

**Age, Gender, Students' Knowledge and Attitude towards HIV/AIDS  
in selected Local Government Areas of Ondo State**

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**Abstract**

*The study looked at the Age, Gender, students' knowledge and attitude towards HIV/AIDS in selected LGAs of Ondo State. Descriptive research design of the survey type was employed for the study. The population of the study consisted of all public secondary school students in Ondo East and Ondo West LGAs of Ondo State. Five hundred secondary school students were sampled, using stratified sampling technique. A self-designed and validated questionnaire was used for data collection. T-test statistics was used to test the hypotheses at 0.05 level of significance. The results showed that there was no significant difference in students' age and knowledge of HIV/AIDS, there was no significant difference between students' age and attitude towards HIV/AIDS, there was a significant difference between male and female students knowledge of HIV/AIDS and that there was no significant difference between male and female students attitude towards HIV/AIDS. It was concluded that age of students did not affect their attitude and knowledge of HIV/AIDS. Also sex of students did not affect their attitude but affected their knowledge of HIV/AIDS. Based on the findings, it was recommended that parents, religious leaders and guidance counsellors should encourage abstinence from pre-marital sex among adolescents. Government and non-governmental bodies should not relent in their educative campaigns of HIV/AIDS.*

**Keywords:** Age, gender, students' knowledge, attitude, HIV/AIDS

**Introduction**

HIV means human immune deficiency virus. It is the causative germ of AIDS. AIDS is the acronym for Acquired immune deficiency syndrome. In Nigeria 1,900,000 people are living with HIV/AIDS (NACA, 2017). The percentage of people living with HIV/AIDS

among adults (15-49years) was 1.5% (UNAID, 2018). This shows that HIV/AIDS is rampant among people in reproductive stage of life. The entire adolescence and young adulthood stages of human life, and of course most informed, productive and sexually active stages of life, are in this age bracket. Incidentally, this age bracket is also regarded as very informed and knowledgeable about happenings around them. It is important that adolescents are well equipped with information about HIV/AIDS. This is because evidence showed that they are among the most vulnerable groups (Agyemang, Bour, & Tagoe-darko, 2012).

Adolescents have many sources of information for improving their HIV knowledge. Example of such sources are family members, Friends, teachers, and the Internet. Also government and non-governmental organizations go extra miles to get the populace well informed about HIV/AIDS. They organize, seminars, production of jingles on radio and television, printing of pamphlets, fliers, exercise books and posters on billboards. In spite of these many sources, HIV/AIDS is a social disease. It was estimated that approximately 1.8 million adolescents aged 10–19 years were living with HIV, majority of who were girls (UNAIDS, 2019). HIV deaths among adolescents in Africa continue to rise at an alarming rate (WHO, 2019).

AIDS is currently the number one cause of death among adolescents in Africa, and second leading cause of adolescent deaths worldwide, with sub-Saharan Africa having the highest number of deaths [UNICEF, 2019]. The number of adolescents dying from HIV related illnesses is estimated to have tripled over the last two decades [UNICEF, 2019]. Since adolescents formed the bulk of age group in secondary school and from the foregoing they seem to be vulnerable, it is pertinent, necessary and important to look into how age and gender affect their knowledge of and attitude towards HIV/AIDS. This will assist to understand how safe they are able to keep themselves, and the type of intervention that may be required to help them. There is need for empirical study among secondary school students in Ondo East and Ondo West Local Government areas because of vulnerability to HIV/AIDS, of adolescents that form bulk of population in secondary school. Information on HIV/AIDS have been disseminated through seminars, jingles on radio and television stations, printing of exercise books, pamphlets and fliers by government and non-government organizations.

Despite all the efforts of government and non-governmental organizations to improve on the knowledge of the society, the attitude of secondary school students seems not to reflect the expected knowledge that have been impacted in them. Perhaps, age and gender may have to be investigated as factors in the acquisition and appropriate utilization of such knowledge. Knowledge inform attitude, investigating knowledge and attitude of students in secondary school to HIV/AIDS could be a means of controlling and avoiding the disaster of AIDS epidemic in the society. The study aimed at investigating the influence of age and gender on the knowledge and attitude of secondary school students in Ondo East and Ondo West local government areas of Ondo State.

