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**Awareness and Attitude of Senior Secondary School Students towards HIV/AIDS Risk  
Factors and Preventive Measures in Ebonyi State, Nigeria**

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## **ABSTRACT**

The study determined the level of awareness and attitude towards HIV/AIDS risk factors for enhanced preventive measures among senior secondary school students in Ebonyi State. The study adopted a convergent parallel mixed-method design. The population of the study comprised of all the 6,912 Senior Secondary 2 (SS2) students in Ebonyi North Education Zone. The sample for the study comprised 378 senior secondary school (SS2) students. The instruments for data collection were a questionnaire developed by the researchers and a Focus Group Discussion Guide. Both instruments namely the questionnaire and the focus group discussion guide were face validated by experts from the University of Nigeria, Nsukka. Quantitative data analysis was done using mean and standard deviation and t-test statistics. Qualitative analysis with respect to the Focus Group Discussion was done using thematic analysis method. Findings of the study showed among other things that senior secondary school students are aware of HIV/AIDS risk factors and do have a positive attitude toward such HIV/AIDS risk as well as their preventive measures. The findings of the study further revealed that there was no significant difference in the mean responses of male and female students on attitude and preventive measures towards HIV/AIDS risk factors in the study area. Similarly, there was no significant difference in the mean responses of urban and rural senior secondary school students on awareness of HIV/AIDS risk factors and attitude towards the risks factors in the study area. However, there was a significant difference in the mean responses of male and female students on awareness of HIV/AIDS risk factors with the female students having a higher mean than their male counterparts. There was also a significant difference in the mean responses of urban and rural students on awareness of HIV/AIDS preventive measures with the urban students having a higher mean than those in the rural area.

**Keywords:** Attitude, Awareness, HIV/AIDS, Preventive Measures, Risk Factors, Students

## INTRODUCTION

Over the past decades, countries all over the world have been facing challenges controlling the outbreak of some deadly epidemic diseases that have persistently affected the labour force, government expenditures and global economy. These diseases include Bird flu, Ebola, Tuberculosis, HIV/AIDS and others. The spread of some of these diseases have been controlled and some have also been totally eradicated based on concerted efforts by Governments and individuals due to scientific discovery of cures or management measures. However, HIV/AIDS still persists and no cure has been discovered for the disease till date.

HIV means Human Immunodeficiency Virus. It is a retrovirus that infects the immune system, destroying its functions (Awolaye & Thron, 2015). A virus is an agent that causes diseases. It is the virus that causes AIDS. HIV targets the white blood cell called CD4+ cells which fight off infections. When a host is infected with HIV, the virus multiplies in the host's system, destroying his/her ability to fight diseases. In this regard, such a person becomes susceptible or vulnerable to various diseases as the virus multiplies and the immune system gets depleted. Thus, when the body is now so weak to fight off infections, the individual is said to have AIDS (Global Fact Sheet for HIV/AIDS, 2014). The virus is spread through certain body fluids such as blood, semen, vaginal fluid and breast milk of infected persons. In this study, HIV means a virus that infects one for life and destroys the body's immune system. AIDS is also perceived as a condition of damaged immune system which is caused by the virus.

The first recognized case of HIV/AIDS occurred among homosexual men in the United States of America (USA) in 1981 (UNADS, 2014). Since its discovery, the disease has continued to spread widely all over the world especially among young people. In 2012, the global estimate of adolescents and young people living with HIV was 5.4 million and in 2013, there were over

160,000 adolescents aged 10–19 living with HIV (National Agency for the Control of AIDS [NACA], 2016). UNAIDS (2006) reported that 63% of the global HIV/AIDS infections are in sub-Saharan Africa with prevalence rate highest among the age group 15-49years. A much recent report by UNAIDS (2014) showed that 2.9 million young people (aged 15–24) are living with HIV in sub-Saharan Africa.

