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AIDS KNOWLEDGE, ATTITUDE AND BEHAVIOURAL PATTERN AMONG HIGH SCHOOL STUDENTS IN SOUTHWESTERN NIGERIA

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An evaluation of knowledge, attitude and behavioural patterns of high school students in Oyo and Osun States, Southwestern Nigeria, towards HIV/AIDS was undertaken. A structured questionnaire was administered to respondents from six secondary schools that were selected by systematic random sampling method from the two States. The questionnaire focused on specific aspects of knowledge, attitude and behavioural patterns related to HIV/AIDS, its mode of transmission and preventive measures. Results from the study showed that 362 (73%) of the 496 respondents had correct knowledge of the causative agent of AIDS, 69% had correct knowledge of the mode of transmission, 83.2% had correct knowledge of the people at risk and 80.2% had good knowledge of methods of prevention. Attitude toward AIDS victims was however relatively poor with 21% believing that AIDS patients should be isolated and avoided and additional 7% believing that people should not eat or share utensils with AIDS patients. Only 57.7% believed that people should relate freely with AIDS patients. This study showed an improvement in the knowledge and attitude towards HIV/AIDS over a previous one carried out over a decade ago in the same locality, highlighting the importance of mass media campaign programme embarked upon by the States over the years. However, there is need to further increase the awareness campaign especially as it relates to attitude towards AIDS patients and also on information dissemination, which should be more detailed and formal. Incorporating sex education into the curriculum of secondary schools will be a welcome development in stemming the tide of this dreaded disease.

Keywords: Knowledge, attitude, sexual behaviour, HIV, AIDS.

INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) caused by Human Immunodeficiency Virus (HIV) is a disease that affects primarily young adults (1-2). The scourge of HIV/AIDS epidemic has continued worldwide but the impact is most felt in developing countries especially Africa. The Joint United Nation Programme on HIV/AIDS estimates of December 2001 shows that globally, about 36.1 million people are living with HIV/AIDS (3). By 2002, the number had increased to 40 million, with new infection occurring at a rate of 16,000 per day (4) and by 2003, the total estimate was put at 60 million people infected, with about 20 million dead from AIDS related illnesses (5).

In Nigeria, the epidemic has continued unabated and presently health authorities establish that about 4 million adults and 800,000 children may be infected with the virus. In Oyo State, Southwestern Nigeria, the national sentinel survey put the level of infection at 4% in 2001, which increased to 10% in 2003, with most of those infected in the 15-24 years age group (6).

Adolescents and young adults are recognized as a group of concern in the continued spread of HIV/AIDS, not only for their unprotected sexual habits but for their propensity to have multiple sexual partners (7, 8), which are high risk behaviours. This group therefore represents a major target for AIDS prevention education. Although, HIV/AIDS awareness campaign at both national and state levels in Nigeria have been on for some years, they have not been found to sufficiently change the behavioural pattern and attitude of these youths who are at risk of contacting this infection (7-11). Health education therefore needs to be intensified among these youths. This approach has been applied in developing countries to reduce the transmission among homosexuals, intravenous drug users and prostitutes (12).

A study of high school students carried out in Ibadan, Oyo State, Southwestern Nigeria in 1988 revealed that

70% were unaware of HIV/AIDS and 90% did not know that it can be spread by sexual intercourse (13). Sixteen years after, we assess the knowledge, attitude and behavioral pattern of secondary school students toward HIV/AIDS in the same geographical zone, in order to determine to what level the awareness campaign have reached and identify areas that needs to be improved upon.

MATERIALS AND METHOD

Study area

The study was conducted in Oyo and Osun States, Southwestern Nigeria in May 2004. Osun State was created out of the old Oyo State in 1992. The States occupy latitude 7°48N and longitude 4°37E. The estimated population by the 1991 census in the country put the figure for the two States at 5.7million. There are about 630 secondary schools (public and private) in the two States.

Study population/selection

The study population consisted senior secondary school students (SSI, SSII and SSIII) from 6 schools in the two states selected by systematic random sampling technique. The schools included those run by the government (public) and private individuals. The estimated sample size determination was done using the sentinel sero-prevalence rate of 10% for each of the states and twice the number of questionnaires distributed in case of non-response and improper filling of the forms.

The students were randomly selected and the forms were filled during school hours by each student independently. Students who objected to filling the forms in the selected classes were excluded. In all, a total of 500 questionnaires were administered. We sought the co-operation and help of the class teachers and headmasters of the schools in selecting the students and administering the questionnaires.

Method

The questionnaires on HIV/AIDS were self-administered to respondents after a pre-test. The questionnaires focused on specific aspects of knowledge of HIV/AIDS, its mode of transmission and prevention, attitude towards AIDS patients and sexual behaviour of students in spite of the knowledge.

Demographic data of the students were also obtained and these include name, age, sex, religion, and type of schools. Other variables include weekly income of students, level of parents' education, willingness to undergo HIV testing and source of information about AIDS.

Statistical analysis

Analysis was done on IBM computer with EPI INFO version 5.0 software (14). Test of significance was done using Chi square and p value of < 0.05 was taken as significant value.

