitute 41.2 per cent, and less than 1 percent are adherents of indigenous religions. The wealth index revealed that about one out of four youth is from a household classified in the fifth quintile.

The findings reveal a high level of exposure to electronic media. Most respondents listened to the radio at least once in a while, and about 58.5 percent of young adult males reported listening to the radio every day. Meanwhile, about a quarter (23.0 percent) had never watched television; 29.9 percent watched television every day. The result indicates that access to media is widespread.

## **SEXUAL BEHAVIOUR**

Overall, 42.9 percent of respondents had ever had sexual intercourse and the median age at sexual debut is 18.0 years. Among those who were sexually experienced, about one-fifth had sexual relations in the month preceding the survey and about 47 percent had intercourse four weeks before interview. Table 2 displays the distribution of sexually experienced unmarried men, current sexual activity and median age of sexual debut by selected socio-demographic factors.

The analysis revealed that the proportions of respondents who are sexually experienced as well as those who had sexual relation in the month preceding the survey increase with age. For instance, one-fourth of unmarried male respondents' age 15-19 years and 62 percent of their elder peers aged 20-24 years had ever had sex. The corresponding figures with respect to sexual activity in the past month are 44.9 per cent and 47.2 cent respectively. Table 2 shows regional differences in the level of sexual activity, with respondents in the southern regions, especially the youth from southeast and south-south, manifesting higher levels of sexual activity and initiating sex earlier relative to those in the north. This analysis indicates that male unmarried youth from the southeast commenced sexual activity about one-half years earlier than counterparts from the northern and southwest regions.

Rural residents tend to initiate sexual relations earlier than those in urban areas (about one year difference), and are slightly more sexually experienced and sexually active in the preceding month prior to the interview. For instance, 45.1 percent of unmarried male youth who are rural dwellers were sexually experienced compared with 39.6 percent among their urban counterparts. Childhood place of residence somewhat supports the notion of lower sexual activity among those who have some urban exposure. Table 2 clearly shows that increased educational attainment is associated with an elevated likelihood of being sexually experienced. About three-fifths of the respondents who have tertiary education had ever had sex compared

with 31.6 percent among those who did not attend any formal school. However, the age at sexual debut is generally higher among those with higher level of education relative to those with low levels of education. This finding indicates that male adolescents with no formal education started sexual activity two years earlier than those with tertiary education. This may explain why the male youth in southeast region started sex earlier than their counterparts from other regions due to high prevalence of school drop-outs in the region.

Religion is believed to have a profound impact on individual behaviour and views. Even in the face of modernization and its consequences on cultural practices, religion seems to still hold a firm grip on moral values relating to sexual activity. Therefore, male adolescents who are more religious are more likely to hold types of beliefs that may discourage sexual activity. The relationship between religious affiliation and reproductive health behaviour, particularly sexuality, is likely to be mediated by social and demographic factors, such as education of the respondent. Table 2 shows that Muslim male youth are less sexually experienced but more sexually active in the preceeding month than their Christian counterparts. For instance, about 37 percent of Muslim male adolescents in Nigeria reported being sexually experienced relative to 47.7 percent of their counterparts who are Catholic. In addition, respondents who are Muslim started sexual activity about one year later than Christian respondents and two years later than adherents of other faiths. The Muslim youth reported being more sexually active in the last four weeks than their other Christian counterparts (56.6% vs. 32.4%)

Table 2 shows that wealth quintiles are inversely associated with sexual experience. First, those from first wealth quintile started sexual relation one year earlier than those from other wealth quintiles except those from the fourth. By the same token, sexual experience tends to increase as wealth quintile declines. Current level of sexual activity revealed same patterns. Level of access to media information is positively related with the level of sexual activity although the

median age of initiation of sex is inversely related with access to information. Respondents with low access to media information started sexual activity almost 12 months earlier than those with better access to information.

