## ORIGINAL PAPER

# The Sexual Behaviour of Secondary School Adolescent Students in Tanzania: Patterns and Trends 

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#### Abstract

Introduction: A surge of sexual interest occurs around puberty and continues through adolescence. Heightened adolescent sexuality may be caused by a number of factors, including bodily changes, sexual hormones, social forces, and rehearsal for adult gender roles. The main objective of the present study is to understand the patterns and trends of adolescent students' sexual behaviour in Tanzania. Methodology: A descriptive cross sectional study was conducted and 550 secondary school students ( 13 to 19 years old) were recruited by using a multistage random sampling technique from Tanzania's secondary schools. The data collection tool was a structured questionnaire. Data were analysed by using SPSS software package version 16. Results: More than one third (40.2\%) of the participant students had experienced intercourse with mean age $17.2 \pm 1.8$ years and one sixth ( $17.6 \%$ ) of the participants had multiple sexual partners. The mean age for hugging, kissing and breast fondling was significantly younger when compared to the sexual intercourse. Most $(78.5 \%)$ of the students had used contraceptives but the frequency of contraception was less than half (48.6\%) "always". The main reasons beyond sexual debut were "just for fun" (37\%) and "peer pressure" (27.6\%). A male student was 1.46 times more likely to have had intercourse than a female. Parental education was the most significant association with sexual debut of adolescents and the odds ratio indicates that sexual intercourse among students is decreasing with the increasing of parental education. Conclusion: A relatively high sexual intercourse has been recorded and risky sexual behaviour also existed among the respondents. Hence, there is a need to promote specific intervention programmes built upon those factors which are associated with an increased likelihood for early sexual debut and risky sexual behaviour.


Keywords: adolescence; contraception; sexual behaviour; sexual debut; Tanzania

## Background

Human sexual behaviour is a diverse phenomenon. It occurs in different physical locations and social contexts, consists of a wide range of specific activities and is perceived differently by different people. An individual engages in sexual activity on the basis of a complex set of motivations and organizes that activity on the basis of numerous external factors and influences (Janet, 2003). A surge of sexual interest occurs around puberty and continues through adolescence (teenage years 13 to 19).

This heightened adolescent sexuality may be caused by a number of factors, including bodily
changes, sexual hormones, social forces, and rehearsal for adult gender roles (Eder et al., 1995). Late adolescence (15-19 years) is particularly important as sexual debut and experimentation often take place during this period (Dixon-Mueller, 2009). Early Sexual activity is associated with the risk of contracting HIV and other sexually transmitted diseases (STDs) and unplanned pregnancy (Pettifor, et al., 2004, Ersin \& Bahar 2009, Papaharitou, et al, 2011).

Tanzania is home to about 9.9 million adolescents between 10 and 19 years old, representing almost 23 per cent of the total population 43,187,823 (UNICEF, 2011). During
the second decade of their lives, these young people will fuel the future of the nation. They will be the young professionals, teachers, nurses, social workers, doctors, technicians, politicians, performers, designers and brave new thinkers, visionaries and young leaders of faith.
Tanzania is running short of skilled human resources due to high mortality of sexual transmitted diseases and school dropouts of girls because of pregnancy as a result of unprotected sex (Kurowski, et al., 2007). In 2010, more than 8,000 girls dropped out of school due to pregnancy, including about 1,760 girls in primary school and over 6,300 in secondary school (Songa, 2012). Moreover, the prevalence of HIV and other STDs among adolescents is higher in Sub-Saharan Africa than in other parts of the world (UNAIDS, 2004). The main objective of the present study is to understand the patterns and trends of adolescent students' sexual behaviour in Tanzania, particularly 13 to 19 year old.

## Methods

## Sampling Procedure and size

Multi-stage semi-purposive random sampling method was applied in obtaining sample from the Major cities of Tanzania. A total of 8 schools, each two were selected from the cities namely, Dar es Salaam, Arusha, Dodoma and Mwanza. A list of adolescent students in each school was prepared based on age criteria ( 13 to 19 years old). Approximately 70 adolescent students were selected randomly from the list of eligible students and those students were approached before they participate in the study. The final sample consisted of 550 students (adolescent age group which was 13 to 19 years old).