Although everyone is at risk of being infected with HIV/AIDS, some groups that have been identified as largely vulnerable include adolescents, sex workers, drug users and homosexuals (Awoleye & Thron, 2015). Researchers have documented that young persons are perhaps, the most vulnerable owing to their sexually active nature, and quest to engage in sexual escapades and experimentation (Aanu & Olatoye (2011; Aboki, Folayan, Daniel & Ogunlayi 2014; Fagbamigbe, Adebowale & Olaniyan, 2011; Awoleye & Thron, 2015). There is at the moment no known cure for HIV/AIDS. Preventive measures remain the only option for stemming the spread of the scourge (Ikemike, 2015). Thus, Adekeye and Adeusi (2011) argued that the only way to prevent HIV infection is to avoid behaviours that could put a person at risk. A person may know the causes of a disease but may not be aware of the factors that could put him or her at risk of contracting the disease. Prevention means efforts to stop one from contracting HIV. People can also adopt preventive measures to stop the virus from developing into full-blown AIDS. Avoiding risky behaviours is influenced by the development of a positive attitude towards protecting oneself and such attitude formation can be influenced by the level of awareness of the risk factors.

Awareness means having an idea about the existence or functions of something. Thus, Ongunya, Indoshi and Agak (2009) defined awareness as the process of raising human consciousness. Being conscious is to be vigilant, alert or ready to tackle issues. HIV/AIDS

awareness in the context of this study means the process of raising the consciousness of senior secondary schools (SSS) students about HIV/AIDS in terms of its sure reality, spread, risk factors and ways of prevention. Awareness can be created through giving information and the corresponding information increases the level of certainty in any human decision process including the decision to develop a positive attitude towards the prevention of HIV/AIDS (Arinola & Adekunjo, 2012). HIV/AIDS awareness is very vital to the prevention of HIV and other diseases (Chikonzo 2012; Isaac & Tanga 2016). Awareness is needed to expose the risk factors of HIV/AIDS among youngsters especially senior secondary school students. This, according to Amu (2014), is imperative because HIV infection among Nigerian youth has been persistently high due to their vulnerability to HIV risk factors. In view of this, it becomes increasingly imperative to assess the level of awareness of this age group on the risk factors of HIV/AIDS.

Risk factors are not necessarily causes. Individuals may be aware of the causes of a disease but may not be aware of some behaviours, lifestyles, attitudes, environmental and other socio-economic and religious practices that could increase vulnerability to diseases. Risk factors are factors that can increase the chances of contracting a disease. A risk factor of HIV/AIDS is a condition that can increase the chances of being infected with the virus. UNAIDS (2015) defines HIV/AIDS risk as the likelihood that a person may acquire HIV through exposure to certain conditions, lifestyles or behaviours. HIV risk factors or behaviours include casual sex, non-use of condom, multiple sexual partnerships, commercial sex work, rape and use of drying substances in the vagina which may cause friction or bruises, low-risk perception, marital status of young females, poor health-seeking behaviour, low awareness of HIV amongst others (UNAIDS, 2015). Awareness of HIV/AIDS risk factors influences attitudes towards the disease which

ultimately could help to bring about change in risky behaviours that predispose people to HIV/AIDS infection.

Attitude is a predisposition to something. Brousmiche, Kant, Sabouret, and Prenot-Guinard (2016) see attitude as an evaluative judgment which has a valence to express a positive (in favour), neutral or negative (disfavour) predisposition toward an object. Attitudes are characterized by a predisposition or state of readiness to act or react in a particular way to certain stimuli (Arrey, 2013). Attitude is therefore a predisposition to act towards an object which may be positive, negative or neutral. Attitude to HIV/AIDS risk factor in this study is the predisposition of senior secondary school students on what put them at risk of contracting the virus and how seriously they take the avoidance of those factors. Sometimes, young people do not see the need to protect themselves and avoid engaging in risky behaviours that predispose them to HIV/AIDS hence the persistent increase in the spread of the disease among young people of secondary school age. The attitude of secondary school students towards HIV/AIDS risk factors could make them seek to reduce behaviours that put them at risk or make them feel less concerned about taking measures to avoid being exposed to the risk factors of HIV/AIDS.

In Nigeria, secondary education lasts for 6 years (3 years of Junior secondary and 3 years of senior secondary school). Students in secondary schools especially at the senior secondary level are adolescents and are at the age when sexual activities often begin. Thus, they may be putting themselves at risk of acquisition of HIV and other related sexually transmitted diseases unless they are properly informed to consider themselves at risk and undertake safer sexual practices (Frank-Peterside, Okerentugba, Akpan & Okonko, 2013). The age bracket of adolescents (15-24 years) that have been identified as most vulnerable to HIV includes students at the senior secondary school level (UNAIDS, 2014).