In the logistic regression model (Table 3), unmarried male youth aged 20-24 years were (5.49 times) more likely than those 15-19 years to have had sex. The odds of engaging in pre-marital sex were higher among urban males than rural men (1.64), a finding that is consistent with earlier research results in Nigeria (Feyisetan and Pebley, 1989; Isiugo-Abanihe and Oyediran, 2004). Region of residence is also associated with engaging in pre-marital sex: compared with men in north-central, those in northeast, northwest and southeast were significantly less likely to engage in pre-marital sex. For instance, those in northeast were about half as likely to engage in pre-marital sex compared with those in north-central states. The results indicated that odds of engaging in pre-marital sex are associated with wealth index. Unmarried male youth from households classified into second quintile and fourth quintile were less likely to have pre-marital sex as compared with those from household rank in first quintile. Two of the three proxies for media exposure – frequency of watching television and listening to radio were significantly associated with Nigerian male youth engaging in pre-marital sex (Table 3).

With respect to correlates of current sexual activity in the previous four weeks, the logistic regression in Table 3 reveals that region of residence; religious affiliation and frequency of watching television were significantly associated to whether the unmarried males engaged in pre-marital sex in the last four weeks before the survey. Those who reside in the southeast were almost four times less likely to engage in sex in the previous four weeks compared with their counterparts from north-central region. Furthermore, unmarried Christian male adolescents were three times less likely to have had sex in the previous four weeks as compared with unmarried Muslim male adolescents.

The results of the proportional hazard-regression analyses of the determinants of age at sexual debut are showed in Table 4. The hazard rates shown in the table indicate the relative risk of a given outcome per unit increase in a specified independent variable. For instance, a rate of 1.5 for the factor “friends have had sex” would be interpreted as implying that young people whose friends had sex were one and a half times more likely to have initiated sex earlier than his counterpart, net of the effects of other factors considered in the analysis. Of all the co-variate included in the analysis, only the region variable emerged as a significant correlate, with unmarried males living in the northwest being significantly less likely than their counterparts in the southwest to commence sexual activity later in life. The observation of later sexual initiation among adolescent males in the north-western region is consistent with results of 1999 NDHS (Isiugo-Abanihe and Oyediran, 2004). The finding is also supported by the fact that marriage occurs earlier in the northern region than southern regions because of the adherence to Islamic tenets.

#### **CONDOM USE DURING SEXUAL INTERCOURSE**

Although a majority of the adolescent boys in Nigeria were sexually experienced, the level of condom use amongst them is low, an indication of their high level of vulnerability to sexually transmitted infections, including HIV/AIDS. Less than one-fifth (17.1 percent) of unmarried male youth who were sexually experienced reported using condom at the time of their first sexual act. Table 5 shows the percentage distribution of respondents who reported condom use at their first sexual experience according to selected background factors. Table 5 indicates that condom use at first sexual initiation varies considerably according to the personal attributes of the respondents. As would be expected, the proportions of respondents who reported condom use at first sexual intercourse increase with age. For instance, 10.6 percent respondents’ aged 15-19 years reported condom use at first sexual intercourse relative to 19.9 percent of those

aged 20-24 years. The result indicates that condom use at first sexual initiation tends to be higher among urban dwellers than those residing in the rural areas. About 3 out of 10 urban-dwellers included in this analysis reported condom use at first sexual intercourse compared with 11.1 percent for those living in the rural areas.

Table 5 reveals a large regional difference in condom use at first sexual intercourse among Nigerian unmarried male youth. It is evident from the table that more male adolescent respondents in the southern region reported condom use at sexual debut, relative to those in the North. For instance, two-fifths of the respondents in the southwest region used condom at first sexual intercourse compared with 8.2 percent among the respondents in the northeast region. The finding shows that childhood place of residence confirms the notion of higher condom use among those who have some urban exposure. As can be seen in Table 5, condom use at first sexual intercourse was associated with higher levels of education; better access to media through newspapers, television and radio; and higher socio-economic status as reflected in the wealth index. This finding could be attributed to the fact that unmarried male adolescents in the fifth quintile are more likely to be well exposed to information about grave consequences of unprotected sexual acts. In addition, there is likelihood that parent-child communication on reproductive health matters would be pronounced among respondents in the higher wealth index.

The results of the multivariate analysis of the determinants of condom use at sexual debut are shown in Table 6. The analysis for this outcome was restricted to those who reported that they have had sex. An odds ratio of greater than one for a particular variable indicates that respondents in that category were more likely to have had used condom than were respondents in the reference or excluded group of the correlate. While the respondents having odds ratios of less than one are interpreted as being less likely to have had used than were the respondents in

the reference category, whereas odds ratios of one implies no differences in the likelihood of condom use in comparison with the reference group.