## Ethical consideration

The nature and purpose of the study were explained to the respondents and School administration. Ethical approval obtained from the School administration and verbal consent was taken from the students who agreed to participate in this study. Confidentiality and privacy were assured to the respondents to maintain secrecy on
the names of the schools and even student information.

## Data Collection Methods

Data collection as a process of gathering specific information aimed at providing or refuting some facts (Kothari, 1990). In the present study a structured closed end questionnaire was used as a tool for primary data collection and documentary review for secondary data. Pre -testing of the questionnaire was conducted for the purpose of checking the weakness and ambiguity of the questionnaires. Ten respondents were involved in testing the questionnaires in order to prove its validity and reliability.

## Data analysis

Data were entered into Microsoft Excel 2003 spreadsheet and imported to SPSS 16.0.1 Window version for analysis. The results of participants' were summarised using descriptive summary measures expressed as mean (Standard deviation) or range for continuous variables (Intentionally to get mean age, categorical were made in to two continuous groups namely 13-15 years and 16-19 years and percentage for categorical variables. Chi-square test and binary logistic regression model were used to find associations between categorical variables. Odds ratios (OR) with $95 \%$ confidence intervals were also calculated. All statistical tests were performed by using two-tailed tests at the 0.05 level of significance or significant at $\mathrm{p}<0.05$.

## Results

## Sample Characteristics:

Demographic characteristics include information about sex, age, religion, residence, family structure, family size, mother's and father's education level (Table 1). A total of 550 adolescents from secondary schools of four Tanzanian Municipalities participated in this study. Females constituted 287 (52.2\%) of the respondents. The participants' age ranged from 13 to 19 years and the overall mean age was 16.06 years (Standard deviation $\pm 2.3$ ).

Table 1: Participants' socio -demographic characteristics ( $\mathrm{n}=550$ )

| Variable | Frequency |
| :--- | :---: |
| Sex |  |
| Male | $263(47.8)$ |
| Female | $287(52.2)$ |
| Age group |  |
| Early adolescent (13-15) | $231(41.9)$ |
| Late adolescent (16-19) | $319(58)$ |
| Religion |  |
| Muslim | $137(24.9)$ |
| Christian | $408(74.2)$ |
| Other | $5(0.9)$ |
| Residence |  |
| Rural | $126(22.9)$ |
| Urban | $422(76.7)$ |
| Family structure |  |
| Monogamous | $364(66.2)$ |
| Polygamous | $112(20.4)$ |
| Separated | $74(13.5)$ |
| Family size |  |
| Up to 5 members | $305(55.5)$ |
| More than 5 | $245(44.5)$ |
| Education of Mother | $29(5.3)$ |
| Literate | $272(49.5)$ |
| Primary | $172(31.3)$ |
| Secondary | $77(14)$ |
| Graduate above |  |
| Education of Father | $20(3.6)$ |
| Literate | $193(35.1)$ |
| Primary | $195(35.5)$ |
| Secondary | $142(25.8)$ |
| Graduate above |  |
|  |  |

The majority of the respondents are Christians (74.2\%) while $24.9 \%$ are Muslims. More than three fourth of the respondents are living in urban areas (76.7\%) and the remaining 23.3\% in rural areas. Regarding family structure, $66.2 \%$ are in monogamous families, $20.4 \%$ in polygamous and $13.5 \%$ have separated parents. About half of the adolescents (54.5\%) have families with up to five members and $44.2 \%$ have families with more than five members. Finally, mother's education was as follows: illiteracy (5.3\%), primary (49.5\%), secondary (31.3\%), and graduation and above (14\%) and father's education was: illiteracy ( $3.3 \%$ ), primary (34.5\%), secondary (35.5\%) and graduation and above (24.7\%).

