

Nonconsensual sexual relationship and prevalence of HIV infection in adolescent in Jos, Nigeria

Collins John, Seline N. Okolo, Chris Isichei¹

Departments of Paediatrics, Jos University Teaching Hospital, Jos, ¹Chemical Pathology, Faculty of Medical Sciences, University of Jos, Jos, Plateau State, Nigeria

ABSTRACT

Background: HIV infection in adolescents is promoted by sexual risky behaviours and nonconsensual sex. Nonconsensual sex ranges from forced sex/rape, unwanted touch and inducement by gifts. This study was designed to determine the prevalence of nonconsensual sex (NCS) and HIV infection in adolescents. **Materials and Methods:** Eight hundred and eighty three adolescents from 10 secondary schools were randomly selected and given a questionnaire to fill. All had group pre-test counseling had HIV screening. HIV positive subjects had a confirmatory test done after individual post-test counseling. Ethical clearance was received from the relevant authorities and persons. **Results:** Of the 883 students, 169 (19.2%) were sexually experienced. Of which 101/169 (59.8%) were males and 40.2% females. Mean age at first sexual debut was 14.4±2.6 years; males 13.3±2.7 years and females 14.6±3.2 years, $P=0.006$. Seventy three of 127 respondents (57.5%) indicated consensual sex and 42.5% (54/127) indicated NCS. Of the 54 subjects, 74% were females and 22% males. Mean age at first sex in NCS was 13.5 + 3.4 yrs; males, 12.5±2.9 yr in NCS and 14±2.6 in consensual, $P=0.045$; females 14±3.5 in NCS and 16.5±1.2 in consensual $P=0.02$. Circumstances of sex showed 59.3% were forced sex or rape, 7.4% was following gifts. Over 70% of NCS group use no form of protection. In the population studied 9/883 (1.02%) were HIV positive. Among the sexually experienced HIV prevalence was 2.4% (4/169), and 3.7% (2/54) among NCS. **Conclusion:** Prevalence of NCS is high, occurring at an earlier age and associated with lack of condom use as well as a higher HIV prevalence.

Key words: Adolescents, human immunodeficiency virus infection, nonconsensual sex

Address for correspondence:

Dr. Collins John,
Department of Paediatrics,
University of Jos, Jos,
Plateau State, Nigeria.
E-mail: cchibunkem@yahoo.com

INTRODUCTION

Human immunodeficiency virus (HIV) infection spreads to younger people, among other routes, from risky sexual behaviour and also as men choose increasingly younger sexual partners. Some men believe that younger girls are less likely to be infected with HIV.^{1,2} Many young women experience rape and forced sex and this does increase the risk of being infected with HIV.³

Sexual coercion is the act of forcing (or attempting to force) another individual through violence, threats, verbal insistence, deception, cultural expectations or economic circumstances to engage in sexual behaviour against

her/his will. Non-consensual sexual experience exists along a continuum of behaviours, from threats and intimidation to unwanted touch to rape, and that the victim lacks choices that do not have severe physical and social consequences.⁴

This study aimed at determining the sexual characteristics, prevalence and pattern of non-consensual sexual relationships (NCS) and HIV infection among adolescents in Jos Plateau state Nigeria.

MATERIALS AND METHODS

The study took place in Jos capital city of Plateau state in north-central Nigeria. Ten secondary schools were selected using cluster sampling technique and out of this schools using multistage sampling technique, 883 students, aged 10-19 years whose parents and themselves gave consent to HIV test were consecutively selected.

Approval for the study was obtained from the relevant institutions of the State's ministry of education and the parents of the students as well as the Research and Ethical committee of the Jos University Teaching Hospital.

| Access this article online | |
|---|--|
| Quick Response Code: | Website: www.nigeriamedj.com |
|  | DOI: 10.4103/0300-1652.107555 |

Each of the subjects filled out a self-administered questionnaire and had a HIV test done using Abbott Determine Rapid test strip manufactured by Abbott laboratories.⁵ All subjects received group pre-test counseling in their various classes but all receive individual post-test counseling. HIV positive subjects had a confirmatory test using Unigold HIV test strip by Trinity Biotech inc.⁶

Results obtained were entered into Microsoft excel 2007 and analysed using Stata 10IC from Stata Inc. USA. A *P* value<0.05 was considered statistically significant.