RESULTS

Demographic characteristics

Four of the questionnaires were not properly filled and were therefore excluded from analysis. The final sample available for analysis was 496 questionnaires. This represents a total response rate of 99.2%. Two hundred (40.3%) students were from secondary schools in Oyo State while 296 (59.7%) were from secondary schools in Osun state. Three hundred and forty-six (69.8%) students were from public schools while 150 (30.2%) were from private schools. The mean age of the students was 17.6 years. The male to female ratio was 0.9: 1. Most (71.8%) of the students were Christians and a few (0.8%) were married.

Table 1: Demographic characteristics of respondents

Data	Public school	Private school	Total (%)
Age: < 15years	72	62	134 (27)
> 15years	274	88	362 (73)
Sex: Male	165	63	228 (46)
Female	181	87	268 (54)
Religion: Christian	249	107	356 (71.8)
Muslim	97	40	137 (27.6)
Others	–	3	3 (0.6)
Class: SSS I	37	63	100 (20.2)
SSS II	259	76	335 (67)
SSS III	50	11	61 (12.3)
Weekly: <N100	134	56	190 (38.3)
Spending < N500	128	62	190 (38.3)
> N500	84	32	116 (23.4)
Marital: Married	3	1	4 (0.8)
Status Single	343	149	492 (99 .2)

Table 2: Knowledge on causes, person at risk, transmission and prevention of HIVAIDS

a.) Causes	Overall%	Public school N (%) N=346	Private school N (%) N=150	X^2 value	P value
Virus	73.0	229 (66.2)	133 (88.7)	26.75	p < 0.005
Malnutrition	9.3	36 (10.4)	10 (6.7)	1.71	0.05 < p< 0.975
"Juju"	2.6	8 (2.3)	5 (3.3)	0.44	0.05 < p< 0.975
No idea	15.1	73 (21.1)	2 (1.3)	31.87	p < 0.005
b.) Persons at risk					
Prostitutes	58.3	205(59.2)	84(56.0)	0.44	0.05 < p< 0.975
Hemophiliacs	21.8	86(24.9)	22(14.7)	6.41	0.01 < p< 0.025
Blood Transfusion	49.6	192(55.5)	54(36.0)	15.89	p < 0.005
Homosexuals	8.1	27(7.8)	13(8.7)	0.1	0.05 < p< 0.975
Promiscuous individuals	30.2	118(34.1)	32(21.3)	8.11	p < 0.005
No idea	17.7	74(21.4)	14(9.3)	10.37	p < 0.005
c.) Routes of transmission					
Sexual intercourse	59.3	191(55.2)	103(68.7)	7.88	p = 0.005
Unsterilized needles/objects	37.7	156(45.1)	31(20.7)	26.63	p < 0.005
Blood transfusion	50.4	175(50.6)	75(50.0)	0.0000	p > 0.995
Kissing	20.0	75(21.7)	24(16.0)	2.05	0.05 < p< 0.975
Hugging	0.4	2(0.6)	0(0)		
Handshaking	0.2	1(0.3)	0(0)		
Mosquito bite	4.8	21(6.1)	3(2.0)	3.8	p = 0.05
No idea	5.6	27(7.8)	1(0.7)	10.05	p < 0.005
d.) Preventive measures					
Condom use	45.8	174(50.3)	53(35.3)	9.34	p < 0.005
Avoid contact with victims	19.8	79(22.8)	19(12.7)	6.76	0.005 < p<0.01
Avoid transfusion of unscreened blood	31.9	117(33.8)	41(27.3)	2.01	0.05 < p< 0.975
Have just one partner	31.0	111(32.1)	43(28.7)	0.56	0.05 < p< 0.975

Knowledge about the cause of AIDS

The term HIV/AIDS was familiar to 99.6% of the students. Table 2 shows the students knowledge of the cause of AIDS. The most common response was that a virus was responsible in 66.2% of the students from public schools and 88.7% of students from private schools. Only 15.1% of the students had no idea of the cause of AIDS, and this is worse among the students from public

schools ($X^2 = 31.87$, $p < 0.005$). Their source of information included newspaper (29.6%), radio (35.9%), hand bills (31.3%), friends (19.8%), parents (33.5%), teachers (33.5%) and television (60.5%) (Table 3)

Table 3: Source of information about HIV/AIDS

Sources	Number	Percentage
Television	300	60.5
Radio	178	35.9
Newspaper	147	29.6
Textbook	37	7.5
Distributed handbills	155	31.3
Parental communication	118	23.8
Friends	98	19.8
School teacher	166	33.5

Knowledge of people at risk/ mode of spread

As regards the people at risk of being infected, 58.3% of the students believed that prostitutes are most likely to be infected, followed by those who receive blood transfusion (49.6%), and those with multiple sexual partners (30.2%).

On the mode of HIV/AIDS transmission, 59.3% believed that it can be transmitted by sexual intercourse (68.7% of the students from the private schools and 55.2% of students from the public schools). Other means of transmission mentioned include blood transfusion in 50.4% of students, and use of unsterilized needles in 37.7%. Twenty percent of the students believed that the virus can be transmitted through kissing while 5.6% of the students had no idea of how the virus can be transmitted (Table 2).