Table 2 illustrates details of the secondary school students' sexual behaviour. As shown in the Table, $53.8 \%$ of the respondents involved in necking, $52.5 \%$ engaged in French kissing, $42.5 \%$ in breast fondling, $40.7 \%$ in intercourse and $17.6 \%$ have had multiple sexual partners.
The mean age of sexual debut was $17.2 \pm 1.62$. The mean age for necking, kissing and breast fondling was significantly lower in comparison to the mean age of sexual intercourse.

Table 3 focuses on the factors influencing sexual debut. Out of the 550 participants, 224 students were sexually active. $37 \%$ reported that the influencing factor for sexual debut was "Just for fun", $27.6 \%$ "Peer pressure/peer influence",
$16.5 \%$ "Poverty/financial constrain", $11.1 \%$ reason/ don't know".
"Drug and alcohol influence" and $7.5 \%$ "No

Table 2: Frequency and Mean distribution of sexual behaviours ( $\mathbf{N}=550$ )

| Variable | Frequency | Mean Age |
| :--- | :---: | :---: |
| Necking | $296(53.8)$ | $15.2 \pm 1.5$ |
| French kissing | $289(52.5)$ | $15.9 \pm 2.1$ |
| Breast fondling | $239(42.5)$ | $16.2 \pm 1.6$ |
| Intercourse | $224(40.7)$ | $17.2 \pm 1.8$ |
| Multiple sexual partners | $97(17.6)$ | $17.6 \pm 1.1$ |

Table 3: Factors influencing sexual intercourse ( $\mathrm{n}=224$ )

| Variable | Frequency |
| :--- | :---: |
| Peer pressure/peer influence | $62(27.6 \%)$ |
| Just for fun | $83(37 \%)$ |
| Drug and alcohol influence | $25(11.1 \%)$ |
| Poverty/financial constrains | $37(16.5 \%)$ |
| No reasons /I don't know | $17(7.5 \%)$ |

Table 4 illustrates the participants' contraceptive behaviour. The vast majority (78.5\%) of the respondents use contraception in their sexual relationship. Regarding frequency of contraception: $48.6 \%$ of the respondents use contraception always, $23.6 \%$ frequently, $6.2 \%$ rarely and $21.4 \%$ never. Most of the participants ( $69.8 \%$ ) were using condoms as main method of contraception, followed by birth control pills (16.4\%) and female contraceptives (14\%). Furthermore, the reason beyond use of contraception was both "unwanted pregnancy
and fear of HIV/AIDS" for $44.3 \%$ of the participants, "unwanted pregnancy" for $36.3 \%$ and only "fear of STI or HIV/AIDS" for 19.3\% of the adolescents.

Relationship between sexual intercourse and demographic characteristics

Table 5 shows the relationship between sexual intercourse as a dependent variable and gender, age, religion, family structure, family size, mother's education and father's education as
independent variables. Sexual intercourse was categorized as "Yes" or "No" on the basis of experience of intercourse. The findings show that $51.3 \%$ of the male students and $49.7 \%$ of the female students had experience sexual intercourse.

The association was insignificant with probability value 0.171 . This indicates that both males and females almost equally prefer sexual intercourse. A chi square test of independence
was used to analyze the data with intercourse as one variable and the age of the participant as the second variable.

The association between prevalence of sexual intercourse and age of the students is highly significant with $X^{2}(6, N=550)=76.96, p=0.000$. With regard to religion, Chi-square (2, N=550) $=7.02, P=0.030$, these values manifest that the association between religion and sexual intercourse is statistically significant.

