INFLUENCE OF HIV/AIDS AWARENESS ON SEXUAL BEHAVIOUR OF UNDERGRADUATES IN NNAMDI AZIKIWE UNIVERSITY, AWKA

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ABSTRACT

Background: ***The awareness of HIV/AIDS can influence sexual behaviour which can in turn decrease the rate of transmission of HIV. This study was done at Nnamdi Azikiwe University (NAU), Awka, Anambra State, to determine the awareness of HIV/AIDS and its effect on sexual behaviour of undergraduate students.***

Method: ***This was a cross-sectional study which covered students at the main campus of the University. A convenience sampling technique was used and most of the faculties were randomly covered. A structured questionnaire was designed based on the findings from literature review.***

Result: ***Approximately 98% of the students have heard of HIV/AIDS prior to the study and more than 89% could identify ways to protect oneself against sexually transmitted HIV/AIDS. More females (72%) than males (37%) reported non-use of condom during sex.***

Conclusion: ***Majority of the students have heard of HIV/AIDS and many believe that it can be prevented. The high level of awareness has not timely influenced the students' sexual practice because it has not translated into healthier sexual practices. A significant number of students are sexually active and are involved in risky sexual practices that can expose them to HIV infection.***

INTRODUCTION

The Human Immunodeficiency Virus (HIV) types 1 and 2, derived from primate lentiviruses, are the aetiologic agents of Acquired Immunodeficiency Syndrome (AIDS).[1] HIV-2 causes similar illness to HIV-1, but is less aggressive and restricted to western Africa. The earliest documented case has been traced to a blood sample from 1959.[2] However, the illness was first described in 1981, and HIV-1 was isolated by the end of 1983. AIDS is deadly. Most of the people who were diagnosed with it in early 1990 died within 2-3 years.[3] The knowledge of AIDS has caused many people to change their sexual behaviours, such that people move from less safe sexual attitude to safer one. Hence, there is a trade-off between safe and unsafe sex, promiscuity and monogamy, heterosexuality and homosexuality since HIV transmission varies wildly across sexual activities. For instance, anal receptive sex is by far the most dangerous sexual activity[4,5] and oral sex is relatively safe.[6]

The university brings together young people of both sexes, many of whom have already started sexual activity and are still sexually active. It is, thus, a fertile ground for transmission of the disease given the relative sexual freedom that exists. Many different cultural, social and behavioural aspects determine the regional characteristics of HIV disease. Historically, the epidemic in North America and northern Europe has been in men who have sex with men, whereas in Southern and Eastern Europe, Vietnam, China and Indonesia the incidence has been greatest in injection drug-users. However, the epidemic in many nations is changing. Heterosexual transmission has become a significant and more dominant route[2]. In Africa, the erosion of traditional values, which stake premium on high sexual morality, and adoption of more liberal western culture, aided by provocative items on internet and electronic media, has made the matter worse. This study aims to establish the level of awareness and attitude towards the disease as well as the behaviour and perception of susceptibility among students in a government owned university.

METHODS

The study was done at Nnamdi Azikiwe University (NAU), Awka. Undergraduate students, full-time and part-time, were studied. The faculties covered were: Law, Engineering and Environmental Sciences, Management Sciences, Natural Sciences and Information Technology. The work was a cross-sectional descriptive study with the view of assessing the level of knowledge, perceptions and attitude, sexual behaviours and factors affecting practice of sexual activities. Convenience sampling was used and all the faculties were randomly covered. Sample size "N" was calculated using this formula:[7] $N= [Z^2(p)(1-p)]/c^2$. The calculated sample size was 384. Questionnaires were used to collect data. The data were analyzed both manually and electronically using a computer application (Microsoft Office Excel) and calculator. Percentages were compiled.

