



## A Survey of the Knowledge of the Modes of Transmission of HIV/AIDS among Some Youths

E. M. Aanu (M.Ed) & <sup>2</sup>R. A. Olatoye (PhD)

Faculty of Education,

Department of Curriculum Studies and Instructional Technology,  
Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria.

<sup>2</sup>Department of Science, Technology and Mathematics Education,  
College of Education, Ipetu-Ijesa Campus,

Osun State University, Osogbo, Osun State, Nigeria.

E-mail: lizzymosun@yahoo.com, kingdemola@yahoo.com

### ABSTRACT

*This study surveyed the level of knowledge of some polytechnic and secondary school students about the knowledge of mode of transmission of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). A random sampling of four secondary schools and a purposive sampling of a polytechnic in Abeokuta, Ogun State were used for the study. One hundred and fifty students were randomly selected from the secondary schools and one hundred and forty nine students were randomly selected from the polytechnic. A twenty-item students' knowledge of HIV/AIDS questionnaire was used to collect data. Data were analyzed using frequencies, percentages and t-test statistics. Findings show that students' knowledge of HIV/AIDS transmission is generally high (Percentage mean = 63.1%). There is no significant difference between male and female students' knowledge of mode of transmission of HIV/AIDS. Though, the knowledge is high for both secondary and polytechnic students, however the polytechnic students have significantly higher knowledge than the secondary school students. Recommendations are made based on findings.*

**Key Words:** HIV/AIDS, condoms, transmission, sexually-transmitted diseases, Nigeria

### INTRODUCTION

In Nigeria the most populous country in the Sub-Saharan Africa, with an estimated population of 120 million, the rate of HIV infection has slowly grown from 1.9% in 1993 to 5.8% in 2001. More than 3 million Nigerians are estimated to be living with HIV/AIDS. Generally, sub-Saharan African is the most affected by HIV/AIDS. An estimated 26.6 million people are living with HIV/AIDS and approximately 2.3 million new infections occurred in Sub-Saharan African in 2003. In the past the epidemic has claimed the lives of an estimated 2.3 million Africans. Ten million young people (aged 15-24 years) and almost 3 million children under 15 are living with HIV. (Federal Ministry of Health National Action Committee on AIDS, 2000; World Bank Report, 2003).

The world's youngest people are threatened by HIV/AIDS. Of the 40 million people living with HIV/AIDS, more than a quarter are aged 15-24. Half of all new infections now occur in young people. In Nigeria, the public enlightenment campaign to sensitize the youths on the menace of HIV/AIDS, have always been met with obstacles such as inadequate funding of HIV/AIDS programmes, negative attitude of parents to sex education, poverty, early marriage for girls, religious organization's attitudes towards sex education, peer pressure, influence of pornographic materials, hawking, sexual harassment in schools, access to alcohol e.t.c. (World Bank Reports, 2004)

The first case of AIDS in Nigeria was seen in 1984 in a sexually active 13-years old girl, and was reported in 1986. In the same year (1986), several cases of sero-positivity were reported in commercial sex workers (Nigeria Bulletin of Epidemiology, 1992). In certain areas like Enugu State, the mean HIV prevalence had increased from 2.3% in 1995 to 16-8% by 1999, an increase of more than 700%. Similarly eight other areas of the country had HIV prevalence rates greater than 10%. Nigerian population continues to increase at an alarming rate of 2.83% or more. The scourge of HIV infection will have terrible consequence on the population of Nigeria and ultimately of Africa and the world. Despite all these, some

Nigerians still continue to deny the existence of the disease (Federal Ministry of Health National Action Committee on AIDS, 2000).

Young persons are mostly affected by the scourge of HIV/AIDS as this group of people are sexually active; they engage in sexual escapades and experimentation with adverse consequences such as unintended pregnancies, abortions and Sexually Transmitted Diseases infections (STDs) including HIV/AIDS. As at the end of 1998, UNAIDS estimated that 33.4 million people had died of AIDS since the beginning of the epidemic. About 90 percent of infections occur in developing countries, where the disease has already reduced life expectancy, in some cases by more than a decade. (World Bank Policy Report, 1999).