Table 4: Contraceptive practices amongst sexually active students ( $\mathbf{N}=\mathbf{2 2 4}$ )

| Variable | Frequency |
| :--- | :---: |
| Use of contraception (N=224) |  |
| Yes | $176(78.5 \%)$ |
| No | $48(21.5 \%)$ |
| Frequency of use of contraception (N=176) | $109(48.6 \%)$ |
| Always | $53(23.6 \%)$ |
| Frequently | $14(6.2 \%)$ |
| Rarely | $48(21.4 \%)$ |
| Never | $29(16.4 \%)$ |
| Contraceptive methods (N=176) | $123(69.8 \%)$ |
| Birth control pills | $25(14.2 \%)$ |
| Condoms | $64(36.3 \%)$ |
| Female contraceptives | $34(19.3 \%)$ |
| Reasons for using contraception (N=176) | $78(44.3 \%)$ |
| Unwanted pregnancy |  |
| Fear of STI or HIV/AIDS |  |
| Both A \& B |  |

The association of residence and sexual intercourse showed that insignificant with the value, $\mathrm{X}^{2}(1)=2.950, P=0.086$. The association between family structure and intercourse variables was significant at 0.05 levels with the probability value of 0.021 . Family size and intercourse were insignificantly associated ( $X^{2}$ $(1, N=550)=4.408, p=0.110)$. Education of mother and sexual intercourse were significantly associated with each other at 0.05 level ( $\mathrm{p}<0.003$ ) with $\mathrm{x}^{2}(3)=13.94$. And also in the case of education of father and intercourse were significantly associated at 0.05 level ( $\mathrm{p}<0.000$ ) with $\mathrm{x}^{2}(3)=35.00$.

Table 6 summarizes the roles of the parameters in the process in binary logistic regression analysis: Out of 550 sampled adolescent students, $224(40.7 \%)$ students experienced sexual intercourse. We consider sexual intercourse as a dependent variable, where as gender, age, religion, family structure, family size, mother's education and father's education as independent variables. The Wald statistic and the corresponding significance level test, the significance of each of the covariate and dummy independent variables in the model are shown in the Table 6.

If the Wald statistic is significant (i.e., less than 0.05 ) then the parameter is significant in the model. The independent variables, gender of the respondents is insignificant, whereas age, religion, family structure, family size, education of mother and education of father of the respondents have significantly affected the sexual intercourse among the adolescent students in secondary schools in Tanzania.
Gender which contrasts 'female' with 'male' has an $\exp (B)$ of 0.682 which means that a female 0 .682 times (i.e. much less) likely to have sexual intercourse than a male. If we calculate the inverse of $\exp (B)$ here as $1 / 0.682=1.46$, it could be said that a male is 1.46 times more likely to have intercourse than female. With regard to age of the respondents highly significant predictor to the model with p value 0.000 corresponding to sexual intercourse. It is evident from the table that Age of the adolescent students is the most influencing factor of intercourse among respondents. When the adolescences age increases from 13 years to 19 years, the experience of intercourse is also increasing significantly.
The odds ratio shows that at age, 14 years, 15 years, 16 years, 17 years, 18 years and 19 years of the respondents were $1.084,2.109,3.510$, $6.315,7.341$ and 27.075 times more likely to have sexual intercourse as compared with 13 years old adolescent student (as ref= category 13 yrs).
Hence, it would be conclude that there was a strong association between sexual intercourse and age of the respondent and intercourse increases with the age.
Concerning the variable of religion (i.e. Christianity and others) as a whole is marginally significant factor with $p$ value 0.043 corresponding to sexual intercourse. Hence, the Exp (B) column shows the relative odds (odds ratio) and indicates that Christian students are 0.226 times as likely to have sex as Muslims. In other words, Muslim students have 4.424 $1 / 0.226$ ) more times sexual intercourse than Christian students. On the other hand, students from other religion reported approximately one and half times higher sexual intercourse than Muslim students.

Family structure (i.e. polygamous and separated) as a whole is a significant factor with p value 0.024 corresponding to intercourse. Also it is observed that prevalence of intercourse among students whose from polygamous and separated family are 1.965 ( $95 \%$ CI: $1.186-3.254$ ) and 2.071 ( $95 \%$ CI: $1.140-3.762$ ) times more than from the students of monogamous family respectively. As far as family size is concerned, it can be seen that, more than five members of family size, approximately one and half times ( $\mathrm{OR}=1.5,95 \%$ CI: $0.999-1.986, p=0.05$ ) higher sexual intercourse than up to five members of family size. Similarly, urban students, 1.840 times ( $\mathrm{OR}=1.840,95 \% \mathrm{CI}$ : $1.126-3.007, p=0.015$ ) more likely to have intercourse than the rural students.

