

Full length research paper

# **Social factors associated with teenage sexual behavior: A risk factor for STI/HIV among female adolescents in a rural Community in Plateau State, Nigeria**

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**Adolescents within the ages of 10 to 19 years sustain the most negative health outcomes from sexual behavior compare to any other age group. The aim of the study was to assess the sexual activity among teenage girls and to determine the personal and parental characteristics associated with teenage sexual behavior. A community based cross sectional studies was carried out among teenage girls who were selected through a simple random sampling technique and data was collected using a semi-structured interviewer administered questionnaire after obtaining consent from both the parents and the teenage girls. Not being in school and not staying with one's parents had a significant relationship with having sexual intercourse ( $P < 0.0001$ ), sexual intercourse was seen to be more common among teenagers of single parent, of polygamous family (83.3% and 61.5%) and those whose father had no formal education(66.7%) and were unskilled workers(52.7%). It was concluded from this study that most teenagers have initiated sexual intercourse and being in school, not staying with ones parents and type of family born into were factors that contributed to the exposure to sexual intercourse in addition to educational level and occupation of the parents.**

**KEYWORDS:** social; factors; sexual behavior; adolescents; STI

## **INTRODUCTION**

Beginning sexual activity at an early age exposes an individual to the risk of acquiring sexually transmitted infections, especially because the age is usually early for the individual to have acquired the necessary sex education to navigate relationships successfully.[Hallett T B et al, 2007] Adolescence is the period during which sexuality issues naturally arise and sexual behavior may determine both physical health and psychosocial development.[Greydanus D et al, 2009].Sexuality is a multidimensional concept which encompasses sexual meanings, identities, desire, orientations and pleasure as well as types of partnerships and sexual acts. It goes beyond concerns related to behaviour, numbers of sexual

partners and practices, to the underlying social, cultural and economic factors that make individuals vulnerable to risk and affect the way in which sex is sought, desire and/or refused by young people. For sundry reasons the sexual health of the youth in Nigeria, or their state of physical, emotional, mental and social well-being related to sexuality, leaves much to be desired, especially against the backdrop of the HIV/AIDS epidemic.[Andres D et al 2007]Most youth in Africa initiate sexual activity while they are still of school age[Hallett T B et al 2007] and adolescents in Nigeria have high burden of sexual and reproductive health problems,[Fatusi A O, 2005] and those within the ages of 10 to 19 years sustain the most negative health outcomes from sexual behavior compare to any other age group,[Bearinger L H et al , 2007] theage-specific fertility rate of adolescent girls was 126 per 1,000 in 2003; and a quarter of females aged 15–19

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years are said to have begun childbearing in Nigeria.[NPC, 2004].According to the 2008 Nigeria Demographic and Health Survey( NDHS), the percentage of girls age 15-19years who had had sexual intercourse in the 12 months preceding the interview were 33.3%.[NDHS, 2008] which is higher than the figure recorded in the 2003 NDHS where 20% of girls aged 15-19 had initiated sex at the time of the interview.[NDHS, 2003].Sexually active adolescents are at an increased risk for sexually transmitted diseases (STD) due to their elevated rates of sexual activity, adoption of multiple sexual partners, concomitant use of illegal substances during sexual activity, immature development of the adolescent female cervix, practical difficulties in planning sexual activity and adolescent “magical thinking”(i.e., no personal harm will result from high risk behavior patterns and inherent barriers to related guidance and/or medical treatment).[Pratt H D et al, 2007]

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## **METHODOLOGY**

### **STUDY AREA**

The study was conducted in Gyel, sabon barki community of Jos South LGA of Plateau State Nigeria. It is a community with an estimated population of 306,716 according to the national census 2006.[NPC, 2006]Jos South LGA is one of the 17LGAs in the State which is bounded by Jos North

### **STUDY POPULATION**

The study population was female teenagers residing in the community.

### **STUDY DESIGN**

It was a community based cross sectional study.