In Nigeria, young people who are the leaders or pillars of tomorrow are found to be a vulnerable group especially those between 15-24 years (UNAIDS, 2014). The HIV prevalence rate among Nigerian adolescents aged 15 to 19 is the highest compared to other countries in West and Central Africa (Pharr, Enejoh, Mavegam, Olutola, Karick & Ezeanolue, 2017). Fagbamigbe, Adebowale and Olaniyano (2011) noted that preventing the spread of HIV infection among youths is critical to reducing the incidence of new HIV infection as young people make up a substantial part of the population. It is also known that first sexual intercourse commonly occurs during this stage. Thus, this stage seems very vulnerable to HIV/AIDS and other related social threats that bother on very risky and vulnerable human habits and behaviours. To curb the menace, it is necessary to put into perspective the current level of awareness and the attitude of senior secondary school students towards HIV/AIDS risk factors and preventive measures as well.

### **Statement of Problem**

Nigeria has made several efforts to create awareness and effect change of attitude towards HIV/AIDS epidemic, especially among young people. Family Life and HIV Education (FLHE) has been adopted through career subjects like Social Studies. Heated campaigns and peer education have also been put in place with the objective of preventing HIV/AIDS through awareness and education. NACA was created in 2001 for the same purpose. Despite the roles of government, individuals and organizations such as the Ebonyi State Action Committee on AIDS [EBOSCA], Anti- HIV/AIDS clubs in secondary schools and other non-governmental organizations in enlightening people on HIV/AIDS, the disease still spreads especially among young people in the State. The prevalence rate of HIV/AIDS in Ebonyi state moved from 0.9% in 2012 to 3.6% in 2016. There is a need, therefore, for more efforts to curtail the spread of the



disease in the State. The risk factors of HIV/AIDS in the State and the attitudinal dispositions of the people towards the disease and its preventive measures should be put into perspective especially among adolescents who are not only vulnerable but constitute the future of the young State. This study, therefore, seeks to determine the awareness and attitudes towards HIV/AIDS risk factors among SSS students in Ebonyi State, Nigeria.

### **Research Questions**

1. Are secondary school students in Ebonyi State aware of HIV/AIDS risk factors?
2. What is the attitude of senior secondary school students towards HIV/AIDS risk factors in Ebonyi State?
3. Are senior secondary school students in Ebonyi State aware of HIV/AIDS preventive measures?

### **Hypotheses**

1. There is no significant difference in the mean responses of male and female senior secondary school students on the level of awareness of HIV/AIDS risk factors, attitude towards HIV/AIDS and awareness of preventive measures
2. There is no significant difference in the mean responses of urban and rural senior secondary school students on awareness of HIV/AIDS risk factors, attitude towards the risk factors and awareness of preventive measures.

### **METHOD**

The study adopted a convergent parallel mixed method design. A mixed-method design is a design in which the researcher collects, analyses and integrates both quantitative and qualitative data which complement each other in a single study (Creswell, 2013; Creswell & Plano Clark, 2011). A convergent parallel mixed-method is a type of mixed-method design

where the researcher collects both qualitative and quantitative data simultaneously, gives both equal weighting or priority and integrates the results (Doyle, Brady & Byrne, 2009). Mixed method design is adopted when the researcher needs to get more detailed information which quantitative means is not sufficient to do. This study, therefore, adopted a convergent parallel mixed method design since qualitative and quantitative data were collected and analysed simultaneously and given equal priority and the qualitative data was used to validate, substantiate or expand the findings from the quantitative data.

This study was conducted in Ebonyi North Education Zone, Ebonyi State, Nigeria. The population of the study comprised of all the 6,912 Senior Secondary 2 students in Ebonyi North Education Zone consisting of 3,190 males and 3,722 females (Ebonyi State Ministry of Education, 2018). There are 78 approved public secondary schools in Ebonyi North Education Zone. The SSS2 students were used because primarily they are in the adolescent age group which is considered vulnerable to HIV/AIDS risks as a result of being immature to handle certain sexual related issues. The sample for the study comprised 378 SSS2 students (age range: 15-20 years). The sample size was determined using Yamane (1967) formula for sample size determination. The sample was selected using a multi-stage sampling procedure.