As far as mother's education is concerned, it is observed that on the whole, it is highly significant $(\mathrm{p}=0.004)$. Primary, secondary school education and graduation and above of the mothers influencing sexual intercourse among adolescent students are 2.157 ( $95 \%$ CI: $0.857-$ $5.431)$ and $.849(95 \%$ CI: $0.378-1.906)$ and .729 ( $95 \%$ CI: $0.332-1.603$ ) times higher than illiteracy of mothers.

On the other hand, father's education (i.e. illiteracy, primary school education and secondary school education) on the whole is highly significant ( $\mathrm{p}=0.000$ ). Hence the odds ratio indicates that sexual intercourse among students decreasing with the education of father. It is clearly shown in the table that intercourse of the students increasing with illiteracy, primary and secondary school education of father respectively 10.742 ( $95 \%$ CI: $3.620-31.873$ ), 3.500 ( $95 \%$ CI: $1.224-10.007$ ) and $3.580(95 \%$ CI: 1.251-10.239) times higher than graduation and above education of father.

## Discussion

## Sexual behaviour of adolescent students

The results indicate that $40.2 \%$ of students had experienced sexual intercourse at the time of the study. A number of studies conducted among adolescents in the age group of 10 to 19 years in different countries revealed that the prevalence of sexual activity was $48.7 \%$ in America (Eaton et al, 2007), $38 \%$ in Italy (Giannotta et al, 2009)

46\% in South Africa (Palen, 2009), 11\% in Burkina Faso (Guiella, 2007), 22\% in Nigeria (Fatusi, 2008), and $56.6 \%$ in Turkey (Aras, 2007). The disparity may be due to different sample characteristics, different cultural background, and different socioeconomic environment.

More than one third of the students had sexual intercourse in their late adolescent with mean age $17.2 \pm 1.8$, which is similar with a study which was carried out in Nigeria (Olaseha, 2004) where the mean age was 16.5 years. In the present study, $17.6 \%$ of the students had multiple sexual partners. Adolescents who begin sexual activity early are more likely to have more sexual partners, and exposed more to the risk of sexual transmitted diseases (Leslie-Harwit \& Meheus, 1989).

A study carried out by Wellings (2006) revealed that urbanisation, poverty, erosion of values, openness, and acceptance of premarital life are encouraging premarital sexual activity amongst adolescents, which is fuelling early sexual initiation of young people globally. While the mean age at hugging, kissing and breast fondling was significantly younger $15.2 \pm 1.5,15.9 \pm 2.1$ and $16.2 \pm 1.6$ when compared to the mean age of sexual intercourse $17.2 \pm 1.8$.

In terms of the individual's development, the data indicates that there is a very regular progression from kissing, through French kissing and breast and genital fondling to intercourse, this generally occurs over a period of four or more years (De Lamatter \& Mac Corquodale, 1979).

The main motivation for sex may be curiosity, experimentation and fun and this assertion is supported by one study which is conducted on adolescents in which about $63 \%$ of girls and $80 \%$ of boys had first sex because they wanted to experiment and fun (Hargreaves \& Morison, 2002). In terms of sexual activity, some studies have shown that adolescents, especially girls, are more likely to be sexually active if they believe rates of sexual activity are high among their peers. Sexual activity is more closely related to what teenagers believe friends do than what is actually going on (Dryfoos, 1990).

Male partners also exert considerable pressure on teenage females. The pressure to be sexually active peaks in about ninth grade and is higher for females than males (Hayes, 1987). The use of alcohol and drugs before sex reduces a person's inhibitions and ability to take protective sex, and increases the choices of coercive sex (Andersson, et al., 2004).

