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Sexuality, HIV and Drug use among University Students

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ABSTRACT

Sexuality, HIV prevalence and drug used among students of University of Uyo were investigated through a survey that involved use of questionnaires and analysis of blood specimens. The study involved use of questionnaire and collection of blood samples from sampled students. Informed consent forms were given out to students to read and those who met the criteria were allowed to participate in the study. The result of the study indicated that fifty-seven (58.1%) of the students have sexual intercourse. Sixty-eight (69.39%) students have sexual intercourse with one sex-partners while seven (7.14%) students have multiple sex-partners. Fifty-two (91.23%) students use condom during sexual activity while five (8.77%) had sexual intercourse without using condom. Rate of sexual activity demonstrated among the volunteered students follows this trend; abstinence (22.45%), once weekly (17.35%), twice weekly (5.10%), and once daily (4.08%) respectively. The study further revealed that eighty-five (86.7%) students know their HIV status while forty (70.18%) know the HIV status of their sex-partners. In spite of the current campaign on HIV, there are students who lack adequate knowledge of HIV transmission and prevention leading to unprotected sexual intercourse.

Keywords: HIV, life challenges, sex-partner, sexuality, sexual activity.

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INTRODUCTION

Sexuality is expressed in the complete expression of who we are as human beings. It involves our values, attitudes, behaviours, physical appearances, beliefs emotions and personality (Tiefer, 1995). Sexual health refers to factors that enable individuals to enjoy and control our sexual and reproductive lives including the quality of our sexual and other close relationships (Masters *et. al.*, 1966). It is a type of sexual behavior which can be seen in all living beings (Diamond, 1997). Previous research studies have shown that young people are actually aware of their vulnerability to risks associate with sexuality. They actually over-estimate their risks for negative outcomes like contracting HIV and other Sexually Transmitted Diseases, getting lung cancer etc (Reyna *et. al.*, 2006).

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High risky sexual behaviors are those practices that increase the risk of acquiring a sexually transmitted infection such as having extra-marital, unprotected sexual intercourse without the use of condom; engaging in oral sex without using oral or dental dam; having multiple sex-partners; engaging with a partner who has a history of Sexually Transmitted Infections (STI) and engaging in sexual activities with a partner of unknown STI history (James, 1998). Half of unintended pregnancies end in abortion and the ones that continued to term are associated with increased risk of detrimental prenatal parental behaviours such as smoking and drinking as well as of negative health and social outcomes for both mothers and babies (Finer and Henshaw, 2006). Sexually transmitted infections have also been viewed as symbols of corrupt sexuality (Allen, 2000). The relationship between drug use and sexuality can be grouped into three domains; drugs and sexual dysfunctions, drugs and risky sexual behavior and drugs used as sexual aids (James, 1998).

Human immunodeficiency virus (HIV) is a lentivirus that causes Acquired Immune Deficiency Syndrome (AIDS), a condition in which the human immune system begins to fail leading to life threatening opportunistic infections (Douek *et al.*, 2009). An infection with HIV is associated with a progressive decrease of the CD₄₊ T-cell count and an increase in viral load. HIV infection has four basic stages namely, incubation period, acute infection, latency stage and AIDS. Many HIV- positive people are unaware that they are infected with the virus. HIV testing consists of initial screening with an enzyme linked immunosorbent assay (ELISA) to detect antibodies to HIV (Kumaranayake *et al.*, 2001). The objective of the research study is to find the relationship of sexuality and drug consumption with awareness of HIV among university students.

METHOD

Ethical approval was first obtained from the University of Uyo Health Centre Medical Research Committee. The study design involved first, the filling of questionnaire and second, the collection of blood samples from volunteered students for diagnostic investigation. Informed consent forms were given out to students to read and those who met the criteria were allowed to fill the questionnaires. Both the questionnaires and the Informed consent forms were distributed at random to all the faculties in the institution. The questionnaires contain five sections viz demographic details, sexuality, health status, life challenges and drug use. The criteria for selection to participate in the research study were first, the participant must be registered student of the institution. Second, the participant must not be less than fifteen years of age. Critically ill persons were excluded from the study.

Two hundred (200) questionnaires were given out to volunteered students to fill and return to the laboratory section of the Health Centre. On returning the questionnaires, each questionnaire was assigned code and the participant donated 2ml blood sample for HIV screening test. Information on the questionnaires and the screening test result were compiled and analyzed.

RESULT

From Table 1, the result showed that forty-five (45.9%) of the volunteered students fell within the age range 21-25 years, twenty-seven (27.6%) fell within 26-30 years while fourteen (14.2%) of them were within 15-20 years. Six (6.12%) participants were in the age range of 31-35 years while another six students were more than 35 years of age. Fifty-six (57.1%) of the participants were females while forty-two (42.9%) of them were male. Twelve (12.2%) of the participants were married while eighty-six (86.8%) were single.