In other reports by World Bank (2002) and Valerio and Bundy (2004), it was estimated that the global HIV/AIDS epidemic has already killed 20 million people and another 40 million people are currently infected. The authors however, are of the opinion that education has proven to be one of the most effective means of HIV prevention. Since good education provides right knowledge, right knowledge can prevent impending danger. According to Population Reports (1989), education is recommended as the only vaccine against the scourge of HIV/AIDS. Most governments are using broadcast and print media to reach the general population. The Population Reports explained that knowledge helps clarify misconceptions about the transmission of HIV virus, reduces discrimination against people with AIDS or at high risk of infection, and make accessibility to information easy irrespective of gender. A study like this that surveyed the level of knowledge of the youths about the modes of transmission of HIV/AIDS is highly desirable especially at this time.

The study investigated the level of knowledge of the modes of transmission of HIV/AIDS among some youths in some secondary schools and the polytechnic students at Abeokuta, Nigeria.

### **Research Questions**

- (1) What is the magnitude of knowledge of modes of transmission of HIV/AIDS among the selected youths?
- (2) Is there any significant difference in the knowledge of modes HIV/AIDS transmission between the secondary school and polytechnic students?
- (3) Is there any significant difference in the knowledge of modes of transmission of HIV/AIDS between male and female youths?

## **METHODOLOGY**

### ***Research Design***

This study adopted a descriptive survey research design as it collected data on a part of the target population with the view of describing systematically the knowledge of modes of transmission of HIV/AIDS. The design is considered suitable here because only a part of the population (though a portion that is representative of the entire population) was studied and findings can be generalized upon the entire population. Descriptive research was also considered appropriate in that it involved some type of comparison or contrasts between the existing non-manipulated variables.

### ***Target Population and Sample***

The target population for this study is all the Senior Secondary School and Polytechnic students in Abeokuta metropolis in Ogun State, Nigeria. Four senior secondary schools and the only state-government owned Polytechnic in Abeokuta metropolis were chosen for the study. The secondary schools were randomly selected while the polytechnic was selected purposively.

The reasons for selecting the youths at these levels are: (1) Youths at these levels are more vulnerable to be infected with HIV because they are in a more sexually active stage than the mature adults. (2) To enable the researchers to compare the students' knowledge of HIV in secondary schools with a tertiary institution. Thirty eight students were randomly selected from each of the four senior secondary schools while 152 students were selected from the Polytechnic. However, only respondents who completed and submitted the questionnaires were used for the study. Eventually, only one hundred and forty nine (149) students from the senior secondary schools and 151 students from the Polytechnic fully participated in the study. The respondents comprised 139 females and 161 males. The total number of respondents is 300.

### ***Instrument***

A questionnaire was designed to collect data. The section A elicits information on the students' background while section B contains 20 items to test the students' knowledge of HIV/AIDS (see the Appendix). The respondents were asked to give answer to each of the statements by ticking 'yes' or 'no'. The marking scheme was prepared.

Where the correct response to an item is 'Yes', a respondent was scored 1, but if a respondent ticked 'no' on such item, he or she was scored zero. Similarly, where the correct response to an item is 'No', a respondent was scored 1, but if a respondent ticked 'Yes' on such item, he or she was scored zero.

Let's consider these three examples:

**Item 1:** 'I can tell if a person has HIV by looking at him or her'.

The answer to this question is 'No'. Therefore, it was scored just like item 1

**Items 2:** 'A person can be infected with HIV by sharing needles and syringe'

The answer to this question is 'Yes'. Therefore 'Yes' was scored '1' while 'No' was scored '0' for every respondent.

It is on this basis the number and percentage of respondents who got each item right were calculated.

### Data Analysis

Data were analyzed using frequencies, percentages and t-test statistics.

## RESULTS

### Research Question 1

What is the magnitude of knowledge of modes of transmission of HIV/AIDS among the selected youths?