It is observed from similar study that Poverty is a motivation for female adolescents to engage in early sexual debut and to have multiple partners in terms of exchange of gifts and money in subSaharan countries (Meekers \& Calvès, 1997).

## Contraceptive behaviour

The majority of the respondents (78.5\%) use contraception. However, use of a contraceptive method during each sexual encounter was inconsistent and sporadic. Less than half of the respondents ( $48.6 \%$ ) use contraception always and most of the students ( $69.8 \%$ ) use condoms. An adolescent's decision about whether to use contraception is complex. Although trends have improved, with more adolescents reporting the use of contraception, more frequently with continuing sexual intercourse but the consistent use of contraception remains a challenge for most adolescents (Zelnik \& Shah, 1983).

Approximately half of all adolescent pregnancies occur within the first 6 months after the adolescent becomes sexually active, and one fifth of pregnancies occur within the first month (Zabin et al, 1979).

Contraceptive use increases with age in both males and females. It is worth noting that younger teens are less likely to use contraceptives (Brooks-Gunn \& Furstenberg, 1989). If a girl is under 15, when she has first intercourse, she is nearly twice as likely to become pregnant in the first 6 months of intercourse than if she is over age 17 (CSSP, 1986). The proportion of unintended pregnancies remains highest among women under age 20 . In other words, about 85 percent of teenage pregnancies are unintended compared to 50 percent of pregnancies among adult women (Finer \& Henshaw, 2006).

Table 5. Relationship between sexual intercourse status and independent variables

|  | Intercourse status <br> Yes | No | $X^{2}$-Value | p-value |
| :--- | :---: | :--- | :--- | :--- |
| $\mathbf{S e x}$ |  |  |  |  |
| Male | $115(51.3 \%)$ | $148(45.4 \%)$ | $\mathbf{1 . 8 7 8}$ | $\mathbf{0 . 1 7 1}$ |
| Female | $109(48.7 \%)$ | $178(54.6 \%)$ |  |  |


| Age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 9 (4.0\%) | 55 (16.9\%) | 76.962 | 0.000 |
| 14 | 20 (8.9\%) | 61 (18.7\%) |  |  |
| 15 | 23 (10.3\%) | 63 (19.3\%) |  |  |
| 16 | 30 (13.4\%) | 52 (16.0\%) |  |  |
| 17 | 39 (17.4\%) | 39 (12.0\%) |  |  |
| 18 | 48 (21.4\%) | 31 (9.5\%) |  |  |
| 19 | 55 (24.6\%) | 25 (7.7\%) |  |  |


| Religion <br> Muslim | $65(29 \%)$ | $72(22.1 \%)$ | $\mathbf{7 . 0 2 2}$ | $\mathbf{0 . 0 3 0}$ |
| :--- | :---: | :---: | :---: | :---: |
| Christian | $155(69.2 \%)$ | $253(77.6 \%)$ |  |  |
| Others | $4(1.8 \%)$ | $1(0.3 \%)$ |  |  |


| Residence |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Rural | $43(19.2 \%)$ | $83(25.5 \%)$ | $\mathbf{2 . 9 5 0}$ | $\mathbf{0 . 0 8 6}$ |
| Urban | $181(80.8 \%)$ | $243(74.5 \%)$ |  |  |
| Family Structure |  |  |  |  |
| Monogamous | $134(59.8 \%)$ | $364(66.2 \%)$ | $\mathbf{7 . 6 8 5}$ | $\mathbf{0 . 0 2 1}$ |
| Polygamous | $63(28.1 \%)$ | $112(20.4 \%)$ |  |  |
| Separated | $27(12.1 \%)$ | $74(13.5 \%)$ |  |  |
|  |  |  |  |  |


| Family Size |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Up to 5 Members | $113(50.4 \%)$ | $191(58.6 \%)$ | 4.408 | $\mathbf{0 . 1 1 0}$ |
| More than 5 Members | $111(49.6 \%)$ | $131(41.1 \%)$ |  |  |


| Mother's Education |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Illiterate | $11(4.9 \%)$ | $18(5.5 \%)$ | $\mathbf{1 3 . 9 4 2}$ | $\mathbf{0 . 0 0 3}$ |
| Primary school | $124(55.4 \%)$ | $148(45.4 \%)$ |  |  |
| Secondary School | $72(32.1 \%)$ | $100(30.7 \%)$ |  |  |
| Graduation and above | $17(7.6 \%)$ | $60(18.4 \%)$ |  |  |