### **Research Questions**

The following research questions were raised to guide the study.

1. What is the knowledge level of secondary school students about HIV/AIDS?
2. What is the attitude of secondary school students towards HIV/AIDS?

### **Hypotheses**

To find solution to the problem of the study, the following null hypotheses were formulated

1. There is no significant influence of age on students' knowledge of HIV/AIDS.
2. There is no significant influence of age on students' attitude towards HIV/AIDS.
3. There is no significant difference between female and male students' knowledge of HIV/AIDS.
4. There is no significant difference between female and male students' attitude towards HIV/AIDS.

### **Methodology:**

The study adopted the descriptive design of the survey type. The population of the study consisted of all public secondary school students in Ondo East and Ondo West LGAs of Ondo state. Five Hundred students constituted the sample of the study. There were 44 public secondary schools in Ondo East and Ondo West Local Government areas of Ondo State. Stratified and simple random sampling techniques were used in selecting the sample based on age and gender. Fifty-five (55) students were selected randomly from each of the schools visited. One hundred and sixty-seven (167) males and 333 females, also two hundred and twenty - three (223) younger and two hundred and seventy- seven (277) older students) were sampled respectively. A self-designed questionnaire titled "Student knowledge and attitude towards HIV/AIDS" was used for the study. There are two sections in the questionnaire. Section A, solicited for biographic information of the respondents, while section B consisted of items that could measure the knowledge and attitude of students about and towards HIV/AIDS.

The instrument was validated by experts in Guidance and counselling and Tests and measurement, who made necessary corrections on the items before it was administered to the respondents.

The reliability of the instrument was ascertained by administering it to 25 secondary school students that were not part of the sample used for the study. The instrument was administered twice within an interval of two weeks. The two sets of responses were compared statistically using Pearson Product Moment correlation. This yielded a coefficient of 0.83 which was found reliable. The instrument was administered to the respondents with the help of trained research assistants. Five hundred and eighty (580) questionnaire were administered, 519 were retrieved of which 500 were valid.

Data collected for the study were analyzed using frequency counts and percentage. All hypotheses were tested at 0.05 level of significance using t-test statistics

## Results

**Question 1:** What is the level of knowledge of secondary school student about HIV/AIDS? In order to answer research question 1, scores relating to the level of knowledge of secondary school students about the meaning, transmission and misconception of HIV/AIDS were computed and subjected to descriptive analysis. The result is presented in table 1

**Table 1**

Descriptive analysis showing the level of knowledge of secondary school students about the meaning, transmission and misconception of HIV/AIDS?

S/N	ITEM	YES	%	NO	%
1	HIV stands for Human immune deficiency virus	264	52.8	236	47.2
2	AIDS is the acronym for Acquired immune deficiency syndrome	256	51.2	244	48.8
3	HIV can be transmitted through sharing of meals	165	33.0	335	67.0
4	A pregnant woman can transmit HIV to her unborn child	453	90.6	47	9.4
5	AIDS is caused by witch craft	109	21.8	391	78.2
6	AIDS is a punishment from God for immoral sins	236	47.2	264	52.8
7	HIV can be transmitted through the transfusion of unscreened blood contaminated with HIV	444	91.6	56	11.2

Table 1 revealed the knowledge of secondary school students about HIV/AIDS. Responses showed that most of the respondents (52.8 %) agreed to item 1 (HIV stands for Human immune deficiency virus) while 47.2% disagreed. Majority of the respondents (51.2 %) agreed with item 2, (AIDS is the acronym for Acquired immune deficiency syndrome) while 48.8% disagreed. Few number of the respondents (33.0%) agreed to item 3, (HIV can be transmitted through sharing of meals) while 67.0% disagreed. Majority of the respondents (90.6%) agreed to item 4, (A pregnant woman can transmit HIV to her unborn child while 9.4% disagreed. Few number of the students (21.8%) agreed to item 5, (AIDS is caused by witch craft) while 78.2% disagreed. Average number of the respondents (47.2%) agreed to item 6, (AIDS is a punishment from God for immoral sins) while 52.8% disagreed. Higher number of the respondents (91.6%) agreed to item 7, (HIV can be transmitted through the transfusion of unscreened blood contaminated with HIV) while 11.2% disagreed. On a general note, the students have good knowledge on the spread and prevention of HIV/AIDS.