RESULTS

Of the 883 students sampled, 169 (19.2%) were sexually experienced. Among these group, 101/169 (59.8%) were males and 40.2% were females. Mean age at sexual debut was 14.4±2.6 years; in males 13.3±2.7 years and females 14.6±3.2 years, *P*=0.006.

Seventy three of 122 respondents (57.5%) indicated that initiation of sexual activity was consensual, while 42.5% (54/127) indicated that the first sexual experience was non-consensual. Gender pattern showed that of the 54 subjects, 74% were to females while 22% occurred in males.

Mean age at first sex in the NCS was 13.5 + 3.4 yrs. In males, mean age at first sex was 12.5±2.9 yr in NCS and 14±2.6 in consensual relationship, *P*=0.045 while in females mean age at first sex was 14±3.5 in NCS and 16.5±1.2 in consensual *P*=0.02 [Table 1].

The nature/type of NCS is demonstrated in Table 2 where 59.3% of subjects reported forced sex or rape as the context, while 7.4% was following gifts received/given.

Use of protection (condoms, creams or pills) during sexual encounters is demonstrated in Table 3. Over 70% of those in NCS group use no form of protection.

In the population studied 9/883 (1.02%) tested positive to HIV, 8 females and one male. Among the sexually experienced subjects (169/883) HIV prevalence rate was 2.4% (4/169), and among those who had NCS HIV prevalence rate was 3.7% (2/54). This is summarized in Table 4.

DISCUSSION

This study demonstrates the pattern of sexual relationship among adolescents in the studied schools. There is an early initiation of sexual activity among the subjects, with first sexual debut occurring at a mean of 14.4±2.6 years, lower in males than in females. This study notes a high rate of NCS among the studied group. The observed prevalence

Table 1: Consensual versus NCS among respondents

| Type | Males | Females | Total |
|----------------|----------|----------|-------------|
| Non-consensual | 17 (22) | 37 (74) | 54 (42.5) |
| Consensual | 60 (78) | 13 (26) | 73 (57.5) |
| Total | 77 (100) | 50 (100) | 127 (100.0) |

$\chi^2 = 33.3$; *P* = 0.000; Figures in parenthesis are in percentage

Table 2: Type and influence to non-consensual relationship

| Type | Frequency | Percentage |
|--------------|-----------|------------|
| Forced/raped | 32 | 59.3 |
| Pressure | 18 | 33.3 |
| Gifts | 4 | 7.4 |
| Total | 54 | 100 |

Fisher's exact = 0.000

Table 3: Use of any protection by relationship type

| Protection | Consensual | | NCS | | Total | |
|------------|------------|--------|-----|--------|-------|--------|
| | N | % | N | % | N | % |
| No | 37 | 50.68 | 38 | 71.70 | 75 | 59.52 |
| Yes | 36 | 49.32 | 15 | 28.30 | 51 | 40.48 |
| Total | 73 | 100.00 | 53 | 100.00 | 126 | 100.00 |

Fisher's exact = 0.027

Table 4: HIV prevalence among subjects

| Group | N | HIV positive | Prevalence rate (%) |
|----------------------|-----|--------------|---------------------|
| Study population | 883 | 9 | 1 |
| Sexually experienced | 169 | 4 | 2.4 |
| Non-consensual | 54 | 2 | 3.7 |

of 42.5% in this study is higher than previously reported by Slap *et al.*,⁷ in 2003 in Jos plateau state. The observed difference may be that of sample size and the wider range students, 12-21 years. This is also higher than the report by Ajuwon *et al.*,⁸ in Ibadan of a prevalence of 8-18% in children 15-19 years. The limited age group may account for the reported lower levels and also the categories of the sampled population, house helps, shop attendants etc. The highest prevalence reported of NCS is in Cape town, by Jewkes *et al.*,⁹ in 2001, where 60% of those in the township and informal settings reported NCS.

There are considerably differences in prevalence between the sexes with regards to NCS. Females had more NCS than males (74%:22%) Both figures are however relatively higher than reports from some countries.^{10,11} Erulkar¹⁰ in Kenya reported a NCS rate of 11% in boys and 21% in females. These figures are very low compared with our findings. Jaya and Hindin¹² in India reported a higher prevalence in males and less in females when compared with our findings.

