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EFFECT OF A FORMAL AIDS EDUCATION PROGRAMME ON THE KNOWLEDGE OF HIGH SCHOOL ADOLESCENTS IN THE RURAL COMMUNITY: A RETROSPECTIVE STUDY

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ABSTRACT

This particular study investigated the effect of a formal AIDS education programme on the knowledge of high school adolescents in the rural area. The purpose of the study was to assess the rural high school students' knowledge about AIDS in the remote riverine area of Burutu Local Government Area of Bendel State.

The major hypothesis tested was: There will be no significant difference in the general knowledge about AIDS between the rural high adolescents that are exposed to a formal AIDS education programme and those of their counterparts not exposed to it in Burutu Local Government Area of Bendel state. The age bracket of the subjects for this study is 10-20 years old adolescents. The population of study comprises of 1,020 final year students of ten secondary schools from Burutu Local Government Area of Bendel state. The sample of study consisted of 400 respondents, 200 of them were utilized for the pretest and 200 for post test for the purpose of comparison.

A 60 test item was developed to elicit the necessary information from the respondents. The data was analyzed by the University of Ibadan Computer department using statistical package for social sciences (SPSS). The findings showed that majority of the students are unaware of the subject of AIDS, with regard to disease transmission, they did not know that AIDS is spread

through sexual intercourse, one can therefore conclude that there is an urgent need to avail necessary information on AIDS for students most especially those of the rural community.

It is strongly recommended that the national government develops and implements school health education programmes on AIDS in schools most especially in the rural areas of Nigeria most of which is cut off from the AIDS information as delivered by the mass media.

It is therefore suggested that incorporating AIDS Education into schols curriculum at both the Junior and Senior Secondary level will greatly help with the prevention and control of the deadly disease AIDS.

Keywords: Adolescents, Adolescents Sexuality, AIDS, AIDS Education, Rural Community, Burutu Local Government Area, Formal

INTRODUCTION

AIDS which is an abbreviation for Acquired Immune Deficiency Syndrome, is a world-wide concern which calls for researches into the dimensions problems and programmes planned to address its implications. These steps are necessary towards creating a wide spread awareness, bearing in mind its adverse health, social, economic and demographic effects on the individual, family and the community at large **[1]**.

[2] described AIDS as a new disease that has in the short period of six to nine years affected practically every country in the world.

According to **[3]** AIDS is not a disease per se. It shares symptoms of other diseases. What the causative agent the Human Immunodeficiency Virus (HIV) does, is to completely destroy ones immune system so that the body cannot fight any infection i.e. the opportunistic diseases like Kaposi Sarcoma (a type of skin cancer) and Pheumocystic Corinii (a type of pneumonia peculiar to AIDS patients).

As regards to dissemination of information about AIDS in Nigeria, the mass media have been used to educate the general public through the radio, television, newspapers and posters. Through these media people are educated about the facts that AIDS kills and that at present there is no cure, using such jingles and slogans like:-

- AIDS is a disgraceful path to death
- Watch your sexual habit
- Reduce the number of your sex partners
- AIDS is a reality, Death is the penalty
- Don't allow AIDS to aid your death
- I keep my family free off AIDS What you?

- Don't accept cheques of AIDS.

To some extent these propaganda are good, but people need more than just jingles as information.

[4] surveyed 860 high school adolescents in Northerneastern state university also in U.S.A. their results indicated that adolescents remain misinformed about AIDS especially regarding mode of transmission.

It is quite pertinent to note that the danger of lack of AIDS knowledge is worst for the rural student as has been found by **[5]**. In his research, he looked at the knowledge of both the urban and rural high school students in south-west Nigeria and found that urban high school students are more knowledgeable about AIDS than their counterparts in the rural area. Infact, more students in the rural than in the urban schools had over heard about aids before the study was conducted.