RESULTS

A total of 379 out of 384 questionnaires distributed were retrieved and analyzed. This represented a

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response rate of 98.7%. The participating students' ages ranged from 15 to 30 years and above. Two hundred and seventy eight (73.4%) of the respondents were between the ages of 20 – 24 years, 54 students (14.2%) aged 25-29 years, 36 students (9.5%) aged 15-19 while 11 students (2.9%) were 30 years old and above. Males were 238 (62.8%) while females were 141 (37.2%). Level of study of the respondents is as in table I:

Table I : Level of study of respondents

Level of study	Frequency	Percentage (%)
100	102	26.9
200	136	35.9
300	62	16.4
400	34	9.0
500	45	11.9
TOTAL	**379**	**100.0**

All the students were Christians. The religious affiliations of the students are shown in table II

Table II: Religious affiliation of respondents

Religion	Frequency	Percentage (%)
Roman Catholic	177	46.7
Anglican	79	20.8
Pentecostal	84	22.2
7-day Adventist	11	2.9
Methodist	13	3.4
Jehovah Witness	9	2.4
Islam	0	0.0
Traditional	0	0.0
Others	6	1.6
TOTAL	**379**	**100.0**

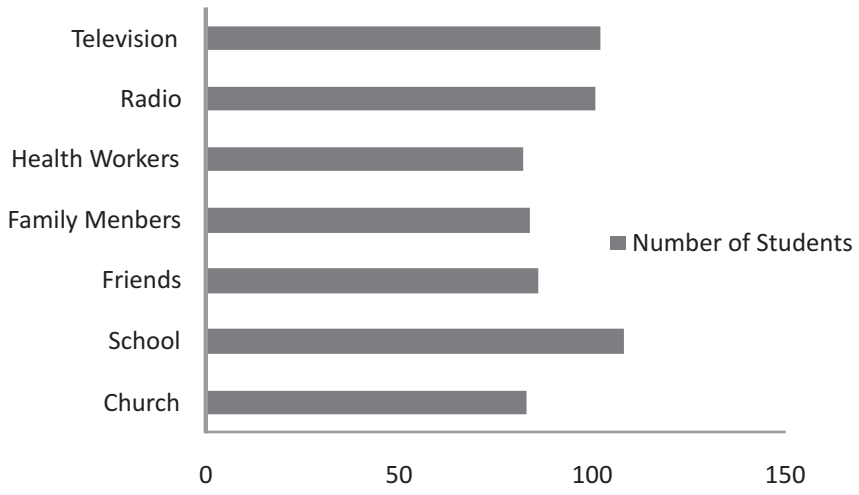
Majority of the respondents grew up in urban areas. Taking gender into consideration, more males than females grew up in rural areas (table III).

Table III: Areas where the respondents grew up

	Female		Male		Total	
Area	**n**	**%**	**n**	**%**	**N**	**%**
Urban	124	87.9	176	73.9	300	79.2
Small town	6	4.3	34	14.3	40	10.6
Rural	11	7.8	28	11.8	39	10.3
TOTAL	**141**	**100.0**	**238**	**100.0**	**379**	**100.0**

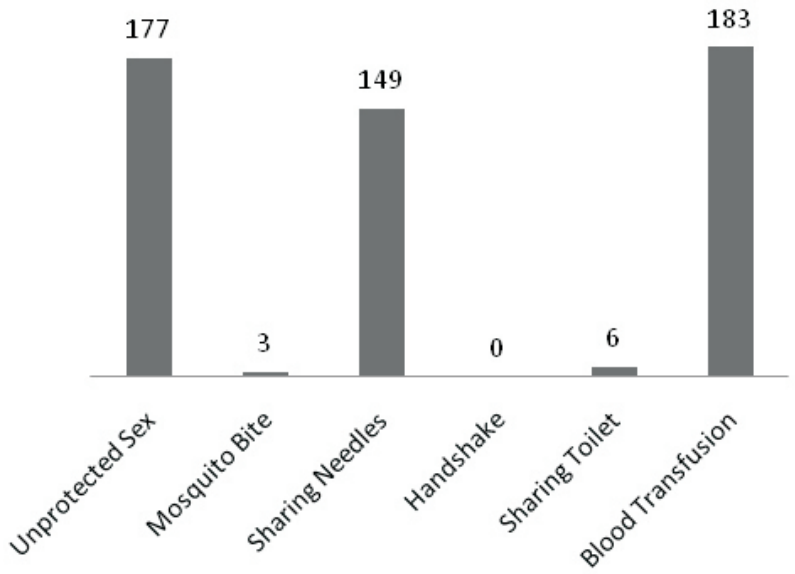
All the males (100%) had heard about HIV/AIDS. However, 6 females (4.3%) reported not to have heard about it. Schools were the commonest source of HIV/AIDS information. This is followed by the television and radio (figure I).

