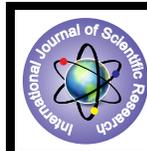


# Effect of Hiv and Aids Education on Secondary School Students' Sexual Knowledge in Nsukka Education Zone of Enugu State



## EDUCATION

KEYWORDS :

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### ABSTRACT

*HIV and AIDS scourge has posed some serious threats to human existence. There was no cure for the disease presently. Some researchers posit that the best option currently is comprehensive HIV and AIDS education. HIV and AIDS education is the use of information mechanisms to influence knowledge, attitudes and behaviours towards healthier lifestyle. The design of the study was a quasi-experimental design. One research question and one null hypothesis guided the conduct of the study. 275 SS II students were used as sample for the study. 30-item structured questionnaire was used to collect data from the respondents. The instrument was validated by three experts from University of Nigeria, Nsukka in the field of education. Cronbach Alpha was used to determine the internal consistency of the instrument which yielded 0.77 coefficient value. Mean and standard deviation were used to answer the research question. Analysis of covariance (ANCOVA) was employed to test the null hypothesis. The findings of the study includes: HIV and AIDS education has effects on the students' sexual knowledge. The interaction effects between HIV and AIDS education packages and the students was significant ( $p > 0.05$ ). Recommendations were made based on the findings of the study.*

### Introduction

Human Immune Virus (HIV) is the virus that causes acquired immune deficiency syndrome (AIDS) in human being which belongs to a retrovirus group. HIV is of two types - HIV<sup>I</sup> and HIV<sup>II</sup>. Oyakhire (2010) stated that two types of HIV have been identified based on epidemiological considerations and to some extent clinical features. The author reported that there is sequence homology of HIV with 40 percent for HIV<sup>II</sup>. Globally HIV -1 is the most common type of HIV but HIV-2 is most common found in West Africa and the prevalence rate in Nigeria is about 4.6% according to National Agency for the Control of AIDS (NACA) 2008. HIV attacks and produces itself in certain cells of human body called CD4 T-helper cells. The CD4 T-helper cells are a subset of white blood cells that are essential to the human defense system of the human body.

HIV and AIDS came to limelight after Dr. Cottiliab's discoveries of the disease in 1981. Since the discovery of the disease, it has been ravaging human beings in large numbers continuously. Research proved that all HIV and AIDS infected persons are expected to die of the complication of the disease if not constantly on antiretroviral drugs. However, this depends on the age of the infected person, genetic type, and several other factors which include rapid progressions, long term non-progressions and highly exposed persistently zero negative (Oyakhire 2010). Despite these differences in the categories of infection, the disease has caused disproportionate suffering on those who contracted the disease. Poverty and lack of education exacerbate the devastation, as those who are afflicted by the disease cannot obtain needed medication or treatment due to lack of resources, cannot fight the disease due to malnutrition and cannot prevent transmission due to lack of education.

HIV and AIDS is usually characterized by many signals which include Kaposis Sarcoma, deficiency in the immune system, stigma and discrimination. Similarly Kenneth (2006) stated that one distinct feature of HIV and AIDS which set it apart from the other life threatening diseases of our time are discrimination and stigma. United States Centre for Disease Control (USCDC) (1997) stated that AIDS is characterized by lost of natural defense system against certain infections and so unable to fight them off.

HIV and AIDS in this work is the symptom that shows an abnormal condition in the body as a result of shortage or weakness of body immunity gained through risky sexual behaviours and other careless means which attracts various illnesses. Put

differently, HIV and AIDS means that the body cannot fight off diseases and is open to other opportunistic infections. The virus that causes HIV and AIDS enters the blood stream of the patients and starts to multiply.

There were several reports as to the causes and mode of transmission of HIV and AIDS. Some reports alleged that HIV and AIDS came from African and caused by Africans. Some other reports alleged that the disease came from white men who wanted to experiment the mixture of human reproductive cells and that of monkey. Balmer (2001) stated that HIV and AIDS was transmitted to some East African hunters (Kenya aborigines) after having sexual intercourse with wild monkeys. The implication of this assertion is that HIV and AIDS came from Kenyan hunters who indulge in bestialities with wild monkeys. Some other researchers as well indicated that lack of sexual knowledge spread HIV and AIDS. Godwin and Rosco (2003) stated that sexual knowledge means the understanding of what sex is, what role sex has to play in human life, whether we can identify which sex acts are moral or immoral.

Studies revealed that most of the adolescents do not have adequate sexual knowledge. Denga (1988) stated that adolescence is the period when sex impulses and curiosities begin to manifest.

Experience has shown that adolescents in secondary schools engage in behaviours that lead to organism, such as dating, holding of hands, hugging, deep kissing, fondling of genital, masturbation, condom use, heterosexual intercourse among others without knowing the implications of such behaviours. Since HIV and AIDS was discovered in 1981, the scourge has caused devastating problems to the people of the world especially the under developed countries. The devastating effects were enormous because those people, especially the under developed countries lack the knowledge of how the disease is spread and its prevalence rate.