[6] has asserted that the high school rate of sexual activity observed for adolescents constitutes a high risk for sexual transmission of AIDS Virus. A recent demographic survey conducted in Benin showed that 98% of adolescents indulge in sexual intercourse before 15 years of age. As a result of these, there is therefore, the need to have more useful information concerning sexuality issues especially in the area of AIDS among adolescents. There is growing tendency for adults to see behavior problems in the adolescents as escalating. The criticisms leveled against the adolescents are familiar gross irresponsibility, drug taking, insubordination, violence and rioting, premarital sex, falling standards in academic excellence and the general rise in the rate of juvenile delinquency.

From the statements above, adolescent health, most especially in this era of AIDS, needs serious attention. There is the need for researches to be conducted with special focus on the rural adolescents youth, who may not be exposed to the skeletal jingles of the media. There is need for health educators, medical practitioners, nurses, teachers and students in general to be well informed and be prepared to meet the challenges posed by AIDS in the rural area. Hence this study looked at the situation from the point of view of adolescent sexuality. It is therefore focused on the development of an effective AIDS education programme, which can be used for rural high school adolescents.

Statement of The Problem

The main problem of the study is to find out the effect of a formal AIDS education programme on the knowledge of high school adolescents in the Burutu Local Government Area of Bendel State.

The major question which this study is out to answer is whether there will be any difference in knowledge on AIDS with regards to the cause, signs and symptoms, mode of transmission, treatment, control and prevention, risk factors, availability of tests, and where to go for the tests between the rural high school adolescents exposed to AIDS education and those not exposed to it.

The following are the sub-questions:-

1) Will there be any difference in knowledge on the cause of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

2) Will there be any difference in knowledge of the signs and symptoms of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

3) Will there be any difference in knowledge of the mode of transmission of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

4) Will there be any difference in knowledge of the treatment for AIDS between the rural high school adolescent exposed to AIDS education and those not exposed to it?

5) Will there be any difference in knowledge of the control and preventive measures for AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

6) Will there be any difference in knowledge of the high risk factors of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

7) Will there be any difference in the knowledge of what Tests are available for AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

8) Will there be any difference in knowledge of where tests are available for AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it?

Significance of The Study

The main focus of this study is to investigate the effect of an AIDS education programme on the knowledge about AIDS among rural high school adolescents of Burutu Local Government Area of Bendel State.

The study is considered important and timely from the point of view that not much have been done in the area of adolescents in relation to AIDS in Nigeria most especially in the rural community. The study will be made available to the Federal and State Ministries of Health. In this way findings and

recommendations in the study may bring about an improvement in AIDS education programme for rural adolescents.

The study will also provide medical professionals, health educators, teachers in general with materials that could be used for AIDS education either in the rural or urban area. Finally, findings from the research may provide information that will generate further researches in the area.

Literature Review

The purpose of this review was to identify the problem areas, compared to the result derived from this study with previously documented ones, thus adding to the existing body of knowledge. AIDS, an infamous epidemic that defies modern medicine was not generally recognized just a decade ago as a serious life threatening disease. AIDS today stands infamous as an epidemic whose tentacles are reaching out to infect every corner of the globe.

According to Dr. Halfdan Manler, director General of the World Health Organization (WHO) "a gigantic strategy in unfolding in front of our eyes and we are really running scared". In each year since the disease first appeared, the human toll has continued to rise. Yet, as all nations wake up to the seriousness of the problem and start taking measures to seal with it, hope of conquering AIDS begins to rise as well.

In the words of Dr. Jonathan Mann, director of WHO's special programme on AIDS, AIDS will not be stopped any where until it has been stopped everywhere.

An Overview of AIDS

AIDS (Acquired Immune Deficiency Syndrome) is a disease that attacks certain white blood cells which form a key part of the body's immune system. It is caused by a virus that was identified in 1983 by Dr. Lucas Montagnier of the Pasteur Institute in Paris and Dr. Robert Gallo of the U.S. National Cancer Institute as Human Immunodeficiency Virus (HIV). With the Immune System damaged or compromised, the body becomes vulnerable to the life threatening disease which constitute the medical problems AIDS. A person infected with HIV becomes a life-long carrier and can infect others.