Table 1: Table 1: Demographic Profile of Participants.

| Age | Frequency (F) | Cummulative Frequency (CF) | Percentage (%) |
|-----------------------|---------------|----------------------------|----------------|
| 15- 20 | 14 | 14 | 14.2 |
| 21- 25 | 45 | 59 | 45.9 |
| 26- 30 | 27 | 86 | 27.6 |
| 31- 35 | 6 | 92 | 6. 12 |
| 35 | 6 | 98 | 6.12 |
| Total | 98 | | 100 |
| Gender | | | |
| Male | 42 | 42 | 42.9 |
| Female | 56 | 98 | 57.1 |
| Total | 98 | | 100 |
| Marital Status | | | |
| Married | 12 | 12 | 12.2 |
| Single | 86 | 98 | 87.8 |
| Divorced | 0 | | 0 |
| Widowed | 0 | | 0 |
| Total | 98 | | 100 |

The result in Table 2 showed the trend of distribution of students as follow; thirty (30.6%) of the volunteered students were in Faculty II followed by Faculties III, VI and VII with 19 (19.4%), 13 (13.3%) and 11 (11.2%) respectively. Table 3 showed that out of the ninety-eight respondents, fifty-seven (58.1%) had had sexual intercourse, seven (9.3%) had more than one sex partners while sixty-eight (90.7%) had one sex partners. Five (5.10%) of the respondents declared that they had sex twice per week, four (4.08%) of them had sex once daily while seventeen (17.35%) had sex once weekly. While twenty-two (22.45%) of the respondents decided to abstain from sex, fifty (51.02%) of the respondents did not comment on their sex life. Among the respondents who had had sex, fifty-two (91.23%) used barrier method while five (8.77%) of them did not use barrier method. None of the respondents declared that they had sex with same gender, animals or used drugs to enhance sex.

Table 2: Categorized Professional Training Units (Faculties) Represented by Participants.

| Faculties | Frequency (F) | Cummulative Frequency (CF) | Percentage (%) |
|-----------|---------------|----------------------------|----------------|
| I | 8 | 8 | 8.2 |
| II | 30 | 38 | 30.6% |
| III | 19 | 57 | 19.4 |
| IV | 3 | 60 | 3.1 |
| V | 4 | 64 | 4.2 |
| VI | 13 | 77 | 13.3 |
| VII | 11 | 88 | 11.2 |
| VIII | 5 | 93 | 5.1 |
| IX | 4 | 97 | 4.2 |
| X | 1 | 98 | 1 |
| Total | 98 | | 100 |

Table. 3: Sexual Behaviours of Participants.

| Sexual Intercourse | Frequency (F) | Cummulative Frequency(CF) | Percentage (%) |
|------------------------------|---------------|---------------------------|----------------|
| Yes | 57 | 57 | 58.2 |
| No | 41 | 98 | 41.8 |
| Total | 98 | | 100 |
| Sex Partner (> 1) | | | |
| Yes | 7 | 7 | 7.14 |
| No | 68 | 75 | 69.39 |
| Unknown | 23 | 98 | 23.47 |
| Total | 98 | | 100 |
| Frequency of Sex | | | |
| Once a day | 4 | 4 | 4.08 |
| Twice per week | 5 | 9 | 5.10 |
| Once per week | 17 | 26 | 17.35 |
| Abstinence | 22 | 48 | 22.45 |
| Unknown | 50 | 98 | 51.02 |
| Total | 98 | | 100 |
| Use of Barrier method | | | |
| Always | 52 | 52 | 91.23 |
| Seldom | 0 | | 0 |
| Not at all | 0 | | 0 |
| Unknown | 5 | 57 | 8.77 |
| Total | 57 | | 100 |
| Sex with same Gender | | | |
| Yes | 0 | | 0 |
| No | 40 | 40 | 40.82 |
| Unknown | 58 | 98 | 59.18 |
| Total | 98 | | 100 |
| Sex with Animal | | | |
| Yes | 0 | | 0 |
| No | 40 | 40 | 40.82 |
| Unknown | 58 | 98 | 59.18 |
| Total | 98 | | 100 |
| Drug for Sex | | | |
| Yes | 0 | | 0 |
| No | 40 | 40 | 40.82 |
| Unknown | 58 | 98 | 59.18 |
| Total | 98 | | 100 |

Table 4 showed that eighty-five (86.7%) of the respondents had awareness of their HIV status while thirteen (13.3%) did not know their HIV status. Out of the eighty-five respondents, seventeen (20%) males and thirty-eight (44.7%) females could recall the year that they had HIV screening test.