**Question 2:** What is the attitude of secondary school students towards HIV/AIDS?

In order to answer research question 2, scores relating to attitude of secondary school students' attitude towards HIV/AIDS were computed and subjected to descriptive analysis, the result is presented in table 2

**Table 2**

Descriptive analysis showing attitude of secondary school students towards HIV/HIDS.

S/N	ITEM	YES	%	NO	%
1	I like reading pamphlet and books on HIV/AIDS	364	72.8	136	27.2
2	AIDS does not exist, it is a fallacy	138	27.6	362	72.4
3	There is no need to worry about the number of sexual partners, I am not afraid of AIDS	108	21.6	392	78.4
4	I cannot contact HIV ,even if I had unprotected sex	150	30.0	350	70.0

Table 2 revealed the attitude of secondary school students towards HIV/AIDS. Most of the respondents (72.8%) agreed with item 1, ( I like reading pamphlet and books on HIV/AIDS) while 27.2% disagreed. Few of the respondents (27.6%) agreed with item 2, (AIDS does not exist, it is a fallacy) while 72.4% disagreed. Few of the respondents (21.6%) agreed with item 3, (There is no need to worry about the number of sexual partners, I am not afraid of AIDS) while 78.4% disagreed. Less than average of the respondents (30.0%) agreed with item 4, (I cannot contact HIV, even if I had unprotected sex) while 70.0% disagreed. From the results above, secondary school students have favorable/ positive attitude towards HIV/AIDS.

**Hypotheses 1:** There is no significant influence of age on students' knowledge of HIV/AIDS.

In order to test the hypothesis, scores relating to students' knowledge of HIV/AIDS were computed and compared based on age using t–test statistics. The result is presented in table 3

**Table 3:**

t-test showing influence age on students' knowledge of HIV/AIDS

Variables	No of Cases	Mean	S.D	df	tc	Tt
Younger students(10-14years)	223	41.90	4.493	498	0.195	1.96
Older students(15-20years)	277	41.98	4.330			

**P < 0.05**

Table 3 shows  $t$  calculated (0.195) is less than table value (1.960), which showed no significant result, hence the null hypothesis was upheld that is, there is no significant influence of age on students' knowledge of HIV/AIDS.

**Hypothesis 2:** There is no significant influence of age on students' attitude towards HIV/AIDS.

In order to test the hypothesis, scores relating to students' attitude towards HIV/AIDS were computed and compared based on age using  $t$  – test statistics. The result is presented in table 4

**Table 4**  
t-test summary of students age attitude towards HIV/AIDS

Variables	No of Cases	Mean	S.D	df	t-cal	t-tab
Younger students (10-14years old)	223	60.19	11.42	498	0.903	1.96
Older students(15-20 years old)	277	59.17	10.37			

**P > 0.05**

Table 4 shows  $t$  calculated (0.903) is less than table value (1.960), which shows that the result is not significant, hence the null hypothesis is upheld, that is there is no significant influence of age on students' attitude towards HIV/AIDS.

**Hypothesis 3:** There is no significant difference between male and female students in their knowledge of HIV/AIDS.

In order to test the hypothesis, scores relating to students' gender and knowledge of HIV/AIDS were computed and subjected to statistical analysis involving  $t$  – test at 0.05 level of significance. The result is presented in table 5

**Table 5**  
t-test showing influence of gender on students' knowledge of HIV/AIDS

Variables	No of Cases	Mean	S.D	df	t-cal	t-tab
Male students	167	41.34	5.73	498	2.21	1.96
Female students	333	42.26	3.51			

**P < 0.05**

Table 5 shows t calculated value (2.21) is greater than table value of (1.96), which shows that the result is significant, hence the null hypothesis is rejected at 0.05 level of significant. Therefore, there is a significant difference between male and female students in their knowledge of HIV/AIDS.