The prevalence rate of HIV and AIDS is enormous. According to World Health Organization (WHO, 2003) report, there were 40 million people who were living with HIV and AIDS. The report also affirmed that about 6.5 million people contract the disease annually. In Nigeria according to NACA report of 2008, the national prevalence rate has moved from 4.4% in 2006 to 4.6% in 2007. This portends danger signal for Nigerian adolescents and children yet unborn. Melude (2006) stated that the age group that is mostly infested with HIV and AIDS in Nigeria falls

between 15 to 34 years. The author as well stated that Benue, Cross Rivers, Enugu, Kaduna, and Ekiti States have 10%, 7%, 4% 3% and 1% infection rates respectively. Going by the above statistics, HIV and AIDS is devastating most states in Nigeria. These may have led many researchers to conclude that whenever HIV enters a population, it always move to those people who are already experiencing poverty, oppression, alienation, inequality, subordination and marginalization. Paul (2002) stated that entrenched poverty, economic inequality, racial discrimination, subordination of women and other forms of structural injustice contribute overwhelmingly to the spread of HIV and AIDS infection. The author further stated that the disease has preferential option for the poor, adolescents and females.

Ifeluni (1994), Ogbuagu and Agbo (2002) observed that students in Nigerian secondary schools amazingly indulge in pre-marital sexual activities which exposed them to sexually transmitted diseases (STDs). They also observed that those students indulge in such sexual activities without having adequate sexual knowledge and health implications of their behaviours. Due to the ignorance or lack of knowledge of those students, it becomes imperative that this pandemic should be halted through education before it is too late. HIV and AIDS education programme becomes a vital tool to halt the spread of the disease among the students in secondary schools in Nigeria.

HIV and AIDS education was defined by Agujiobi (2003) as the use of informative means such as campaigns, symposia, seminars, workshops, lectures and others to influence knowledge, attitudes and behaviours towards healthier life style. The essence of effective HIV and AIDS education is that the disease has no known cure as at moment. The only alternative therapy available to man as at now apart from effective HIV and AIDS education is the new invented highly active anti-retroviral therapy (HAART). Anekwe (2009) remarked that the invention of highly active anti-retroviral drugs has resulted in the significant increase in the survival rates for HIV infected individuals. Similarly Kenneth (2006) stated that anti-retroviral drugs are now available to delay the progression from HIV infection to AIDS in millions of people who are infected with the disease. The author further stated that the use of highly active anti-retroviral therapy gives hope to transforming the infection into a chronic disease. This is because the drugs (HAART) are not a permanent cure, as some virus always remains in the body of the HIV victims after treatment.

However, the anti-retroviral treatment has greatly improved and extended the lives of many who are infected with HIV. In view of all these efforts to stop the spread of the disease and or find solutions for the cure of the disease, the disease still persists. HIV and AIDS education becomes the most effective alternative for now. Therefore, it is against this background that the researchers set to find out the effects of HIV and AIDS education packages had on the secondary school students' sexual knowledge in Nsukka education zone of Enugu State.

### Purpose of the Study

Specifically the study sought to determine the effect of HIV and AIDS education on secondary school students' sexual knowledge.

### Research Question

This research question guided the conduct of the study: What is the effect of HIV and AIDS education on secondary school students' sexual knowledge?

### Hypothesis

The hypothesis below guided the conduct of the study which was tested at the 0.05 level of significance.

$H_{01}$ : HIV and AIDS education has no significant effect on the secondary school students' sexual knowledge as measured by HIV and AIDS education packages.

### Methods

The design adopted for this study was a quasi-experimental study of the effect of HIV and AIDS education on secondary

school students' sexual knowledge. Specifically it is a non-randomized, pretest-posttest design. The study was carried out in Enugu State particularly in Nsukka Education zone which consists of three local government areas namely: IgboEti, Nsukka and Uzo-Uwani Local Government Areas. The education zone is in the Northern part of Enugu State. The population of the study comprised all the senior secondary school students (SS II) in the 48 state owned secondary schools in Nsukka education zone as at 2013/2014 academic session.

The sample used for this study consisted of 275 respondents. Multi-stage sampling procedure was used in selecting the sample for the study. The first stage consisted of drawing schools for experimental and control groups from the three LGAs. The second stage was selecting 4 mixed sex schools out of the 48 public secondary schools in Nsukka zone. Two mixed sex schools each were selected from the schools in the rural and urban areas. The third stage involved selecting SS II classes for the study in each of the sampled schools. From these schools (4 mixed sex schools) eight intact classes were selected of which 4 classes each formed the experimental and control groups. 134 students were in the experimental classes while 141 students formed the control group.

Sexual knowledge questionnaire (SKQ) with 30 items was developed by the researchers and was face-validated by three experts from the Departments of Educational Foundations, Health and Physical Education and Science Education, University of Nigeria, Nsukka. The instrument was a four-point rating scale of Very Strongly Agree (VSA), Strongly Agree (SA), Agree (A), and Disagree (D). This means that with positive scoring, 4 points was designed for VSA, 3 for SA, 2 for A, and 1 for D. For the items on the negative response, the scores will be applied in the reverse order. Decision bench mark was 2.50. Items with 2.50 and above were regarded as having more knowledge of risky and non-risky sexual activities, while items below 2.50 were regarded as poor knowledge of risky and non-risky sexual activities that spread HIV and AIDS in the society. An estimate of internal consistency using Cronbach Alpha was established for the instrument. The value obtained was 0.77.