The findings in Table 6 reveals that some factors that were important determinants of pre-marital sex also emerged as significant with respect to condom use at first sexual encounter. Among these factors were region of residence and frequency of listening to radio. Unmarried male adolescents living in the southwest part of Nigeria were six times more likely to have used a condom during their first sexual encounter than those residing in the north-central region. The odds of using condom at first sexual encounter were associated with frequency of listening to radio. For instance, boys who reported listening to radio at least once a week were almost eight times more likely to have used condom at their first sexual encounter than their counterparts who had never listened to the radio. Education is found to be significantly associated with condom at first sexual encounter among Nigerian unmarried males. For instance, young Nigerian men with post-secondary education were seven and a half times likely more to have used a condom in comparison with their reference group (no education) during their first sexual encounter.

About two-fifths (37.9 percent) of sexually active male adolescents reported having used a condom at the time of their last intercourse. Despite a high level of sexual activity among adolescent Nigerian boys, the level of condom use amongst them is low, an indication of their high level of vulnerability to sexually transmitted infections including HIV/AIDS. The results in Table 5, further reveal that condom use during the most recent sexual encounter were higher among respondents that are educated, urban dweller, Christian, have urban exposure at childhood, advanced age (among youth age group), high household socio-economic status, and frequency of exposure to newspaper, television and radio. The logistic regression in Table 6

revealed that only four out of the ten factors included in the analysis were significantly associated with condom use at the last sexual encounter among young men in Nigeria.

## DISCUSSIONS

Designing an effective programme to promote responsible reproductive health behaviour among young adults in Nigeria requires a better understanding of the factors related to their sexual behaviors. Although scholars have documented factors associated with reproductive health behaviour among Nigerian youth, few of these have examined sexual behaviour of male youth and in particular condom use at sexual debut. The findings of this study confirm the high level of premarital sexual activity among Nigerian male youth. Age of initiation of sex remains low and current sexual activity is high, even though the personal and sensitive nature of questions on sexual activity makes them prone to deliberate misreporting. Also, the results suggest that a large proportion of the youth engage in risky sexual behaviour by not using a condom to protect themselves from infection with sexually transmitted diseases and prevent unwanted pregnancy. The results reveal that initiation of sexual activity and use of condom are influenced by arrays of background, social and environmental factors (Feyisetan and Pebley, 1989; Makinwa-Adebusoye, 1992; Oyediran, et. al., 2002; Isiugo-Abanihe and Oyediran, 2004).

The study revealed that Nigerian youth who are at the greatest risk of adverse reproductive health outcomes appear to be those from families of low economic status, those who reside in the rural areas, and those who lived in the countryside during their childhood. This could be explained by the fact that a majority of male youth from these backgrounds may be denied sex education thus making them ignorant of what they need to do for protection. In addition, the societies expect that traditional norms should be adhered to strictly; however, the influence of societal norms is being eroded as a result of poverty and education that often

expose them to risky behaviour. The society expects that traditional norms which prohibit sexual intercourse before marriage is being eroded mostly due to prolonged and exposure to x-rated films. Frequent exposure to mass media, attaining higher levels of education and older youth appears to be protective factors against unprotected sex, although the youth within these categories are more sexually experienced.

Sexual practice is guided and embedded in the local cultures and norms. Although ethnicity was not included in the analysis, the regional patterns of sexual behaviour (ever had and condom use) found in this study suggests some ethnic norm influences. For example, most of the Igbo people, one of the major ethnic groups in Nigeria, live in the southeast region. The region has highest school drop-out rate among male youth in Nigeria. In such conditions, the observed early sexual debut among youth in this region may reflect lack of knowledge and ignorance associated with poor education. This is confirming high sexuality and risky behaviour observed among those respondents with low level of education. However, this influence of cultural norms is changing due to globalization and education, especially in the cities where people are more likely to abandon traditions because of the heterogeneity of populations. Still for many Nigerians, ethnic affiliation, which is usually a regional element, means shared language and norms governing behaviour and sexuality issues. The results of this study support the view that sexual behaviour in Nigeria is a function of varied socio-cultural factors including religion, level of exposure to formal education, urban-rural residence among other.