Table. 4: Health Status.

| Awareness of HIV Status | Frequency (F) | Percentage (%) |
|-----------------------------------|---------------|----------------|
| Yes | 85 | 86.7 |
| No | 13 | 13.3 |
| Total | 98 | 100 |
| Year of HIV Test | Male | Female |
| | Frequency (%) | Frequency (%) |
| 2001 | 0 (0) | 1 (1.79) |
| 2002 | 1 (2.38) | 0 (0) |
| 2003 | 2 (4.76) | 0 (0) |
| 2005 | 0 (0) | 2 (3.57) |
| 2006 | 2 (4.76) | 6 (10.71) |
| 2007 | 0 (0) | 6 (10.71) |
| 2008 | 1 (2.38) | 1 (1.79) |
| 2009 | 5 (11.9) | 11 (19.64) |
| 2010 | 6 (14.29) | 7 (12.5) |
| Unknown | 25 (59.52) | 22 (39.29) |
| Total | 42 | 56 |
| Awareness of Partner's HIV status | Frequency (f) | Percentage (%) |
| Yes | 40 | 70.18 |
| No | 14 | 24.56 |
| Unknown | 3 | 5.26 |
| Total | 57 | 100 |

The proportion pattern showed that more of the volunteered had their HIV screening test in the recent years. Forty

(40.81%) of the respondents knew their sex-partners' HIV status while fourteen (14.29%) did not know. Seventy-eight (79.6%) of the participants wished to participate in HIV screening test in their questionnaires as shown in table 5.

Table. 5: Hiv Screening Test.

| Participation | Frequency (F) | Cummulative Frequency (CF) | Percentage (%) |
|---------------------------|---------------|----------------------------|----------------|
| Yes | 78 | 78 | 79.6 |
| No | 20 | 98 | 20.4 |
| Total | 98 | | 100 |
| Request for result | | | |
| Yes | 78 | 78 | 79.59 |
| No | 0 | 78 | 0 |
| Unknown | 20 | 98 | 20.41 |
| Total | 98 | | 100 |

Table 6 showed that twenty-two (22.45%) of the volunteered participants had academic problems, thirty (30.61%) had financial problems and eight (8.16%) had family problems.

Table. 6: Life Challenges.

| Academic Problems | Frequency (F) | Cummulative Frequency (CF) | Percentage (%) |
|--------------------------|---------------|----------------------------|----------------|
| Yes | 22 | 22 | 22.45 |
| No | 73 | 95 | 74.49 |
| Unknown | 3 | 98 | 3.06 |
| Total | 98 | | 100 |
| Financial Problem | | | |
| Yes | 30 | 30 | 30.61 |
| No | 63 | 93 | 64.29 |
| Unknown | 5 | 98 | 5.1 |
| Total | 98 | | 100 |
| Family Problem | | | |
| Yes | 8 | 8 | 8.16 |
| No | 85 | 93 | 86.73 |
| Unknown | 5 | 98 | 5.10 |
| Total | 98 | | 100 |

DISCUSSION

The majority of the participants in this research study fell within the age range of 21-25 years and 26-30 years which is the average age range of students in the University. This age range is regarded as adult possessing maturity and well defined sexuality. Six persons represented in each of the age range 31- 35 and greater than 35 years indicated those who got admission late in life probably due to academic problem or financial problem and some of them were already working and married. Gender participation in the research study showed distribution ratio of female to male at 4:3 ratio indicating more female chose to participate. The distribution pattern of volunteered participants indicated that almost all the faculties were represented.

More than half (58.1%) of the participants had been involved in sexual intercourse with seven (7.14%) of them having more than one sex- partners. This shows the sexuality pattern among the students was demonstrated with gender identity. Those who claimed that they had sex indicated the rate of involvement as most of them (17.35%) had sex once a week while few (5.10%, 4.08%) had sex twice per week and once per day respectively. This behavior of sexuality among the study population reflects the attitude of young adults' exposure to foreign lifestyle and probably due to life challenges which made them susceptible to this kind of

sexual activity. Amazingly twenty-two (22.45%) of the study population practiced abstinence from sexual activity probably as a result of their faith and morality.

Fifty-two (91.23%) out of fifty-seven volunteered participants that indicated they had sexual activity used barrier method during sexual activity. This implies that they are aware of risks associated with sexuality such as transmission of HIV and other sexually transmitted infections. Though five (8.77%) of those who claimed to have had sex did not use barrier method, they did not indicate if it was seldom or they never used barrier method at all. The study could not ascertain if these particular individuals were forced or they voluntarily chose to avoid use of barrier method during sexual activity. The level of campaign against HIV infection and transmission has undoubtedly increase awareness of people to prevention of HIV transmission. The proportion of the study population who declared that they did not have sex with same gender, animals or induced their sexual activity with drugs barely suggests a level of morality and personal esteem.