Table 1: Performance of respondents on the knowledge of HIV/AIDS questionnaire items (Arranged in descending order).

S/N	Item No	Total No of respondents	No who got an item right	% of those who got it right
1.	9	300	265	88.33
2.	4	300	263	87.67
3.	3	300	254	84.67
4.	7	300	252	84.00
5.	2	300	247	82.33
6.	6	300	208	69.33
7.	16	300	203	67.67
8.	14	300	201	67.00
9.	13	300	195	65.00
10.	18	300	193	64.33
11.	11	300	175	58.33
12.	15	300	174	58.00
13.	17	300	172	57.33
14.	20	300	161	53.67
15.	5	300	161	53.67
16.	10	300	151	50.33
17.	19	300	148	49.33
18.	12	300	143	47.67
19.	8	300	30	43.33
20.	1	300	90	30.00

Youths are well enlightened about the mode of transmission of HIV/AIDS. The number of students who got each item right was high. Except items 19, 12, 8 and 1, each of the other items has 50.3% and above of the students getting it right. Item 1 has the lowest percentage. The answer to this item is 'No'. Most of the students do not know that all those who have HIV are not having AIDS. Though, HIV infection will sooner or later lead to AIDS, most students think once somebody is infected with HIV, he or she already has AIDS. This is rather a misconception. It is however, impressing that the basic knowledge required so as not to be

infected by HIV is well understood by the students. Item 9, 'A blood test can tell if you have AIDS' and item 4 'A person can be infected with HIV by sharing needles and syringe' have the highest percentages.

### Research Question 2

Is there any significant difference in the knowledge of modes HIV/AIDS transmission between the secondary school and polytechnic students?

**Table 2:** Comparison of male and female students' knowledge of mode of transmission of HIV/AIDS.

Gender	N	Mean	% Mean	Std Dev.	Std Error	Df	t	Sig. Value	Remark
Male	161	12.621	63.105	2.704	0.213	298	0.008	0.994	NS
Female	139	12.619	63.095	2.669	0.226				

NS = Not significant at 0.05 level of confidence (2-tailed),  $p > 0.05$

There is no significant difference in the knowledge of mode of transmission of HIV/AIDS by male and female students. Male and female students have equal knowledge of mode of transmission of HIV. The percentage mean is approximately 63.1% for both male and female students. The percentage is above average. Therefore both male and female students have good knowledge of mode of transmission of HIV/AIDS.

### Research Question 3

Is there any significant difference in the knowledge of modes of transmission of HIV/AIDS between male and female youths?

**Table 3:** Comparison of secondary school and polytechnic students' knowledge of mode of transmission of HIV/AIDS

School	N	Mean	% Mean	Std Dev.	Std Error	Df	t	Sig. Value	Remarks
Polytechnic	151	12.967	64.835	2.694	0.219	298	2.270	0.024	Significant P<0.05
Secondary school	149	12.269	61.345	2.635	0.216				

There is significant difference between polytechnic and secondary school students in the knowledge of mode of transmission of HIV/AIDS. The polytechnic students are more knowledgeable than the secondary school students. However, the two groups have a good knowledge of the mode transmission of HIV/AIDS. The mean scores for both groups are high.

## DISCUSSION

It is highly impressive that the knowledge of modes of transmission of HIV/AIDS is very high among our youths. Population Reports (1989) advocate for education as the only vaccine. Formal education no doubt has exposed our youths to good knowledge of HIV/AIDS modes of transmission. However, specific education about the knowledge of HIV/AIDS should still be given to the youths. The objectives of AIDS education programme should include how to prevent the spread of the disease and care for those who are already infected. Valerio and Bundy (2004) reported to the World Bank that education plays a particularly important role in fighting against the disease. Education has proven to be one of the most effective means of HIV prevention.

The significant difference between polytechnic and secondary school students may be due to age and experience. As a youth grows older and also increases in academic knowledge, he/she is able to read many more materials in order to be able to cope with problems and challenges in the society.