Apart from regional differences in sexual behaviour observed, several of the results show association between unmarried male youth characteristics and condom use. Compared with rural dwellers, those residing within urban environments were more sexually experienced and used condom at first coitus. The high level of sexual activity among urban youth can be seen in the context of a permissive environment which favours the attraction and interaction of youth

of opposite sex, and which, therefore, inevitably predisposes them to express themselves sexually. Although the same factor serves as a protective mechanism by encouraging use of condom due to high level of awareness on the intrinsic worth of condom use. In addition, the study indicates that older age is associated with sexuality and condom use among unmarried male youth in Nigeria. The finding of the present study supports the view that the rising sexual activity is a function of household socio-economic status (wealth index),

The study results shed further light as regards the challenges that are facing programmes aimed at improving the reproductive health situation of adolescents and young adults in Nigeria, as well as opportunities for intervention. One major challenge is the sizeable number and diverse nature of factors that appear to influence young adults' behaviour. Some of these are particular characteristics of the environment in which they are reared. Therefore, a single, easy-to-implement intervention is unlikely to provide a solution to the high rate of sexual activity and its attendant consequences of teenage pregnancy and vulnerability to the STIs/HIV/AIDS transmission in Nigeria. This is consistent with Kirby (1999) conclusion that when in a given setting and a multitude of correlates exists, each having a small impact on sexual behaviour, rather than a few correlates, each having a large impact, a single "magic bullet" is unlikely to be found to change adolescent sexual behaviour significantly.

These results have important policy implications because factors associated with sexuality behaviour and condom use among Nigerian male young people vary according to place of residence, region of residence, exposure to media and poverty measure, programs may need to position intervention differently for different target populations. The study has established that there is high level of unprotected pre-marital sex; thus, make the sampled population vulnerable to HIV/AIDS infections. In addition, it could lead to termination of education if unwanted pregnancy occurs as a result the culprits would therefore face with bleak economic future. It is

therefore imperatives for the government at all levels, parents and religious institutions to revert back to the teaching of moral values to enable the youth make responsible decisions with respect to relationship with members of the opposite sex especially during the HIV/AIDS era. The study established that condom use is very low even among educated, urban dwellers and those from affluent homes suggests that the promotion of condom use should be strengthened among sexually active youth with special emphasis on how to use them effectively and consistently as well as ensuring its availability and accessibility to potential clients. Furthermore, behavioural change communication activities should be strengthened with extensive education on sexual abstinence and safe-sexual behaviour through culturally appropriate messages, as is currently undertaken by various NGOs in the country. In particular, more effort should be made to reach the youth in the countryside, who typically have earlier sexual debut and also tend to be more sexually active, with adequate information on behavioural change, prevention of unwanted pregnancy and protection from sexually transmitted infections, including HIV/AIDS.

**Table 1: Percentage distribution of unmarried male youth (15-24) by selected socio-demographic characteristics**

<b>Characteristics</b>	<b>Number</b>	<b>Percentage</b>
<b>Age group</b>		
15-19	448	54.2
20-24	379	45.8(19.0) <sup>1</sup>
<b>Place of residence</b>		
Urban	387	46.8
Rural	440	53.2
<b>Region</b>		
North-central	160	19.3
North-east	107	12.3
North-west	169	20.4
South-east	113	13.7
South-south	127	15.4
South-west	151	18.3
<b>Childhood place of residence</b>		
City	174	21.1
Town	262	31.7
Countryside	390	47.2
<b>Education</b>		
No education	71	8.6
Primary	174	21.0
Secondary	528	63.8
Tertiary	54	6.5
<b>Religious affiliation</b>		
Catholic	167	20.2
Protestant	124	15.0
Other Christians	188	22.7
Islam	341	41.2
Traditional/Others	7	0.8
<b>Wealth quintile</b>		
First	140	16.9
Second	124	15.0
Third	152	18.4
Fourth	213	25.8
Fifth	198	23.9
<b>Frequency of reading newspaper or magazine</b>		
Never	392	47.5
Less than once a week	216	26.2
At least once a week	158	19.1
Almost everyday	60	7.3
<b>Frequency of watching television</b>		
Never	190	23.0
Less than once a week	193	23.3
At least once a week	196	23.7
Almost everyday	247	29.9
<b>Frequency of listening to radio</b>		
Never	45	5.4
Less than once a week	104	12.6
At least once a week	192	23.2
Almost everyday	484	58.5