### Experimental Procedure

The study was carried out in the second term of the 2013/2014 school year among SS II students drawn from the four senior secondary schools in the study area. Four mixed- sex schools were used of which 2 school came from rural and urban areas respectively. Before the experiment commenced, the two schools in each of the locations were randomly assigned to either treatment or control group by balloting. On the first day of the experiment SKQ was administered to the two groups in each of the sampled schools. The experimental groups were treated for 4 weeks lesson on HIV and AIDS education (HAEP). The control group was taught selected topics from SS II biology scheme of work. At the end of the four weeks lesson the treatment and control groups were given posttest questionnaire to once again test their knowledge of those risk and non-risky sexual activities that spread HIV and AIDS in the society. Extraneous variable was minimized using of statistical solution as covariates to take care of non-equivalent of the two groups, rearrangement of the questionnaire items to reduce bias on the respondents as they read the items in the questionnaire, use of respondents from different schools to avoid subject interaction among others. The instrument was administered to the students before (pretest) and after (posttest) with the help of two research assistants. Mean and standard deviation were used in answering the research question while the hypothesis was tested using analysis of covariance at 0.05 level of significance.

### Results

**Research Question One:** What are the effects of HIV and AIDS education on secondary school students' sexual knowledge?

Table 1: The table below indicates mean and standard deviation of the secondary school students' overall pretest and posttest treatment sexual knowledge scores by HIV and AIDS education

Groups	Pretest	Posttest
Experimental group		
Mean	2.2090	4.1866
N	134	134
Standard deviation		
Control group		
Mean	2.1418	2.3050
N	141	141
Standard deviation	0.75196	0.73624
Total Mean	2.1745	3.2218
Standard deviation	0.74877	1.21046

Data on this table indicates that the post treatment mean sexual knowledge of the secondary school students taught lessons on HIV and AIDS education was 4.19 with a standard deviation of 0.79 while their pretest mean sexual knowledge score was 2.21. This indicates that HIV and AIDS education package had effect on the students' sexual knowledge. The control group had a post treatment mean sexual knowledge score of 2.30 with standard deviation of 0.74 while their pretest mean sexual knowledge score 2.14. However, there was an improvement in mean sexual knowledge score of this group as seen in their posttest scores. The improvement may be attributed to sample error/chance and or contamination. The standard deviation indicated that the respondents' scores were tightly clustered around their mean. This signifies closeness in their responses to items of risky and non-risky sexual activities that spread HIV and AIDS in the society.

**Hypothesis (Ho1)**

HIV and AIDS education has no significant effect on secondary schools students' sexual knowledge.

Table below indicates ANCOVA of secondary school students' post treatment sexual knowledge scores according to HIV and AIDS education

Source	Type III sum of squares	df	Mean squares	F-cal	F-crit	Sign
Corrected model	247.563 <sup>a</sup>	20	30.945	53.484	-	.000
Intercept	257.660	2	275.660	445.319	-	.000
Pretest	2.137	2	2.187	3.693	3.68	.056
Treatment	241.892	2	241.892	418.068	3.68	.000
Location	1.804	2	1.804	3.118	3.68	.079
Gender	0.105	2	0.105	0.182	3.68	.670

Treatment location	0.006	2	0.006	0.010	3.68	.920
Treatment gender	0.216	2	0.251	0.372	3.68	.542
Location gender	0.040	2	0.041	0.069	3.68	.793
Treatment, gender location	0.021	2	0.021	0.037	3.68	.847
Error	153.906	266	0.579			
Total	3256.000	275				
Corrected total	401.496	273				

R square = 0.617 (Adjusted R square = .605) statistically significant at 0.05 level.

Data on the table showed that the treatment F-calculated value was 4.18 while F-critical ratio was 3.68 at 2 degree of freedom at 0.05 level of probability and 273 corrected totals. Since the F-calculated value was greater than the F-critical ratio, the null hypothesis of no significant effect was rejected. This is because HIV and AIDS education packages given to the students have significant effect on their sexual knowledge.

**Discussion of Results**

The result of the study in table1 indicates that HIV and AIDS education packages (HAEP) had significant effect on the students' sexual knowledge. This was identified by the differences observed before and after HAEP were given to the students. The students displayed low knowledge of risky and non-risky sexual behaviours during pretest. Posttest scores of the students after treatment indicated more knowledge of those risky and non-risky sexual behaviours. This was in agreement with Agujiobi (2003) who stated that HIV and AIDS and behaviours of those who received the education towards healthier life style.

**Conclusion**

The following conclusions were drawn based on the findings: HIV and AIDS education programmes and other life building skills should be intensified in both rural and urban secondary schools in Enugu State because it creates awareness of what constitutes healthy lifestyles and risky sexual behaviours which enables the students to live a healthier lifestyle. This will help the students to desist from indulging in indiscriminate sexual activities and keeping multiple sexual partners.

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