Figure I: Students' sources of HIV/AIDS information



Majority (183) of the students thought blood transfusion is a means of transmission of HIV (figure II).

Figure II: Respondents' views on ways in which HIV is transmitted



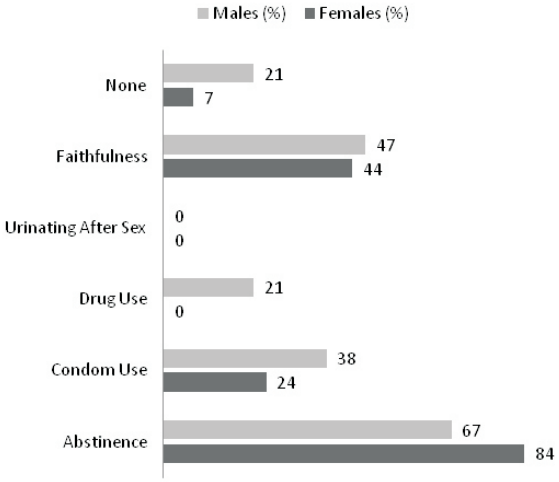
Most of the respondents believe that HIV has no cure (table IV).

Table IV: Responses of the students on if HIV/AIDS has a cure

HIV/Has a Cure	Female		Male		Total	
	n	%	n	%	N	%
Yes	27	19.1	17	7.1	44	11.6
No	80	56.7	198	83.2	278	73.4
Unanswered	34	24.1	23	9.7	57	15.0
TOTAL	**141**	**100.0**	**238**	**100.0**	**379**	**100.0**

Respondents' views on the methods of prevention of HIV are as shown in figure III.

Figure III: Respondents' views on the methods of HIV prevention



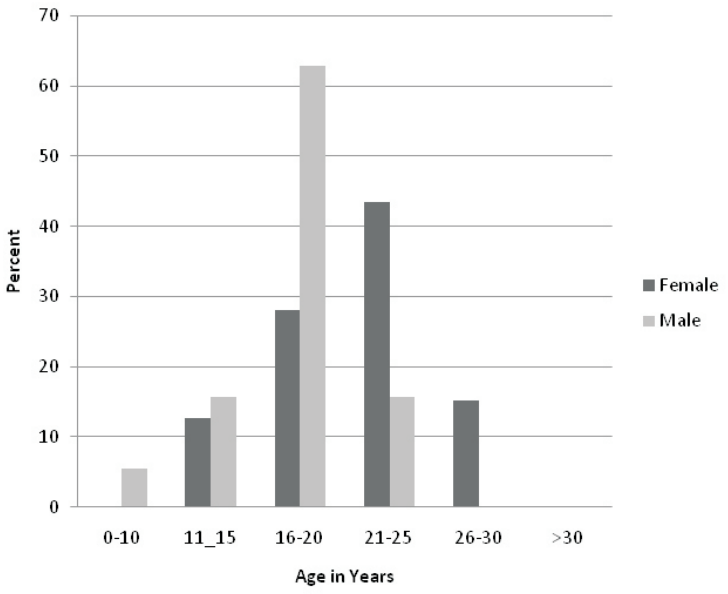
Of all the students, 322 (85%) thought a HIV positive patient can look healthy. Of the respondents, 148 (39%) reported that they did not know anyone who had tested HIV positive while 182 (48%) said that they knew someone who tested positive. Practice of kissing, fondling and sexual intercourse are as in table V.