The health status of the study population showed that eighty-five (86.7%) were aware of their present HIV status while thirteen (13.3%) of them could not (Fig. 1). The institution has encouraged the awareness of the students on HIV prevention by instructing all new students to take medical examination as part of their registration process. Those who could not ascertain their present HIV status could probably have been involved with unprotected sex after they had HIV screening test with partner(s) of unknown HIV status. Only forty (70.18%) of those who claimed to have had sexual activity in the study population knew the HIV of their sex partner(s) while fourteen (24.56%) did not bother to know the HIV status of their sex partners. This actually projects the attitude of part of the study population who would not be concerned about the health status of their sex partners though they belong to intellectual environment where information easily spread. As information and awareness on HIV transmission is being disseminated, there are still individuals who show unconcern attitude.

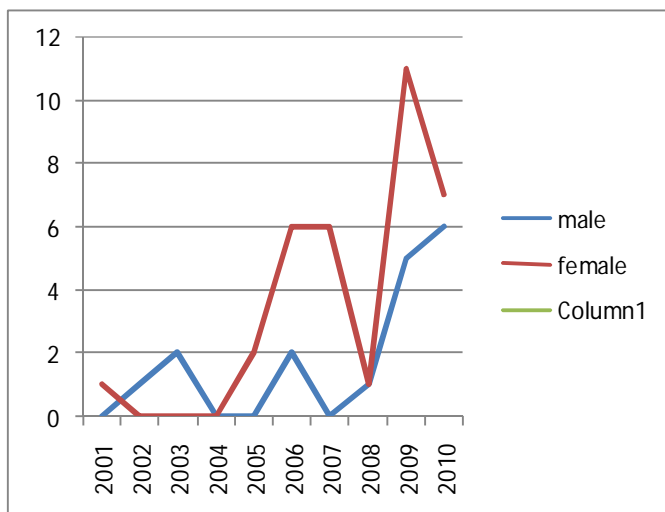


Fig. 1: Awareness of HIV Status.

Though seventy-eight (79.6%) of the study population participated in the HIV screening test, none of them tested positive to the reactive agent. This result has shown that those who knew their HIV status chose to participate in the HIV screening test. Therefore, those who thought they would be negatively affected by the result of the research study had avoided participation in the research study fully or partially. However, the fear of social discrimination, sanction from authority of the institution or psychology of coping with the infection could have led to avoidance of participation by the HIV infected students. It was also observed that sexual activity demonstrated as part of sexuality by some students were not influenced by problems related to academics, finance and family.

Regression analysis was used to determine the effect of time on awareness in both genders. It revealed that in recent years more of the participants were aware of HIV infection than in the past years. $F(5.74)$ is greater than significant $F(0.04)$ and $p < 0.05$ showing there was a marked difference in awareness among participants of these sexually transmitted diseases as years go by. The paired students T-test was used to determine the difference in awareness of HIV between male and female participants which showed that at $p < 0.05$, there was significant difference in awareness of female participants being more than male participants.

In conclusion, the research study has shown that gender identity was well defined among the distribution of the study population with each gender playing his/ her role in sexuality. The common sexual activities involve the opposite gender and never with the same gender or animals nor use of drugs to influence sexuality. Great number of students uses condoms during sex while few still engage in unprotected sex.

Continuing intensified effort on awareness of HIV transmission and prevention in tertiary institutions is recommended as means of enhancing healthy society.

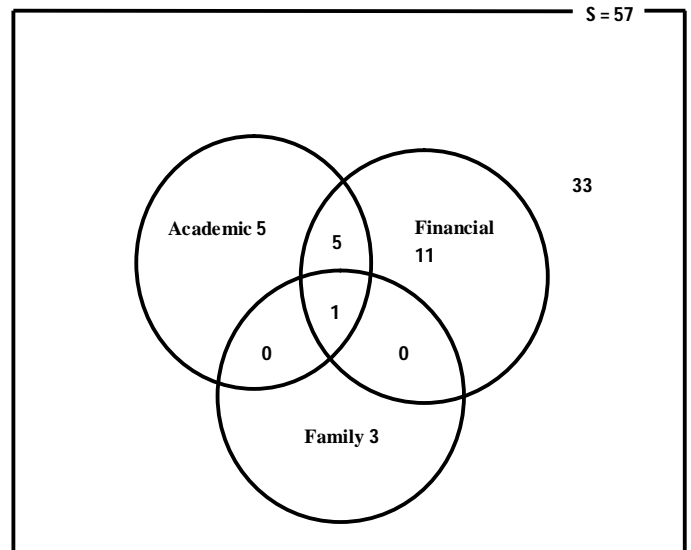


Fig. 2: Life Challenges Among Sexually Active Students.

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