**Hypothesis 4:** -There is no significant difference between male and female students' attitude towards HIV/AIDS

In order to test the hypothesis, scores relating to students' gender and attitude towards HIV/AIDS were computed and subjected to statistical analysis involving t – test at 0.05 level of significance. The result is presented in table 6

**Table 6**

t-test showing influence of gender on students' attitude towards HIV/AIDS

Variables	No of Cases	Mean	S.D	df	t-cal	t-tab
Male Students	167	60.48	14.43	498	1.165	1.96
Female Students	333	59.10	11.37			

P > 0.05

Table 6 shows t calculated value (1.165) is lower than table value (1.96), which shows that the result is not significant, hence the null hypothesis was upheld, therefore, there is no significant difference in the attitude of male and female students towards HIV/AIDS.

### **Discussion**

The items on knowledge were constructed in such a way to deduce respondents' knowledge on awareness of HIV/AIDS, knowledge on transmission, and knowledge on avoiding contracting HIV/AIDS. Based on the above criteria, more than 70% of the students were aware of the disease and major source of contracting it. It is disturbing that more than 40% of these students did not know the full meaning of HIV/AIDS. The reason for this good knowledge may be due to the effort of HIV educators and campaigners, though there is still room to improve on the good knowledge by the campaigners and educators. This finding is contrary to the finding of Badru et al (2017) that HIV knowledge among young adolescent is low. The reason for this may be as a result of the location of the study.

The study also revealed positive/favorable attitude towards HIV/AIDS, this is similar to the findings of Dzah, Tarkang and Lutala (2019) that most of the respondents show positive attitude towards HIV/AIDS. The positive /favorable attitude is an indication that the respondents were well informed and knowledgeable about HIV/AIDS.

Hypothesis 1 revealed that there is no significant difference in students' age and their knowledge of HIV/AIDS. This is contrary to the finding of Dzah, Tarkang, Lutala, (2019) that says there was significant relationship between ages 15- 24 years old in their knowledge of HIV/AIDS. The difference in this result may be as result of location. The present study took place in Ondo Nigeria, while the former took place in Ghana. Also, the difference may be as a result of the sample, the present study involved both junior and high school students while the former consisted of high school students only.

Hypothesis 2 revealed that there is no significant difference in students' age in their attitude towards HIV/AIDS. This finding is contrary with the study of students' attitude towards HIV and AIDS by Geraldine, Sophia and Eleuther (2017) among first year University students. The difference may be as a result of difference in location, and the setting, that is, secondary school students and first year university students respectively.

Hypothesis 3 revealed that there is significant difference between male and female students in their knowledge of HIV/AIDS. This result disagreed with the study by Gupta, Anjum, Bhardwaj, Srivastav, & Zaidi (2013) that revealed a significant difference between girls and boys in their knowledge of HIV/AIDS. The difference in the two results may be as a result of difference in location of the studies.

Hypothesis 4 revealed that there is no significant difference between male and female students in their attitude towards HIV/AIDS. This finding is consistent with previous studies of Rahnama et al (2011), Geraldine, Sophia and Eleuther (2017) that students generally have negative attitude towards HIV/AIDS. Also, Masoudnia (2015) found out that there was no significant difference between male and female attitudes towards HIV/AIDS. This is an indication that both male and female students are beneficial of the campaign by HIV/AIDS educators and campaigners.

### **Conclusion**

Adolescents by their nature are vulnerable to HIV/AIDS and other sexually transmitted diseases. The effort of governments, non-governmental organizations, parents, and internets has helped in alleviating students' ignorance about HIV/AIDS. Knowledge of students have improved and this reflected in their attitude. Conclusively, without the campaigners and educators relenting in their efforts of enlightening the populace, knowledge and attitude of students will continue to improve.

### **Recommendations**

1. HIV/AIDS remains a social disease that is yet to have a cure. Adolescents that are mostly secondary school students are most vulnerable. Stopping HIV/AIDS requires comprehensive strategies that focus on youths. Based on findings of this study, it is recommended that since there is evidence of good knowledge of HIV/AIDS by the students sampled, the HIV/AIDS campaigners should not relent in their efforts of getting the whole populace well informed about the deadly disease.

2. Guidance counsellors should be well equipped to guide and counsel students from time to time to avoid things that can lead to contracting HIV. Abstinence from premarital sex should also be stressed by parents, counsellors, and religious leaders.

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