## Father's Education

| Illiterate | $15(6.7 \%)$ | $5(1.5 \%)$ | $\mathbf{3 5 . 0 0 9}$ | $\mathbf{0 . 0 0 0}$ |
| :--- | :--- | :--- | :--- | :--- |


| Primary school | $88(39.3 \%)$ | $105(32.2 \%)$ |
| :--- | :--- | :--- |
| Secondary School | $90(40.2 \%)$ | $105(32.2 \%)$ |

Graduation and above $\quad 31(13.8 \%) \quad 111$ (34.1\%)

Table 6. Binary logistic regression analysis of participants' sexual behaviour

|  | B | S.E. | Wald | df | Sig. | $\operatorname{Exp}(\mathrm{B})$ | 95.0\% C.I.for EXP(B) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Lower | Upper |
| Gender(Female) | -. 382 | . 208 | 3.388 | 1 | . 066 | . 682 | . 454 | 1.025 |
| Age <br> (Ref cat.= 13 years) |  |  | 71.604 | 6 | . 000 |  |  |  |
| 19 | 3.299 | . 535 | 38.003 | 1 | . 000 | 27.075 | 9.486 | 77.273 |
| 18 | 1.993 | . 386 | 26.702 | 1 | . 000 | 7.341 | 3.446 | 15.635 |
| 17 | 1.843 | . 385 | 22.910 | 1 | . 000 | 6.315 | 2.969 | 13.430 |
| 16 | 1.256 | . 375 | 11.224 | 1 | . 001 | 3.510 | 1.684 | 7.317 |
| 15 | . 746 | . 368 | 4.108 | 1 | . 043 | 2.109 | 1.025 | 4.341 |
| 14 | . 080 | . 372 | . 047 | 1 | . 829 | 1.084 | . 523 | 2.246 |
| Religion <br> (Ref cat. $=$ Muslims) |  |  | 6.292 | 2 | . 043 |  |  |  |
| Christians | -1.489 | 1.131 | 1.732 | 1 | . 188 | . 226 | 0.025 | 2.071 |
| Others | . 388 | . 199 | 3.788 | 1 | . 052 | 1.474 | . 997 | 2.177 |
| Residence (Urban) | . 610 | . 251 | 5.919 | 1 | . 015 | 1.840 | 1.126 | 3.007 |
| Family structure (Ref cat.= <br> Monogamous) |  |  | 7.494 | 2 | . 024 |  |  |  |
| Polygamous | . 675 | . 257 | 6.885 | 1 | 0.009 | 1.965 | 1.186 | 3.254. |
| Separated | . 728 | . 305 | 5.710 | 1 | . 017 | 2.071 | 1.140 | 3.762. |
| Family size (More than five) |  |  |  |  |  |  |  |  |
|  | . 342 | . 175 | 3.827 | 1 | . 050 | 1.414 | . 999 | 1.986 |
| Mother Education <br> $($ Ref cat. $=$ Illiteracy $)$ |  |  | 13.124 | 3 | . 004 |  |  |  |
| primary | . 769 | . 471 | 2.662 | 1 | . 103 | 2.157 | . 857 | 5.431 |
| secondary | -. 164 | . 413 | . 158 | 1 | . 691 | . 849 | . 378 | 1.906 |
| Graduation and above | -. 316 | . 402 | . 617 | 1 | . 432 | . 729 | . 332 | 1.603 |
| Father Education (Ref cat. = Graduation and above ) |  |  | 31.920 | 3 | . 000 |  |  |  |
| Illiteracy | 2.374 | . 555 | 18.305 | 1 | . 000 | 10.742 | 3.620 | 31.873 |
| primary | 1.253 | . 536 | 5.463 | 1 | . 019 | 3.500 | 1.224 | 10.007 |
| Secondary | 1.275 | . 536 | 5.655 | 1 | . 017 | 3.580 | 1.251 | 10.239 |