Table V: The practice of kissing, fondling and sexual intercourse

Sexual activity	Females		Males		Total	
	n	%	n	%	N	%
Kissing						
Yes	101	71.6	198	83.2	299	78.9
No	23	16.3	23	9.7	46	12.1
Unanswered	17	12.1	17	7.1	34	9.0
Total	**141**	**100.0**	**238**	**100.0**	**379**	**100.0**
Fondling						
Yes	45	31.9	97	40.8	142	37.5
No	62	44.0	57	23.9	119	31.4
Unanswered	34	24.1	84	35.3	118	31.1
Total	**141**	**100.0**	**238**	**100.0**	**379**	**100.0**
Sex						
Yes	39	27.7	108	45.4	147	38.8
No	63	44.7	91	38.2	154	40.6
Unanswered	39	27.7	39	16.4	78	20.6
Total	**141**	**100.0**	**238**	**100.0**	**379**	**100.0**

More males (> 60%) than females had their first sexual experience before the age of 20, while most females engaged in sex after 20 years of age. More than 5% had their first sex before they were more than 10 years old (figure IV).

Figure I V: Age at the first sexual experience



Number of sexual intercourse in the 3 months preceding the study and number of sex partners in lifetime's are as shown in figures: V and VI respectively.

Figure VI: Number of sexual intercourse of the students in the last 3 months

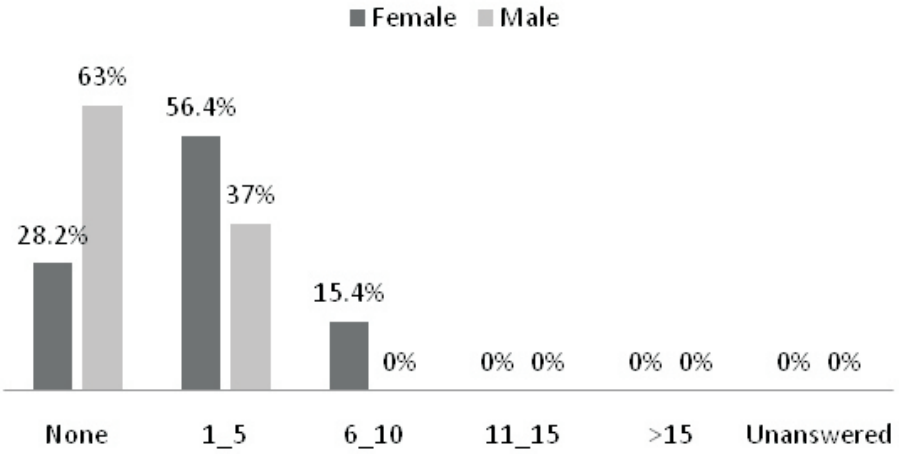
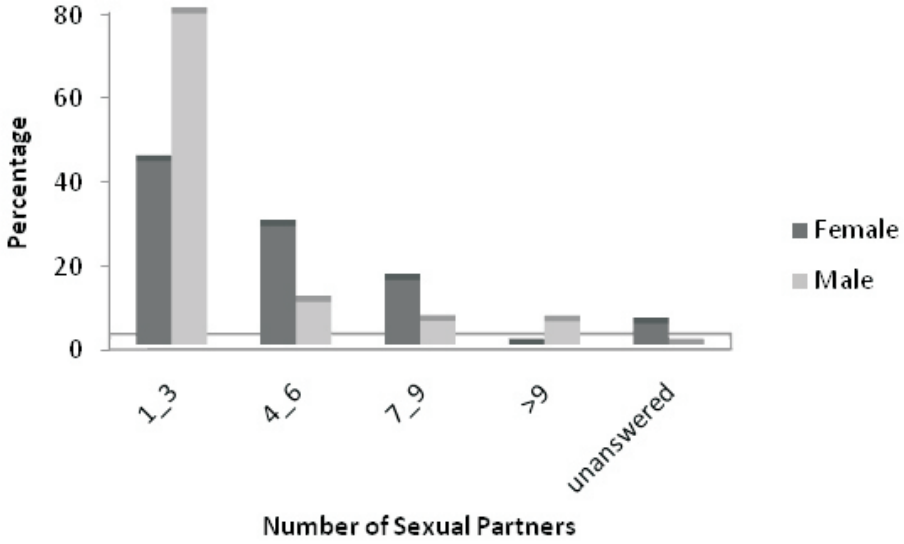


Figure VII: Number of sexual partners in the students' lifetime



More males (79.6%) than females (48.7%) have sex for pleasure alone. Only the females (38.5%) reported sex for the purpose of marriage. No student had sex for financial reasons and 16 (10.9%) students had sex for other reasons. Eleven students (7.5%) gave no reason for having sex. Most of the students do not think they are at risk of contracting HIV; and only 65.3% had ever been tested.