---

<sup>1</sup> Median age of respondent

**Table 2: Percentage distribution of unmarried men who are sexually experienced, current sexual activity among sexually experienced, and median age of first sexual debut by selected characteristics**

Characteristics/variables	Ever had sex		Sexually Active in the last 4 weeks among the sexually experienced		Median age at sexual initiation
	Number	Percentage	Number	Percentage	
<b>Age group</b>					
15-19	448	24.8	126	44.9	16.0
20-24	379	62.1	283	47.2	18.0
<b>Place of residence</b>					
Urban	387	39.6	179	33.9	18.0
Rural	440	45.1	230	53.8	17.0
<b>Region</b>					
North-central	160	52.1	86	50.9	18.0
North-east	107	47.3	59	58.5	18.0
North-west	169	25.0	54	61.4	18.0
South-east	113	43.9	56	17.0	16.5
South-south	127	48.0	71	51.6	17.0
South-west	151	52.2	83	27.9	18.0
<b>Childhood place of residence</b>					
City	174	35.4	66	34.7	18.0
Town	262	45.5	137	45.2	18.0
Countryside	390	44.0	205	50.9	17.0
<b>Education</b>					
No education	71	31.6	34	57.2	17.0
Primary	174	39.6	90	51.1	17.0
Secondary	528	45.1	256	45.4	17.0
Tertiary	54	56.5	29	29.8	19.0
<b>Religious affiliation</b>					
Catholic	167	47.7	88	40.1	17.0
Protestant	124	51.5	64	52.8	17.0
Other Christians	188	46.3	100	32.4	17.0
Islam	341	37.0	153	56.5	18.0
Traditional/Others	7	56.7	4	27.2	16.0
<b>Wealth quintile</b>					
First	140	50.5	84	60.7	17.0
Second	124	35.1	55	57.5	18.0
Third	152	40.6	71	53.4	18.0
Fourth	213	38.7	89	42.9	17.0
Fifth	198	49.1	110	26.6	18.0
<b>Frequency of reading newspaper or magazine</b>					
Never	392	34.2	178	53.8	17.0
Less than once a week	216	51.5	111	42.9	18.0
At least once a week	158	49.8	84	46.7	17.0
Almost everyday	60	61.7	35	25.3	18.0
<b>Frequency of watching television</b>					
Never	190	36.9	87	63.8	17.0
Less than once a week	193	47.3	103	50.7	18.0
At least once a week	196	40.5	90	55.0	18.0
Almost everyday	247	45.5	128	27.6	17.0
<b>Frequency of listening to radio</b>					
Never	45	23.7	18	64.1	17.5
Less than once a week	104	25.5	36	49.4	18.0
At least once a week	192	36.0	83	51.6	17.0
Almost everyday	484	50.9	271	43.6	18.0

\*\*\*P<0.01

\*\*P<0.05

**Table 3: Logit-regression results for correlates of unmarried male youth reports of whether sexually experienced and, current sexual activity among sexually experienced, Nigeria, 2003**

Characteristics	Sexually Experience		Sexually active experience in the last four weeks	
	Odds ratio	Standard errors	Odds ratio	Standard error
<b>Age</b>				
15-19 years	1.00		1.00	
20-24 years	5.49***	1.04	1.45	0.42
<b>Place of Residence</b>				
Urban	1.00		1.00	
Rural	1.64**	0.42	1.49	0.55
<b>Region of Residence</b>				
North-central	1.00		1.00	
North-east	0.50**	0.18	0.78	0.35
North-west	0.14***	0.05	0.83	0.44
South-east	0.46**	0.15	0.24***	0.12
South-south	0.75	0.25	1.54	0.63
South-west	0.78	0.25	0.67	0.27
<b>Educational attainment</b>				
No education	1.00		1.00	
Primary education	1.05	0.41	2.05	1.06
Secondary education	0.64	0.26	2.32	1.31
Post-secondary education	0.53	0.31	2.39	1.92
<b>Religious Affiliation</b>				
Catholic	1.07	0.36	0.51	0.26
Protestant	0.95	0.30	0.77	0.37
Other Christians	0.77	0.23	0.29**	0.16
Islam	1.00		1.00	
<b>Wealth index</b>				
First quintile	1.00		1.00	
Second quintile	0.55**	0.15	0.89	0.37
Third quintile	0.62	0.21	1.19	0.60
Fourth quintile	0.55**	0.18	0.73	0.34
Fifth quintile	0.85	0.32	0.93	0.56
<b>Exposure to Magazine/Newspaper</b>				
Not at all	0.43	0.22	1.61	0.98
Less than once a week	0.86	0.43	1.13	0.72
At least once a week	0.95	0.46	2.04	1.24
Almost everyday	1.00		1.00	
<b>Exposure to Television</b>				
Not at all	1.40	0.53	3.10**	1.68
Less than once a week	1.87**	0.58	1.67	0.85
At least once a week	1.28	0.34	1.97	0.77
Almost everyday	1.00		1.00	
<b>Exposure to Radio</b>				
Not at all	0.24**	0.16	1.38	0.95
Less than once a week	0.35***	0.13	0.75	0.44
At least once a week	0.66	0.18	1.10	0.36
Almost everyday	1.00		1.0	