The knowledge of mode of transmission of HIV/AIDS is not significantly different for male and female students. Gender factor is important in studies on HIV/AIDS. Williams, Milligan & Odemwingie (1997) reported that girls and young women in sub-Saharan Africa are at higher risk of contracting HIV and other Sexually Transmitted Diseases than their male counterparts. For biological reasons, women are much

more likely than men to become infected with HIV through unprotected sexual intercourse. Women have a larger genital surface area than men, and the female genital retains semen for a considerable longer period. Females are denied access to facilities that have been put in place to educate people about HIV/AIDS transmission in some countries in Africa.

HIV/AIDS education should be tailored towards clearing some misconceptions about the modes of transmission of the disease as revealed in this study. Many youths still need to know that the HIV infection will lead to AIDS and not everybody living with HIV is already having AIDS. The findings from this study also show that many youths do not know that blood donation and transfusion if properly done cannot make someone to be infected with HIV/AIDS.

**CONCLUSION AND RECOMMENDATIONS**

The campaign against the spread of HIV/AIDS no doubt is already making good impact. The level of knowledge of youths on the modes of transmission is encouraging though much still needs to be done. Education should therefore not be neglected as a potent weapon in fighting against the scourge of HIV/AIDS. Secondary school and tertiary institution students should be encouraged to take the message home to educate their neighbours about the modes of transmission of HIV/AIDS. The students can be involved in staging drama, organizing lectures, rallies and workshop to enlighten the public about the behaviours that could lead to contracting HIV/AIDS.

Provision of fund for the purpose of public campaign against the spread of HIV/AIDS should be given priority in the budget by government at all levels. The Non-Governmental Organization, Communities and individuals should also be more involved in the campaign.

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**APPENDIX**

**OLABISI ONABANJO UNIVERSITY**

**FACULTY OF EDUCATION**

**AGO IWOYE,**

**OGUN STATE, NIGERIA.**

**SECTION A**

1. SCHOOL:.....
2. GENDER:.....
3. AGE:.....
4. CLASS/DEPARTMENT: .....
5. WHAT OCCUPATION DO YOU INTEND TO ENTER WHEN YOU FINISH SCHOOLING?  
.....
6. FATHER'S OCCUPATION:.....
8. NO. OF FATHER'S WIVES:.....
9. POSITION AMONG THE CHILDREN:.....
10. MOTHER'S OCCUPATION:.....

**INSTRUCTION - TICK THE APPROPRIATE COLUMN THAT BEST SUIT YOUR ANSWER**

Dear Students,

Answer the questions as honestly as you can. The more you know the better you can protect yourself.

S/ N	Statement	YES	NO
1)	Everyone with HIV, the AIDS virus, has AIDS		
2)	I can tell if a person has HIV by looking at him or her.		
3)	Teenagers cannot get HIV/AIDS		
4)	A person can be infected with HIV by sharing needles and syringe		
5)	Shooting steroids has no connection to HIV/AIDS		
6)	All people with HIV/AIDS have done bad things and deserve to be sick.		
7)	A person can be infected with HIV and not even know it.		
8)	You can have HIV/AIDS by donating blood		
9)	A blood test can tell if you have AIDS.		
10)	Drinking alcohol can lead to behaviours that can cause the spread of HIV.		
11)	The only certain protection as against HIV and other STDs is to practice abstinence.		
12)	Kissing, petting and sexual message can lead to infection with HIV.		
13)	Some STDs cause sores that make it easier to get HIV.		
14)	Sexually-transmitted diseases are not dangerous since they can be cured with medication.		
15)	Using latex condoms during sex helps prevent transmission of HIV.		
16)	There is a vaccine to prevent HIV and AIDS.		
17)	If a person has sex with just one more person, he or she cannot get HIV or STDs.		
18)	Birth control pills prevents STDs.		
19)	When sexual partners know one another well, they don't need to use condoms.		
20)	Sexual intercourse refers only to vaginal intercourse.		

*The authors wish to acknowledge that this instrument was adapted from World Bank Report (2004).*