Table VI: Response of the students on risk perception

Do you feel at risk	**N**	**%**
Yes	56	38.1
No	91	61.9
TOTAL	**147**	**100.0**
Ever been tested		
Yes	96	65.3
No	51	34.7
TOTAL	**147**	**100.0**

Fifty-two percent of males and 72% of the females do not know their partners' HIV status before sex. More females (72%) than males (37%) reported non-use of condom during sex. None of the respondents reported any homosexual or bisexual behavior (Table VII).

Table VII: Students' actual reported behaviours

	Yes				No				Unanswered			
	Female		Male		Female		Male		Female		Male	
Lifestyle/Behaviors	n	%	n	%	n	%	n	%	n	%	n	%
I don't know the HIV status of my Partner(s)	11	28	45	42	28	72	57	52.8	0	0	6	5.6
I/my partner(s) always use condom	6	15	68	63	28	72	40	37	5	13	0	0
I am a homosexual	0	0	0	0	33	85	102	94.4	6	15	6	5.6
I am a bisexual	0	0	0	0	34	87	102	94.4	5	13	6	5.6
I reuse the same condom twice	0	0	0	0	39	100	105	97.2	0	0	3	2.8

DISCUSSION

There were more male (62.8%) than female (37.2%) student respondents in the study. This may be due to males being more open in discussions about sexuality than females. Global success in combating HIV/AIDS must be measured by its impact on young people[8]. There is a high level of awareness of HIV/AIDS among the students population studied; approximately 98%, which agrees with the work done by O. O. Ayanakogbu et al[9] in which 95%, have heard of HIV/AIDS prior to the study and more than 89% could identify ways to protect oneself against sexually transmitted HIV/AIDS. The main routes of transmission, sexual contact without condom and intravenous drug use, were both identified by most of the students. Despite high levels of awareness, there were grave misconceptions in mode of transmission, cure, and method of prevention of the disease.

In keeping with high risk behaviour among youths, the level of sexual activity among young people has increased considerably over the years. This is reflected by the declining age of first sexual experience and the high frequency of sexual intercourse among this group. Males become sexually active earlier than females since a number had sex before they were 10 years of age. This reflects the fact that boys are usually more adventurous than females and so initiate sexual activities earlier than females. On the other hand, the declining age of sexual initiation for females may be explained by the fact that they are 'prey' for older men who may be financially capable of coercing them into having sexual affairs. It has been shown that men/boys are able to buy sexual favour from women/girls owing to the latter's low self esteem reinforced by poverty.

The number of lifetime and current sexual partner predict high sexual activity among young people. More than 30% of the students have more than 3 sexual partners and this agrees with O. S. Osowole's report in which 30.6% of those sampled had sex with at least two persons. This also agrees with another group in the same study where 33.2% reported having current sexual relationship with at least two persons[10]. More males than females had had one lifetime partner whereas more females than males had had at least two lifetime partner. The frequency of sexual intercourse is high among the females where about 15% had sex at least six times in 3 months. This is less than reported in a study by Osowole, involving two groups of secondary school students, where 37% of respondents in one group and 39.7% in the other have sex regularly[11.]

Most of the sexually active university students in the study do not use condom. This is more among the females where 72% fail to use condom always. This agrees with the study by Clifford O. O. who reported that knowledge of contraceptive (including use of condom) is higher than its use. In his work, 76% of study population had the knowledge of contraceptive but only 14% use it[12].

Majority of students have had sex and more females gave pleasure as reason for having sex. None of them reported financial reason. This is not expected because some female students tend to depend on men for financial support and such men usually demand sexual favours. However, the worry of getting a suitable suitor in the "marriage market" may explain why many of the females (38.5%) gave marriage purposes as their reason for having sex since it is, in fact, becoming a practice in our society for young men to sleep with their female partners as a pre-requisite for marriage.