Trends in methods of contraception used during 1982-1995 show a decrease in pill use among adolescents 15 to 19 years old and increased male condom use (Piccinino \& Mosher, 1996). Condom use is promoted globally as an effective means of reducing sexual risk, more specifically HIV and sexually transmitted infections. However, a South African national survey reported that $23 \%$ of the young male and female students aged $15-24$ years had been treated for an STI at some point in their lives, and this is indicative of inconsistent condom use (Shisana, et al., 2009).

## The impact of demographic characteristics on sexual debut

The results show that a male student is 1.46 times more likely to have intercourse than a female. For boys, testosterone levels had a very strong relationship to sexual activity than girls with estrogen hormone. The relationship was a significant between testosterone level and sexual activity (Dindia et al, 1992).

The association between prevalence sexual intercourse and age of the students successfully statistically significant with $X^{2}(6, N=550)=$ $76.96, p=.000$.With regard religion, Chi-square $(2, \mathrm{~N}=550)=7.02, P=0.030$, and it is statistically significant association between religion and sexual intercourse. Students from Muslim religion 4.424 times more sexual intercourse than students with Christian religion. Previous studies revealed that the prevalence of early marriages among Muslim students is the cause of early sexual initiation compare to Christian students (Murry, 1994, Pargament, et al, 1998).

Family structure is a significant factor with p value 0.024 corresponding to intercourse in present study. Also prevalence of intercourse among students whose from polygamous and separated family are 1.965 and 2.07 times higher than from the students of monogamous family respectively. Secondary school students in Nigeria from a polygamous and separated family structure are more likely to have engaged in sexual activity than students from a monogamous family structure (Slab, 2002). It could be
explained that parents in polygamous family have no time to spend in educating their children.

Teens who are living with both parents, are the least likely to be sexually active; followed by teens whose parents are divorced or single parent and teens who live in single parent are the most likely to be sexually active (Banza,2003).
As far as family size is concerned, adolescents from more than five members of family size, approximately one and half times ( $\mathrm{OR}=1.5$, $95 \%$ CI: $0.999-1.986, p=0.05$ ) higher sexual intercourse than up to five members of family size. Similar study from big family size which may lead to less parental caring, love, and monitoring and then it leads towards more risk behaviours among adolescents (Miller, B, 1998). And it was found from another research that family size profoundly impact on teens including relations among the family members, quality of monitoring, communication, and time spent together which strongly associated with adolescent sexual behaviours (Miller \& Benson, B.,2001)

Education of mother and sexual intercourse were significantly associated with each other with $\mathrm{p}<0.003$ and $\mathrm{x} 2(3)=13.94$. And also in the case of education of father and intercourse were significantly associated at 0.05 level ( $\mathrm{p}<0.000$ ) with $x^{2}(3)=35.00$. These findings contrast with those of prior studies that low levels of mother education have impact on teens early sexual activity and earlier timing of childbearing. (Hayes, 1987).

The teens from families where fathers have less education are more likely to be sexually active than teens who come from families where fathers have more education. The relationship is pretty linear and proxy between rates of sexual activity and level of father's education. The higher the father's education, the less likely the teen is to be sexually active (Dryfoos, 1990).

## Conclusion

A relatively high sexual intercourse has been recorded in this study compared to other countries. This could be attributed to
experimental behaviour, peer pressure, alcohol influence and poverty among adolescent students. Risky sexual behaviour also existed among the respondents and it could be reduced by increasing awareness among students and their parents. Hence there is a need to promote specific intervention programmes that must be built upon the understanding of those factors which are associated with an increased likelihood for early sexual debut and risky sexual behaviour. This could ensure sexual health among adolescent students.

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