Firstly, the researchers selected SSS2 students only using the purposive sampling technique. Secondly, the researchers used proportionate random sampling to select 26 schools out of the 78 schools in the zone and finally, the researchers used proportionate random sampling to select 174 males and 204 females. For the Focus Group Discussion (FGD), the researchers randomly selected 10 students (5 males and 5 females) each from four schools selected from the sampled schools to participate in the Focus Group Discussion. A self-developed questionnaire titled “Awareness and Attitude for HIV/AIDS Risk Factors and Preventive Measures

Questionnaire” (AAHARPMEQ) and Focus Group Discussion Guide were used for data collection. Each of the four (4) LGAs had one focus group discussion panel. The validation of the questionnaire and focus group topic guide was done by experts from the Faculty of Education, University of Nigeria, Nsukka. The items on attitude were further subjected to construct validity. The internal consistency of the questionnaire was established using the Cronbach Alpha method. 50 copies of the instrument were administered to senior secondary schools in four schools in Ezza South Local Government area of Ebonyi State which is outside the study zone. The co-efficient for cluster A is 0.801, cluster B is 0.833, cluster C is 0.809 and the overall internal consistency is 0.814. Pallant (2011) noted that values above 0.7 are considered acceptable but values above 0.8 are preferable. Therefore, the questionnaire is highly reliable. Cronbach alpha was used because it establishes internal consistency. The researchers involved the teachers as research assistants to help in the distribution and collection of the instrument and in organizing the focus group discussion. The questionnaires were distributed and retrieved on-the-spot from the respondents to ensure a high rate of return. Focus group discussion was conducted after the administration of the questionnaire. The discussion was for a group of 10 students in each of the four selected schools and it was a heterogeneous group of equal size of five males and five females. The use of a heterogeneous group is because gender is a variable in this study as senior secondary school students' awareness and attitude towards HIV/AIDS risk factors and preventive measures could be influenced by it. Mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses at 0.05 probability level. The benchmark for acceptance or rejection was 2.50. Any item with a mean of 2.50 and above was accepted while items with a mean less than 2.50 were

rejected. The decision rule for testing the hypotheses was to reject the null hypothesis if the significance (2-tailed) is less or equal to 0.05 otherwise it was not rejected.

The qualitative data was analysed by examining the pattern of participants' responses to the questions asked during the Focus Group Discussion using a thematic approach. Thematic analysis is one of the most commonly used methods of qualitative analysis (Chukwu, 2015). Howitt and Cramer (2010) are of the opinion that in thematic analysis, the task of the researcher is to identify a limited number of themes that adequately reflect their textual data and apply brief verbal descriptions to small chunks of data.

## RESULTS

### Awareness of SSS students on HIV/AIDS Risk factors

**Table 1: Mean ratings and standard Deviation of Respondents on awareness of HIV/AIDS risk factors among SSS students.**

S/N	Item	Mean	Std. Deviation	Decision
1	Having sex without condoms is a risk factor	3.72	0.54	Aware
2	Sharing of sharp objects with infected persons is a risk factor	3.86	0.40	Aware
3	An innocent child can get HIV/AIDS from the mother during birth or breastfeeding	3.87	0.42	Aware
4	Having multiple sexual partners is a risk factor	3.91	0.32	Aware
5	Lack of access to information does not put one at risk of contracting HIV/AIDS	2.47	1.40	Unaware
6	Excessive alcohol consumption could make one lose control and engage in unprotected sex	3.91	0.31	Aware
7	People who share needles or syringes are not at risk of contracting HIV/AIDS.	3.79	0.49	Aware
8	Ignorance could make one vulnerable to HIV/AIDS risk	3.85	0.50	Aware
9	Poor parental educational background affect the acquisition of useful information about HIV/AIDS	3.75	0.63	Aware

10	Making oneself available for HIV and AIDS testing and counselling can lead to early detection and treatment to avoid Degenerating to AIDS	3.90	0.34	Aware
11	Sharing the same room with someone infected with HIV/AIDS put one at risk of contracting HIV/AIDS	2.16	1.34	Unaware
12	Indecent dressing is a risk factor	3.87	0.44	Aware
13	Untreated sexually transmitted diseases	3.88	0.42	Aware
14	Raising children in localities where sexual immorality and indecency abound	3.89	0.38	Aware
15	Being infected with HIV can lead to AIDS if not managed	3.78	0.49	Aware
16	Age is a risk factor for HIV/AIDS as some age brackets are more vulnerable to HIV attacks due to their level of exposure and pattern of behaviour	3.79	0.45	Aware
17	The culture of the people like marrying many wives cannot expose people to an increased chance of contracting HIV/AIDS	2.33	1.11	Unaware
	<b>Cluster</b>	3.57	0.25	Aware

The results of the study presented in table 1 showed the mean ratings and standard deviations of the respondents on the awareness of senior secondary school students on HIV/AIDS risk factors. The result of the study showed that the students are aware of all the of HIV/AIDS except items 5, 11 and 17 which bother on lack of access to information, sharing the same room with an infected person and the culture of marrying more than one wife. This indicates that the students in the study area are aware of HIV/AIDS risk factors.