\*\*\*P<0.01

\*\*P <0.05

**Table 4: Proportional hazard-regression results for determinants of age at sexual debut among unmarried male youth, Nigeria, 2003**

Characteristics	Hazard ratio	Standard error
<b>Place of Residence</b>		
Urban	0.81	0.11
Rural	1.00	
<b>Region of Residence</b>		
North-central	0.81	0.12
North-east	0.73	0.14
North-west	0.37***	0.08
South-east	0.81	0.16
South-south	1.10	0.20
South-west	1.00	
<b>Place of Childhood residence</b>		
City	1.00	
Town	1.37	0.24
Country-side	1.36	0.24
<b>Religious Affiliation</b>		
Catholic	1.01	0.16
Protestant	0.97	0.16
Other Christians	0.90	0.14
Islam	1.00	
<b>Wealth index</b>		
First quintile	0.99	0.20
Second quintile	1.66	0.14
Third quintile	0.65	0.11
Fourth quintile	0.71	0.11
Fifth quintile	1.00	

\*\*\*P<0.01

\*\*P<0.05

**Table 5: Percentage distribution of unmarried men who used condom during first and last sexual encounters by selected characteristics.**

Characteristics/variables	Use at first sex		Use during last sex	
	Number	Percentage	Number	Percentage
<b>Age group</b>				
15-19	126	10.6	90	30.8
20-24	278	19.9	236	40.4
<b>Place of residence</b>				
Urban	179	27.3	144	54.1
Rural	225	11.1	182	27.6
<b>Region</b>				
North-central	86	12.4	69	38.5
North-east	59	8.2	47	18.1
North-west	51	6.7	47	5.3
South-east	55	28.0	39	70.8
South-south	71	11.5	55	42.0
South-west	82	40.0	69	63.1
<b>Childhood place of residence</b>				
City	65	29.2	57	54.3
Town	136	23.9	110	43.9
Countryside	202	8.3	158	27.5
<b>Education</b>				
No education	32	0.0	27	0.0
Primary	89	8.8	70	18.1
Secondary	255	17.0	205	43.0
Tertiary	28	63.7	24	86.6
<b>Religious affiliation</b>				
Catholic	87	22.2	68	46.3
Protestant	64	14.8	52	40.2
Other Christians	99	16.9	75	49.8
Islam	150	15.8	128	27.0
Traditional/Others	4	0.0	3	0.0
<b>Wealth quintile</b>				
First	83	7.8	67	14.8
Second	54	8.4	50	24.1
Third	69	10.6	51	28.4
Fourth	89	18.3	70	46.7
Fifth	109	33.2	88	65.2
<b>Frequency of reading newspaper or magazine</b>				
Never	175	7.9	137	20.4
Less than once a week	111	17.2	91	36.9
At least once a week	82	19.0	68	54.1
Almost everyday	35	53.6	29	73.6
<b>Frequency of watching television</b>				
Never	85	6.2	71	7.9
Less than once a week	102	14.0	84	37.5
At least once a week	89	12.3	69	54.1
Almost everyday	127	29.0	101	57.3
<b>Frequency of listening to radio</b>				
Never	18	5.9	16	13.0
Less than once a week	36	18.9	26	49.9
At least once a week	82	15.1	64	24.8
Almost everyday	267	18.0	219	41.2

**Table 6: Logit-regression results for correlates of unmarried male youth reports of condom use at first and last sexual intercourse, Nigeria, 2003**