Sexual debut occurred earlier in NCS than in consensual sexual relationship, 13.5 years and 14.4 years respectively even though not statistically significant, $P=0.10$. This is similarly reported by Rositch *et al.*,¹³ In Males among NCS subjects, sexual debut occurred 1.5 years earlier than in those reporting consensual relationship, $P=0.045$, while in females, it occurs 2.5 years earlier than in those with consensual relationships, $P=0.02$. This attests to younger peoples' inability to avoid circumstances that could lead to NCS as alluded to by the report from the Population Council of New Delhi¹⁴ which stated that "Under certain circumstances, and particularly at the time of first sexual experience, young people may be less equipped than adults to avoid non-consensual sex and may have fewer choices available to them when they do experience coercion".

It is highly unlikely that non-consensual sex will occur with any kind of contraceptive or protection being utilized. This is demonstrated in over 70% of subject who received NCS did not use any method of protection during the process. This was found to be 20 points higher than in those who practiced consensual sex. Reasons for this can be adduced from the last statement in the paragraph above.

Among the studied subjects, 883, a HIV prevalence of 1% was found. In the sexually active subjects, 169, a prevalence of 2.4 was noted but in subjects who had NCS, 54, a prevalence of 3.7% was noted. This figure is about 4 times that of the sampled population and is 1.5 times the rate in sexually active subjects. NCS is a high risk behaviour with possibility of HIV infection. This possibility is demonstrated in the works of Rositch *et al.*,¹³ in which they found a HIV prevalence of 7% among 15-19 year olds and that HIV seropositive subjects were more likely to report transactional and nonconsensual sex.

This high prevalence maybe attributable to the non-consensual nature of the relationships with the recipients' inability to make choices and the high possibility of non-use of condoms as demonstrated in this study.

With these findings, it is essential that opportunities to identify adolescents who had had a non consensual sexual affair be put in place so as to offer such adolescent(s) post exposure prophylaxis. Youth advocates groups, adolescent

friendly centers and other social security measures will be a welcome idea.

REFERENCES

1. Kiragu K. HIV/AIDS, can we avoid Catastrophe? Popul Rep 2001; L(12):1-40
2. Rao GG. Gender, Sexuality and HIV/AIDS: The what, the why and how. The 13th International AIDS Conference. 2000 Durban South Africa. Paper Presentation. 2000.
3. Luke N, Kurz K. Gross-generational and transactional sexual relations in Sub-Saharan Africa. Washington: AIDS mark; 2002.
4. Best K. Nonconsensual Sex Undermines Sexual Health, Young and old, females and males are at risk. Network. 2005;23; 4: 3-9.
5. HIV Unigold rapid test kit. Available from: <http://www.unigoldhiv.com> [Last accessed on 2012 Sep 5].
6. Determine Rapid test Kit. Available from: <http://www.abbottlaboratories.com> [Last accessed on 2012 Sep 5].
7. Slap GB, Lot L, Huang B, Daniyam CA, Zink TM, Succop PA. Sexual behaviour of adolescents in Nigeria: Cross Sectional Survey of Secondary School Students. Brit Med J 2003;326:15.
8. Ajuwon AJ, Olley BO, Akin-Jimoh I, Akintola O. Experience of sexual coercion among adolescents in Ibadan, Nigeria. Afr J Reprod Health 2001;5:120-31.
9. Jewkes RC, Vundule F, Maforah F, Jorjaan E. Relationship dynamics and adolescent pregnancy in South Africa. Soc Sci Med 2001;52:733-44.
10. Erulkar AS. The Experience of Sexual Coercion Among Young People in Kenya Int Fam Plan Perspect 2004;30:182-9.
11. Lehrer JA, Lehrer EL, Koss MP. Unwanted Sexual Experiences in Young Men: Evidence from a Survey of University Students in Chile. Arch Sex Behav 2012 [In Press].
12. Jaya J, Hindin MJ. Nonconsensual sexual experiences of adolescents in urban India. J Adolesc Health 2007;40:573.e7-14.
13. Rositch AF, Cherutich P, Brentlinger P, Kiarie JN, Nduati R, Farquhar C. HIV infection and sexual partnerships and behaviour among adolescent girls in Nairobi, Kenya. Int J STD AIDS 2012;23:468-74.
14. Jejeebhoy SJ, Bott S. Non-consensual sexual experiences of young people: A review of the evidence from developing countries. New Delhi India: Population council; 2003. p. 16.

How to cite this article: John C, Okolo SN, Isichei C. Nonconsensual sexual relationship and prevalence of HIV infection in adolescent in Jos, Nigeria. Niger Med J 2012;53:210-2.

Source of Support: Nil, **Conflict of Interest:** None declared.