### **INSTRUMENT OF DATA COLLECTION**

A semi-structured interviewer administered questionnaire was used to obtained data from the teenagers after obtaining consent from both the parents/guardians and the teenagers themselves.

## **SAMPLE SIZE ESTIMATION**

Since the population of the teenagers in the community was not up to 10,000, the sample size was calculated using the formula  $n = \frac{n}{1+n/N}$ [Araoye M O, 2003] to arrive at a sample size of 291and a nonresponse rate of 20% was added to give a total sample size of 349

## **SAMPLING TECHNIQUE**

Gyel sabon barki was selected through a simple random sampling technique out of the 18 wards in Jos south LGA, all the teenagers were made to gather in a primary school in the community and after obtaining an informed verbal consent from both the parents and the teenage girls, 384 respondents were selected through a simple random sampling technique by balloting for the study.

## **DATA ANALYSIS**

The data was analyzed using SPSS version 17 statistical software. Chi-square test was used to test for significant association between the socio-demographic characteristics and sexual activity among the teenage girls. Confidence level of 95% was used for relevant test statistic and a p- value of  $\leq 0.05$  was considered significant.

## **RESULTS**

### **SOCIO-DEMOGRAPHIC CHARACTERISTIC OF THE RESPONDENTS**

The teenage respondents were within the ages of 12-19years with a mean age of  $16.5 \pm 2.15$  but majority were within the ages of 16-19 years(62.5%) while most were Christians 376(97.9%), single 288(75%) with secondary school education 276(71.9%) and 106(27.6%) were out of school.(Table 1)

### **TEENAGE SEXUAL BEHAVIOUR**

Of the teenagers that responded, 67.7% said they had a relationship with the opposite sex and 186(48.4%) admitted to having sexual intercourse with the opposite sex. And among those who have had sexual intercourse with the opposite sex, 67.7% have ever used condom and only 50.5% used condom in the last sexual intercourse. Among the reasons given for not using the condom was partner's refusal and lack of knowledge of

TABLE 1: SEXUAL BEHAVIORS OF STUDY RESPONDENTS

Characteristics	Frequency	Percentage
<b>Relationship with opposite sex</b>		
Yes	260	67.7
No	124	32.3
Total	384	100
<b>Ever heard about Condom</b>		
Yes	326	84.9
No	58	15.1
Total	384	100
<b>Ever had sexual intercourse with opposite sex</b>		
Yes	186	48.4
No	198	51.6
Total	384	100
<b>Ever used condom</b>		
Yes	126	67.7
No	60	32.3
Total	186	100
<b>Use condom in recent sex</b>		
Yes	94	50.5
No	92	49.5
Total	186	100
<b>Why no use of condom</b>		
Partner refused	14	15.2
Don't like it	20	21.7
Married	14	15.2
Not aware	12	13.1
No reason	32	34.8
Total	92	100
<b>Free to discuss sex with parents</b>		
Yes	200	52.1
No	184	47.9
Total	384	100
<b>Reason for not discussing with parent</b>		
Fear/not comfortable	42	22.8
Not comfortable	78	42.4
Forbidden	16	8.7
Shame	16	8.7
No reason	32	17.4
Total	184	100

the need to use any form of protection. A number of the teenagers 184(47.9%) said they were not free to discuss issue of sex with their parents because of fear, shyness and cultural acceptance among other reasons. When asked if they have been screened for HIV in the past, 156(40.6%) said yes, out of which 6.4% said they were HIV positive and 128(33.3%) admitted to having

TABLE 2: STI'S AMONG STUDY RESPONDENTS

Characteristics	Frequency	Percentage
<b>Had STI before</b>		
Yes	128	33.3
No	256	66.7
Total	384	100
<b>Screened for HIV before</b>		
Yes	156	40.6
No	228	59.4
Total	384	100
<b>HIV Status</b>		
Positive	10	6.4
Negative	146	93.6
Total	156	100

HIV positive and 128(33.3%) admitted to having symptoms of STI. (Table 2)

### RELATIONSHIP BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTIC OF TEENAGERS AND THAT OF THE PARENTS AND SEXUAL BEHAVIOUR