Characteristics	Condom Use at First Intercourse		Condom use at last intercourse	
	Odds ratio	Standard errors	Odds ratio	Standard error
<b>Age</b>				
15-19 years	0.61	0.26	0.67	0.23
20-24 years	1.00		1.00	
<b>Place of Residence</b>				
Urban			1.40	0.52
Rural			1.00	
<b>Region of Residence</b>				
North-central	1.00		1.00	
North-east	1.32	1.14	0.39	0.23
North-west	1.14	0.96	0.19	0.18
South-east	1.96	1.58	1.97	1.07
South-south	1.67	1.34	0.89	0.44
South-west	6.00***	3.90	2.58**	1.26
<b>Educational attainment</b>				
Below secondary education	1.00		1.00	
Secondary education	1.98	1.10	2.82**	1.25
Post-secondary education	7.49***	5.88	8.88***	6.67
<b>Religious Affiliation</b>				
Catholic	1.18	0.80	0.69	0.42
Protestant	0.77	0.46	1.04	0.55
Other Christians	0.80	0.48	1.07	0.52
Islam	1.00		1.00	
<b>Wealth index</b>				
First quintile	1.00		1.00	
Second quintile	0.70	0.65	3.13**	1.74
Third quintile	0.60	0.51	2.61	1.44
Fourth quintile	0.82	0.68	3.67**	2.39
Fifth quintile	0.69	0.64	2.70	1.90
<b>Exposure to Magazine/Newspapers</b>				
Not at all	1.00		1.00	
Less than once a week	1.67	0.80	0.89	0.35
At least once a week	1.36	0.73	1.98	0.93
Almost everyday	5.46***	3.63	3.73	2.73
<b>Exposure to television</b>				
Not at all	1.00		1.00	
Less than once a week	1.74	1.05	5.04***	2.68
At least once a week	1.17	0.92	2.90	1.96
Almost everyday	1.62	1.25	2.13	1.45
<b>Exposure to Radio</b>				
Not at all	1.00		1.00	
Less than once a week	7.74**	8.21	6.22	7.42
At least once a week	3.62	3.70	0.88	1.07
Almost everyday	2.17	2.20	1.92	2.20
<b>Childhood place of residence</b>				
City	2.32	1.31		
Town	2.37**	1.06		
Country-side	1.00			
<b>Relationship of the last sex partners</b>				
Causal Friend/Sex workers			6.36***	2.88
Spouse or girlfriend/fiancée			1.00	