## Attitude of SSS2 students towards HIV/AIDS Risk factors

**Table 2: Mean ratings and standard Deviation of Respondents on Attitude towards HIV/AIDS risk factors among senior secondary school students.**

S/ N	Item	Mean	Std. Deviation	Decision
18	Having unprotected sexual intercourse makes sex sweet but puts one at risk of contracting HIV/AIDS	3.81	0.39	Agree
19	Going to shops to buy condoms looks somehow	3.81	0.39	Agree
20	If one use condom correctly and consistently then multiple sexual partners can be maintained	3.82	0.38	Agree
21	Listening to talks about HIV and AIDS is not boring	2.26	1.08	Disagree
22	Taking alcohol is not bad but one should always avoid excessive consumption	3.80	0.39	Agree
23	Sharing rooms and beds with people who have HIV cannot make one contract the disease	3.79	0.42	Agree
24	Sharing sharp objects does not increase the chances of contracting HIV/AIDS	3.61	0.54	Agree
25	Parents should try to acquire useful information about HIV/AIDS as their children's awareness of the disease will be influenced by theirs.	3.68	0.60	Agree
26	Going for HIV testing and counselling is not necessary as it makes people to suspect that one has contracted AIDS	2.17	1.15	Disagree
27	One needs to dress decently to avoid being raped by people who maybe HIV Positive	3.74	0.50	Agree
28	Other sexually transmitted diseases have a link with HIV/AIDS transmission	3.76	0.44	Agree
29	Being placed on anti-retroviral drugs is important to make HIV carriers live longer even though it will not cure them	3.77	0.43	Agree
30	Adolescence is a vulnerable stage to HIV infection hence secondary school students should avoid risky behaviours	3.76	0.44	Agree
31	If one's culture allows some certain things that predispose its members to the risk of HIV and AIDS, one should not live and abide by the culture	2.83	1.09	Agree
32	People who engage in sexual intercourse are not the only ones that should be bothered about HIV/AIDS although it is a sexually transmitted disease	3.77	0.44	Agree

33	As a young person, the body is still so strong that it can fight off all infections including HIV	3.81	0.40	Agree
	<b>Overall Cluster</b>	3.51	0.29	Agree

The results of the study as presented in Table 2 showed the mean ratings and standard deviations of the respondents on attitude towards HIV/AIDS risk factors in Ebonyi State. The result of the study showed that the students agreed on all the items except items 21 and 26. This implies the students are positively disposed to protecting themselves from HIV/AIDS risk factors.

### **Awareness of SSS students on HIV/AIDS preventive measures**

**Table 3: Mean ratings and standard Deviation of Respondents on awareness of HIV/AIDS preventive measures**

S/N	Item	Mean	Std. Deviation	Decision
34	Abstaining from sex is the best way to prevent HIV/AIDS transmission among young people	3.82	0.39	Agree
35	Using condoms correctly and consistently prevents the transmission of HIV/AIDS	3.85	0.35	Agree
36	Not sharing rooms and toilets with infected persons prevents the spread of HIV/AIDS	1.80	0.73	Disagree
37	Avoiding sitting in public places with infected people is not a way to protect oneself from contracting HIV/AIDS	2.95	1.23	Agree
38	Making oneself available for HIV/AIDS testing will help in the early detection of HIV and placement on antiretroviral drugs to avoid developing AIDS	3.82	0.38	Agree
39	Avoiding the sharing of sharp objects is one way of preventing the spread of HIV/AIDS	3.78	0.42	Agree
40	Availing oneself the opportunity to acquire relevant information will help one to be aware of HV and AIDS and be able to protect themselves.	3.77	0.49	Agree
	<b>Overall cluster</b>	3.39	0.36	Agree

The results of the study as presented in Table 3 showed the mean ratings and standard deviation of the respondents on the level of awareness of senior secondary school students on HIV/AIDS preventive measures. The result of the study showed that the students agreed on all the items except item 36. This implies that the students are aware of HIV/AIDS preventive measures.