Knowledge of preventive measures

In response to the question on how HIV/AIDS can be prevented, 45.8% of the students believed condom can be used, 31% believed that having just one partner, while 31.9% believed avoiding transfusion of unscreened blood are preventive measures. Only 19.8% are of the opinion that prevention is by avoiding contact with AIDS victims. (Table 2)

Attitude towards AIDS patients

Twenty one percent of the students said AIDS victims should be avoided and isolated and 7% believed people should not eat or share utensils with AIDS patients. However, 57.7% are of the opinion that people should relate freely with AIDS patients (Table 4).

Table 4: Attitude towards HIV/AIDS patients

Attitude	Number	%
Patient should be isolated and avoided	104	21
Never eat with AIDS victim	35	7.1
Relate freely with AIDS victim	286	57.7
Take victim to doctor	446	89.9
Take victim to herbalist	24	4.8
Take victim to church	5	1

Sexual behaviour/HIV screening

Concerning HIV screening, 40% felt they could not have AIDS and are therefore willing to be freely screened for HIV while 59% are afraid to have the screening exercise (Table 5).

In response to sexual behaviour, 14.3% admitted to having sexual partners, 10.3% admitted to have had sexual intercourse in the past, and 66% of those who have had sexual intercourse in the past before used condom.

Table 5: Sexual behaviour of students

Sexual behaviour	Public school (%)	Private school (%)	Overall %
Have sex partners	65(18.8)	6(4.0)	14.3
Have no sex partner	281(81.2)	144(96.0)	85.7
Have had sexual intercourse before	40(11.6)	11(7.3)	10.3
Have used condom during sexual intercourse	33(9.5)	1(0.7)	6.8
Volunteer for HIV screening	141(40.8)	58(38.7)	40.1

DISCUSSION

Over the years, a lot of awareness campaign and propaganda on HIV/AIDS have been carried out at both national and state levels in Nigeria through the mass media especially radio and television. In this study therefore, majority of the students had good

knowledge of the deadly scourge better than it was in 1988 when over 70% of high school students were unaware of AIDS and 90% did not know that the infection can be spread through sexual intercourse (13). Although the knowledge of the causative agent was high in this study, many (62.3%) still did not know that the virus can be transmitted by using unsterilized needles and sharp objects, while about 25.4% believed that the virus can be transmitted by kissing, hugging, handshaking and by mosquito bite, and about 5.6% had no idea of mode of transmission. These erroneous beliefs, premised on inadequate or improper information, can adversely affect societal attitude towards AIDS patients and further aggravates stigmization and discrimination against these patients, as can be deduced from the response of some of the students. These are areas the awareness campaign must focus on.

The students also demonstrated poor understanding of the preventive measures, as less than half knew the use of condoms as a protective measure. A similar finding was reported in a Tanzania study (15) where only 39% of the study population knew condom use as a preventive measure. This finding is also an indication of inadequate or improper information dissemination about HIV/AIDS transmission, prevention and control.

Students from private schools were better informed about HIV/AIDS than those from public schools ($X^2 = 26.75$, $p < 0.005$). This may be a reflection of the fact that, students from private schools are likely to be from parents in middle to high socioeconomic class and with good educational background and therefore have more access to information from their parents, teachers, mass media and other means.

With regard to sexual behaviour, 14.3% of the students, in spite of their AIDS knowledge, agreed to having sexual partners, 64.8% of whom have had at least one sexual experience and 71.9% of these had used condom during intercourse. This finding is similar to those from Ghana (16) and South Africa (17). It highlights the sexual networking going on among the youths and shows that sexually experienced students are at risk of exposure to HIV and other sexually transmitted infections

Most of the students in this study got their information through the mass media indicating that, to a large extent, the mass media campaign has been of tremendous benefit in sensitizing the populace. However, information needs to be more accurate and detailed. Only 23.8% of the students were informed by their parents, which implied that parents do not actively communicate with their children about adolescent sexuality and sexually transmitted diseases. In our society, there are traditional norms that inhibit discussions of sexual issues with parents, particularly among the inquisitive female youngsters. Many studies (16, 18-20) have shown a strong association between family communication about HIV/AIDS, sexual behaviour and condom use. Therefore, family communication about sexual issues with their children needs to be encouraged in our society.

The prospect for HIV/AIDS control largely depends on recognizing the scale of threat and implementing policies to counter it. It is not enough to increase the awareness of high school students about HIV/AIDS but also to impact accurate knowledge on the modes of transmission and methods of prevention in other to successfully control the epidemic among the adolescents. This may mean changing the overall approach to the dissemination of HIV/AIDS information and making it more detailed instead of being haphazard and informal.

Emphasis should also be placed on promoting moral attitude of the youths, encouraging abstinence and avoiding premarital sexual intercourse. In achieving a successful AIDS education programme in this group, there will be a need to review the curriculum of secondary schools to include adolescent sexuality, sex education and sexually transmitted diseases. This school based intervention programmes must involve parents, teachers and the Ministries of Health, Education, and Social welfare in creating supportive environment to strengthen the school effort.

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