\*\*\*P<0.01

\*\*P <0.05

## REFERENCES

- Ajuwon, A. J.; Benjamin Oladapo Olley, Iwalola Akin-Jimoh and Olagoke Akintola (2001). "Experience of sexual coercion among adolescents in Ibadan, Nigeria." *African Journal of Reproductive Health*, 5(3): 120-131.
- Archibong, EI (1991), Illegal induced abortion—a continuing problem. *International Journal of Obstetrics and Gynecology*, 34:261-265
- Arowojolu AO, Ilesanmi AO, Roberts OA and Okunola MA (2002), Sexuality, contraceptive choice and AIDS awareness among Nigerian undergraduates. *African Journal of Reproductive Health*, 6 (2): 60-70
- Bello CSE, Egah DZ, Okwori EE, Nwokedi, EE, Katung, PY, Zoakah, AI, Opajobi, SO, Ayeni, JA, Barau, C and Mafuyai S (1997), Sexually transmitted diseases (STD): six years experience in Jos Teaching Hospital. *Nigerian Journal of Medicine*, 6(3):83-86
- Brabin L. Kemp, J., Obunge, O.K., Ikimalo, J., Dolimore, N., Odu, N.N., Hart, C.A. and N.D. Briggs (1995) "Reproductive Tract Infections and Abortion among adolescent girls in rural Nigeria." *Lancet*, 345: 270-271
- Brieger, W.; Delano, G., Lane, C., Oladimeji, O. and Oyediran, K. (2001) "West African Youth Initiative: Outcome of a Reproductive Health Education Program," *Journal of Adolescent Health*, 29:436-446
- Ekweozor CC, Olaleye OD, Tomori O, Saliu I, Essien EM, Bakare RA, Oni AA, Oyewo OO, Okesola AO and Oyemenen IN (1995), Clinical epidemiology of STD patients seen in Ibadan. *African Journal of Medicine and Medical Sciences*, 24: 321-7.
- Esiet A (2003). "Building support for adolescent health education and services in Nigeria: reflections from the experience of Action Health Incorporated (AHI) New York, New York, International Women's Health Coalition, 4 p.
- Federal Ministry of Health (FMOH) 2004. 2003 National HIV sero-prevalence and sentinel Survey, Abuja, Nigeria
- Feyisetan, JB. and AR. Pebley (1989). "Premarital Sexuality in Urban Nigeria." *Studies in Family Planning*, 20(6): 343-354
- Forste RT and Heaton TB. (1988) "Initiation of sexual activity among female adolescents". *Youth and Society*, 19(3): 250-68.
- Gueye M; Castle S; and Konate MK (2001) Timing of first intercourse among Malian adolescents: implications for contraceptive use." *International Family Planning Perspectives*, 27(2): 56-62, 70.
- Isiugo-Abanihe IM; Isiugo-Abanihe UC; and Ofrey R (1999) "Teenage reproductive health problems in the Riverine areas of Nigeria: the Nembe experience." Proceeding of the Third African Population Conference, Durban, South Africa, 6-10 December Volume V, [compiled by] Union for African Population Studies. Dakar, Senegal, Union for African Population Studies.:393-411.
- Isiugo-Abanihe, U.C. and Kola Oyediran. 2004. Household socioeconomic status and sexual behaviour among Nigerian female youth. *African Population Studies*, 19(1): 81-98.
- Kirby, Douglas 1999. *Antecedents of Adolescent Sexual Risk-Taking, Pregnancy, and Childbearing: Implications for Research and Programs*. Washington, DC: National Campaign to Prevent Teen Pregnancy.
- Magnani RJ; Seiber EE; Gutierrez EZ; and Vereau D (2001) "Correlates of sexual activity and condom use among secondary-school students in urban Peru." *Studies in Family Planning*, 32(1): 53-66.
- Makinwa-Adebusoye P (1991). "Contraception among urban youth in Nigeria." Presented at the Demographic and Health Surveys World Conference, Washington, D.C., August 5-7, 15, [6] p.
- Makinwa-Adebusoye P (1992). "Sexual behavior, reproductive knowledge and contraceptive use among young urban Nigerians. *International Family Planning Perspectives*, 18(2): 66-70.
- Moronkola OA and Idris OM (2000). "Sexual health knowledge, determinants of sexual behaviour and use of contraceptives among female secondary school students in Ibadan, Nigeria." *Nigerian School Health Journal*, 12(1-2): 27-35.
- Nichols D; Lapido OA; Paxman JM and Otolurin EO (1986). "Sexual behavior, contraceptive practice, and reproductive health among Nigerian adolescents." *Studies in Family Planning*, 17(2): 100-106.
- Omorodion, F.I. and O. Olusanya (1998). "The social context of reported rape in Benin City, Nigeria." *African Journal of Reproductive Health*, 2(2): 37-43.
- Oyediran KA; Ishola GP; and Adewuyi AA (2002). "Knowledge of possible pregnancy at first coitus: a study of in-school adolescents in Ibadan, Nigeria." *Journal of Biosocial Science*, 34(2): 233-48.

- Radhakrishna A; Gringle R; and Greenslade F (1997). "Adolescent women face triple jeopardy: unwanted pregnancy, HIV / AIDS and unsafe abortion." *Women's Health Journal*, 2:53-62.
- Rosenthal SL; von Ranson KM; Cotton S; Biro FM; and Mills L (2001). "Sexual initiation: predictors and developmental trends." *Sexually Transmitted Diseases*, 28(9): 527-32.
- Rwenge M (2000) "Sexual risk behaviors among young people in Bamenda, Cameroon." *International Family Planning Perspectives*, 26(3): 118-23, 130.
- Singh S; Wulf D; Samara R; and Cuca YP (2000) Gender differences in the timing of first intercourse: data from 14 countries. *International Family Planning Perspectives*, 26(1): 21-8, 43.
- Slap, Gail B., L. Lot, Bin Huang, C. A. Daniyam, Zink T.M. and Succop P.A. (2003). "Sexual behaviour of adolescents in Nigeria: cross sectional survey of secondary school students." *British Journal of Medicine*, 326: 1-6

## **ACKNOWLEDGEMENT**

I acknowledge access provided by ORC Macro