### Hypotheses

**Table 3: t-test analysis of the significant difference in the mean responses of male and female SSS students on the level of awareness of HIV/AIDS risk factors, attitude and awareness of preventive measures.**

ITEM	MALE		FEMALE		t-cal	Df	Sig	Decision
	Mean	SD	Mean	SD				
Cluster 1	3.50	0.28	3.63	0.21	-5.07	378	0.00	Reject
Cluster 2	3.49	0.27	3.52	0.30	-1.23	378	0.21	Uphold
Cluster 3	3.35	0.39	3.43	0.32	-2.09	378	0.37	Uphold

Table 5 shows that there is a significant difference in the mean responses of male and female SSS2 students on the level of awareness of HIV/AIDS risk factors in Ebonyi State with the female students having a higher mean than their male counterparts. This suggests that female students have a higher awareness of HIV/AIDS risk factors than their male counterparts. It also showed that there is no significant difference in the mean responses of male and female SSS2 students on attitude towards HIV/AIDS risk factors as well as on awareness of preventive measures. This suggests that both male and female students are aware of HIV/AIDS preventive measure and have a positive attitude towards protecting themselves from HIV/AIDS.



**Table 4: t-test analysis of the significant difference in the mean responses of urban and rural SSS students on the level of awareness of HIV/AIDS risk factors, attitude and awareness of preventive measures.**

ITEM	URBAN		RURAL		t-cal	Df	Sig	Decision
	Mean	SD	Mean	SD				
Risk factors	3.57	0.25	3.57	0.25	0.04	378	0.96	Uphold
Attitude	3.49	0.29	3.53	0.28	-1.24	378	0.21	Uphold
Prev. Measures	3.44	0.36	3.33	0.34	3.01	378	0.00	Reject

Table 4 shows that there was no significant difference in the mean responses of urban and rural SSS2 students on awareness of HIV/AIDS risk factors and attitude towards the risk factors. This implies that both urban and rural students are aware of HIV/AIDS preventive measure and have a positive attitude towards protecting themselves from the risk factors. There was a significant difference in the mean responses of urban and rural students on the awareness of preventive measures. This means that the urban students have a higher awareness of HIV/AIDS preventive measures than their rural counterparts.

### **Qualitative data analysis**

**Awareness of HIV/AIDS risk factors:** The students demonstrated awareness of the risk factors of HIV/AIDS. Their responses include: “having many boyfriends is not good because you may contract HIV/AIDS from one of them unknowingly, “our Civic teacher has already taught us all these”, if a child does not know the good and bad, the child can be deceived”, “those who lick blood like cultists will get HIV one day”, “sharing razors and clippers in the barbing saloon is not okay because it is like public toilet, people can get disease there”.

**Attitude towards HIV/AIDS risk factors:** The students demonstrated a positive or favourable attitude towards HIV/AIDS risk factors. Although they expressed a feeling of being tired of

listening to talks on HIV/AIDS, they acknowledged that it is still necessary. They believe everything possible should be done by individuals and the Government to defeat the spread of the disease. Their responses include: "I am tired of hearing HIV/AIDS", "I started hearing of this HIV/AIDS from primary school, why can't something be done to stop it like we stopped bird flu and ebola? ", " I think telling us not to share sharp objects is to help us and not to separate us from our family members and friends", "I feel we should be told of condoms but the right thing is to stay away from pre-marital sex", "I'm afraid of getting the disease", "it is good for our parents to give us what we need so that we will not be deceived".

**Awareness of HIV/AIDS preventive measure:** The students are aware of HIV/AIDS preventive measures. Students in the urban schools suggested more ways of protecting themselves from the disease than students in the rural schools. Their responses include: "people should not share sharp objects", "do not have sex if you are not married and stay with your partner if you are married", "sterilizing sharp objects can help", "students should wear decent clothes so that they will not attract those that will rape them". The students further added that "parents should provide for us.... .... so that young men will not deceive us"(A female student), "these girls should stop shaping their sports wears to be too tight and short so that we will not start thinking of something else" (A male student from an urban school).