Most teenagers who have had sexual intercourse were within the ages of 16-19years ( $P < 0.0001$ ), Religion had statistical significant relationship with teenage sexual behavior. Although education had no statistical significant relationship with sexual behavior, most of those who had sexual intercourse were among teenagers with tertiary education and those with no formal education (70.4% and 66.7% respectively). Not being in school was found to be statistically associated with having sexual intercourse with the opposite sex ( $P < 0.0001$ ) and also not staying with one's parents had a significant relationship with having sexual intercourse ( $P < 0.0001$ ). Type of family born into was not found to be significantly associated with having sexual intercourse but teenage sexual intercourse was seen to be more common among teenagers of single parent and those from polygamous family than those from monogamous families (83.3% and 61.5%) respectively. Father's, and mother's educational level and occupation were not found to be significantly associated with teenage sexual intercourse, but of those who have had sexual intercourse were teenagers whose fathers had no formal education(66.7%), mothers had only primary education(52.5%) and were unskilled workers(52.7%).

Sexual intercourse with the opposite sex was found to be significantly associated with having symptoms of STI ( $p = 0.001$ ) and the prevalence of HIV. Among the teenagers, the HIV prevalence was found to be 6.4%

Table 3: Relationship between socio-demographic characteristics and the sexual behavior of adolescents

Characteristics	Have had sexual intercourse			X <sup>2</sup>	df	p- value
	Yes	No	Total			
<b>Age</b>						
12-15	40(27.8%)	104(72.2%)	144(100%)	19.687	1	<0.0001
16-19	146(60.8%)	94(39.2%)	240(100%)			
<b>Religion</b>						
Christian	182(48.4%)	192(51.6%)	372(100%)	0.004	1	0.949
Islam	4(50%)	4(50%)	8(100%)			
<b>Education</b>						
None	8(66.7%)	4(33.3%)	12(100%)	7.579	3	0.056
Primary	16(38.1%)	26(61.9%)	42(100%)			
Secondary	62(44.9%)	76(55.1%)	138(100%)			
Tertiary	38(70.4%)	16(29.6%)	54(100%)			
<b>In school</b>						
Yes	110(38.7%)	170(61.3%)	280(100%)	17.3	1	<0.0001
No	76(73.6%)	28(26.4%)	104(100%)			
<b>Staying with parents</b>						
Yes	102(37%)	174(63%)	276(100%)	25.896	1	<0.0001
No	84(77.8%)	24(22.2%)	108(100%)			
<b>Type of family born into</b>						
Monogamous	144(44.9%)	176(55.1%)	320(100%)	5.488	2	0.064
Polygamous	32(61.5%)	20(38.5%)	52(100%)			
Single	10(83.3%)	2(16.7%)	12(100%)			
<b>Mother's educational status</b>						
None	2(33.3%)	4(66.7%)	6(100%)	2.389	3	0.496
Primary	62(52.5%)	56(47.5%)	118(100%)			
Secondary	92(50.5%)	90(49.5%)	182(100%)			
Tertiary	30(38.5%)	48(61.5%)	78(100%)			
<b>Father's educational level</b>						
None	4(66.7%)	2(33.3%)	6(100%)	3.662	3	0.300
Primary	52(56.5%)	40(43.5%)	92(100%)			
Secondary	96(49%)	100(51%)	196(100%)			
Tertiary	34(37.8%)	56(62.2%)	90(100%)			
<b>Occupation</b>						
Skilled	64(45.7%)	76(54.3%)	140(100%)	1.192	2	0.551
Semi-skilled	26(41.9%)	36(58.1%)	62(100%)			
Unskilled	96(52.7%)	86(47.3%)	182(100%)			

among those who were screened for HIV and agreed to reveal their HIV status. (Table 3)