Finally, the high level of awareness has not timely influenced the students' sexual practice. It has not translated into healthier sexual practices.

CONCLUSION AND RECOMMENDATIONS

Majority of the students in the study have heard of HIV/AIDS and many believe that it can be prevented. The high level of awareness has not timely influenced the students' sexual practice because it has not translated into healthier sexual practices. A significant number of students are sexually active and are involved in risky sexual practices that expose them to HIV infection. These include regular unprotected sex, multiple sexual practices and high frequency of sexual activity.

Specific knowledge about important issues regarding HIV/AIDS as well as perception of the disease is still low and may explain the disconnection between the awareness of the disease and the sexual practices of the students. There is need to campaign in favour of voluntary and counseling testing especially with the view to encourage young people to come forward for testing even when they seem not to have any symptoms. It would be wise also to initiate campaign strategies that would motivate these young people to avoid unhealthy sexual practices and risky sexual behaviour that will predispose them to contacting HIV/AIDS.

The following recommendations are being made:

- Handbooks and booklets containing information on HIV/AIDS should be distributed to fresh students at registration.
- Courses on HIV/AIDS should be made compulsory.
- Seminar and film shows on HIV/AIDS should be promoted.
- Interactive session between students and health professionals should be put in place.
- Encourage students on voluntary testing and counseling.
- Religious activities on campuses should be encouraged to help reduce the problem on unhealthy sex practices.
- Student group (e.g. AIDS Club) should be encouraged and sponsored with the aim of training and equipping students with health education to help campaign against HIV/AIDS among fellow students.

REFERENCES

1. Brooks GF, Jawetz E, Melnick JL, Adelberg EA. Jawetz, Melnick & Adelberg's Medical Microbiology. 24th Ed. New York: The McGraw-Hill Companies, 2007: 604-618.
2. Colledge NR, Walker BR, Ralston SH. Davidson's Principles & Practice of Medicine. 21st Ed. New York: Elseiver Limited; 2010: 383-408.
3. Centers for Disease Control. HIV/AIDS surveillance report, 2002. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2003.
4. Kingsley LA, Detels R, Kaslow R, et al. Risk factors for seroconversion to human immunodeficiency virus among male homosexuals: Results from the multicenter AIDS cohort study. Lancet. 1987; 1(8529): 345-349.
5. Vittinghoff E, Douglas J, Judson F, McKirnan D, MacQuenn K, Buchbinder SP. Per-contact risk of human immunodeficiency virus transmission between male sexual partners. American Journal of Epidemiology. 1999; 150 (3): 306-311.
6. Rottenberg RB, Scarlett M, del Rio C, Reznik D, O'Daniels C. Oral transmission of HIV. AIDS. 1998; 12 (16): 2095-2105.
7. Creative Research Systems. Sample size formula for opinion surveys. Available from: http://www.surveysystem.com/samplesize-formula.htm (Accessed 22 February 2013).
8. UNICEF. Young people and HIV/AIDS : Opportunity in crisis. Geneva: UNICEF; 2001: 48.
9. Ayanokogbe OO, Omaatsala BD, Inemi VA, Ahmed OA, Menga OU. Knowledge, attitude, belief and behavioural practices for creating awareness about HIV/AIDS in Lagos State, Nigeria. Nigerian Medical Practitioner. 2003, 44: 7-10.
10. Fawole OI, Asuzu MC, Oduntun SO. Survey of Knowledge, attitudes and sexual practices relateing to HIV/AIDS infection among Nigerian scondary school students. African Journal of Reproductive Health. 1999; 3 : 15-24.
11. Clifford OO, Longman BS, Amos A. Parental characterisics and adolescent sexual behaviour in Bida Local Government Area of Niger State, Nigeria. African Journal of Reproductive Health. 2002, 6 :95-106.
12. Webb D. HIV & AIDS in Africa. Clarement & Satville : David Philip publishers and University of Natal Press; 1997: 112-115.