## **DISCUSSION**

The findings of the study revealed that students are aware of the risk factors of HIV/AIDS. This could be attributed to the high rate of awareness creation on-going in the study area by Government, non-governmental organization and individuals. This supports the findings of Bamise, Bamise and Adedigba (2011) and Ebong and Ebong (2013) who reported that awareness of HIV/AIDS was high among in-school adolescents. It also showed that the students

have a positive attitude towards protecting themselves from the risk factors of HIV/AIDS. This could be attributed to their high awareness of the risk factors arising from an increased campaign in the study area. This could inform their mindsets towards protecting themselves from the risk factors. This study is in line with the findings of Adeleke, Azeez, Aliyu, Ogundiran, Salami and Adeoye (2015) who found out that sss students have a positive attitude towards HIV/AIDS. The findings of the study further revealed that the students are aware of the preventive measures of HIV/AIDS. This could be attributed to the increased awareness of HIV/AIDS in the study area. This supports the findings of Ruma (2009) who reported that secondary school students are aware of how to avoid contracting HIV/AIDS. The findings from the Focus Group Discussion confirmed that students were aware of the risk factors and preventive measures as well as being favourably disposed to the risk factors as the students commented that they have been taught the risk factors in school and know that unprotected sex constitutes a risk factor to HIV/AIDS. They also expressed being aware that staying away from premarital sex is the best way of preventing HIV/AIDS. The analyses of the null hypotheses showed that female SSS2 students had higher awareness mean score on HIV/AIDS risk factors than their male counterparts. This could be attributed to the unique features of adolescent females who are at the age of self-discovery, increased consciousness of self and the opposite sex. This leads to extra carefulness in dressing, neatness and coordination. This could also be linked to increased sex education provided for adolescent females at homes and religious institutions due to their perceived vulnerability. This finding contradicts the findings of Oginni, Adebajo and Ahonsi (2017) which found that females were less likely to have a comprehensive understanding of HIV/AIDS risk factors than males. This also disagrees with the report of Guindo, Liu and Haba (2014) which showed that men have a better knowledge of HIV/AIDS than women but have a negative attitude and risky practices

than women. The study also showed that there was no significant difference in the mean responses of female and male students on attitude and awareness of preventive measures. This could be because of ongoing campaigns in the study area. The study further revealed that there was no significant difference in the mean responses of urban and rural students on awareness of HIV/AIDS risk factors and attitude. It was also established that there was a significant difference in the mean responses of urban and rural SSS2 students on the level of awareness of HIV/AIDS risk factors in Ebonyi with the urban students having a higher mean than their rural area counterparts. This could be attributed to a lack of access to quality teachers for effective sex education and lack of access to information by the rural students. This is in line with the findings of Oginni, Adebajo and Ahonsi (2017) that rural youths are more vulnerable to HIV/AIDS risk factors than urban youths as rural youths have limited access to HIV prevention information. The finding from the Focus Group Discussion supported this as the students in the urban areas actively discussed and suggested measures for preventing the spread of the disease than their rural counterparts.

## **CONCLUSION**

Based on data presented and analysed, it was discovered that both male and female senior secondary school students, urban and rural senior secondary school students are aware of HIV/AIDS risk factors, have a positive attitude toward towards HIV/AIDS risk factors and are aware of HIV/AIDS preventive measures. It was revealed that the female students have a higher awareness of risk factors than their male counterparts and that the urban students have a higher awareness of preventive measures than the rural students.

## **Recommendations**

Based on the findings, the following recommendations were made:

- More funds should be provided by the government, donor agencies and non-governmental organizations to support the dissemination of information on HIV/AIDS risk factors and preventive measures
- Governments, individuals, non-governmental organizations, State and National Action Committees on AIDS should intensify HIV/AIDS risk factors and preventive measures awareness creation in the rural areas through the media
- Governments, individuals and the Nigerian Centre for Disease Control should intensify awareness creation of HIV/AIDS risk factors especially for the male students in Nigerian secondary schools
- The media, health organizations and the government should develop innovative and interesting ways of awareness creation for the rural dwellers
- There is a need to follow up the of HIV/AIDS risk factors and preventive measures already created with a more personal approach so as to get people to practice the preventive measures they are exposed to in order to completely eradicate HIV/AIDS just like other epidemics that have penetrated Nigeria in the past but have been totally eradicated.

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