## DISCUSSION

The findings of this study suggest that more teenagers are getting involved in sexual behavior that is risky and predisposing to STI including HIV/AIDS. The risky sexual behavior here was the initiation of sexual intercourse with

the opposite sex especially sexual intercourse without any form of protection (use of condom). This is a global trend. many teens are regretting initiating sexual intercourse early in life which indicates that most get into it unprepared and wish they had waited longer.[Collins R L et al, 2004].The high rate of sexual debut found in this study is comparable with the findings of the study conducted in two communities in Imo State and River State of Nigeria[Isiugo-Abanihe I M et al.2007]. The 2008 NDHS also recorded that by the age of 18 years, about

half of teenagers would have been exposed to sexual intercourse (NDHS 2008). In the USA, the Centers for Disease Control Youth Risk Behavior Survey (YRBS) noted that 47.8% of high school students (12 to 18 years of age) had had a coital experience [Eaton D K et al 2008].

About half of the teenagers admitted to using condom in the last sexual intercourse and those who did not gave excuse of inadequate information and partner's refusal. It is also possible that the condoms were not used at sexual intercourse because most of the teens were not prepared for the sexual intercourse at the time it occurred or probably due to lack of ready access to the condom by the teenagers. The figure of condom use among the teenagers in this study is similar to the findings in the study conducted in the Southern part of Nigeria. [Isiugo-Abanihe U C et al, 2012]. A study among Greek adolescents found that though condom use is popular among the adolescents, the percentage of adolescents that used condoms during every sexual intercourse was limited to 50%, while the percentage of those who used condoms throughout sexual intercourse was only 32%. [Tsitsika A et al, 2010, Godeau E et al 2008].

The characteristics of the teenagers that were found to be associated with their sexual behavior were age. The older teenagers were more sexually active than the younger ones and those out of school were also more sexually active than those in school. Most of the older teenagers are more likely to be in tertiary institution without adequate knowledge of sexuality and therefore more vulnerable to unprepared sexual activity. This is similar to the findings in other studies that found that majority of teenagers are sexually active between the ages of 15-19 years [Slap G B et al, 2003; Orji E A et al, 2005]. Our analysis shows that the teenagers that have been exposed to sexual intercourse were mostly those not staying with their parents, not present in school, of single parents and those from polygamous families. This is consistent with the findings of similar studies elsewhere like that found by Orji E.O and Esimai O.A in Ilesha South West Nigeria (Orji and Esimai 2005). Similarly, Mott et al reported that in the United States, youth living in single parent households were at an increased risk of early initiation of sexual intercourse [Mott F L 1996].

Parental characteristics such as education was not found to be statistically associated with sexual behavior of the teenagers but however, teenagers whose fathers had no formal education and those whose mothers had only primary school education were found to have had sexual intercourse compared to others. Likewise, teenagers whose fathers were unskilled workers initiated sexual intercourse earlier than others. This is in keeping with the result from the study in Bida which showed that a high proportion of those whose fathers had no education

were sexually active while the highest level of sexual activity was found among females whose mothers had attained only primary education and that males whose fathers were engaged either as low paid workers or were self-employed had higher likelihood of sexual relations than other adolescents whose fathers were in other occupational categories [Odimegwu C O et al, 2002].

The prevalence of STI among teenagers in this study is more than the 5.9% that was observed by Owolabi A T et al among female secondary school students in Ilesha. [Owolabi A T et al, 2005] Adolescents in sub-Saharan Africa are said to be at risk of contracting human immunodeficiency virus and other sexually transmitted infections, even in rural areas [Obasi A I et al, 2001] and this is evident in this study with the rate of sexual activity among the teenagers and the prevalence of STI and HIV that was recorded among them which is even higher than the national figure of 4.6%. [NACA, 2010]

## CONCLUSION

In this study, it was found that most teenage girls have initiated sexual intercourse especially the older teenagers. Other factors that were found to be associated with having had sexual intercourse were; not being in school and not staying with ones parents, being born into a polygamous home and those of single parents were also. The study also found that teenagers whose parents were of lower educational level and unskilled workers had sexual intercourse more than others. The prevalence of STI based on the symptoms was high among the teenagers with a HIV status that is higher than the national figure.

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