The infection appears to be transmitted in three ways.

1) Through intimate sexual contact

2) Through infected blood products or through needles contaminated with infected blood and

3) From infected mother to child before, during and shortly after birth.

In the United States the groups at greatest risk are homosexual men and intravenous drug

users, for every female victim there are ten males. In Africa the spread of the HIV appears to be primarily trough hetero-sexual contact, the ratio of female to male is approximately one to one.

AIDS Has Three Stages

1) Asymptomatic Carrier Stage: - A person infected with HIV feels fine but can spread the disease through close inter-personal contact as heterosexual relationship.

2) AIDS Related Complex (ARC):- ARC Victims exhibits less severe symptoms than AIDS patients. The typical symptoms are nonspecific and include fatigue, low grade fever, swollen glands, and diarrhea and weight loss. In the absence of an opportunistic infection meeting the criteria for the diagnosis of AIDS, serious problems such as brain damage and blood clothing complications are included in the ARC group.

3) AIDS: Persons who experience a severely compromised immune system meet the definition of the condition known as AIDS. Once AIDS has been diagnosed, it is uniformly fatal. About 50 percent of patients with AIDS die within 18 months of diagnosis, about 80 percent succumb within 36 months, for those diagnosed as having AIDS in 1981, the mortality rate has approached 100 percent.

According to WHO, nearly 85% of AIDS patients in the United States and Europe have had one or both of the two rare diseases- Kaposis Sarcoma, a rare form of skin cancer, and Pneumo-cystic carinii, a form of pneumonia which is seen only in AIDS patients with immune suppression. It is also suspected that the immune stimulation from vaccination may activate a latent HIV infection into destructive activity. Manufacturers of live virus vaccines, including diseases such as malaria, amoebiasis and hepatitis have been cited. Measles, Mumps, Rubella, Oral Polio and Yellow fever have long been recommended that, they should not be given to those with immune deficiency. According to **[7]**, of the WHO, the AIDS virus is not transmitted through food or water; it does not spread through insects or toilet seats, swimming pools, or hugging, coughing or sneezing. Thus AIDS should be seen as a disease spread by and controllable through conscious human behaviour. Mann further warned that ostracizing AIDS sufferers from society would drive the problem underground wreaking havoc with health authorities' attempts to keep track of the spread of the disease. At the 40^{th} World Health Assembly held in Geneva, Switzerland, in May, 1987, the WHO unanimously adopted a resolution

entitled 'Global Strategy for the prevention and control of AIDS", in which it declared that AIDS was caused by one or more naturally occurring retroviruses of undetermined geographical origin". In October, 1987, the United Nations General Assembly, in passing a resolution uniting all countries AIDS, echoed WHO's opinion that the AIDS virus was a naturally occurring phenomenon.

In November 1987, the Soviet Government Newspaper Izvestia carried an article reporting that soviet Academy of Sciences had publicly distanced itself from accusations about American responsibility for AIDS. Soviet scientists disabused charges that AIDS virus was artificially cultivated at secret American Laboratory, saying that they had protested the appearance of soviet articles that repeated those contentions. Dr. Viktor M. Zhdanov, a leading Medical authority and director of the institute of Virology of the Soviet Academy of Medical Sciences, stated; despite different point of views on the origins of AIDS, one thing is indebtable, and AIDS virus has not been obtained artificially.

Who Predicts More Aids Cases

There will be between 500,000 and three million new Acquired Immune Deficiency Syndrome (AIDS) cases in the next five years, a World Health Organization (WHO) projection, published in its latest World Health Statistics. According to the statistics, those to be affected will mainly be between 18 and 49 years which form part of between five and ten million people carrying the Human Immuno-Deficiency Virus (HIV), the agents responsible for the dreaded killer disease. The report said that in countries where 10 percent of pregnant women are HIV-infected, "AIDS-related infant mortality may be greater than the total mortality rate from all causes in many industrialized countries, thus nullifying improvements in infant and child health in the developing world". It said that in December 1987, 40 countries in America reported 45.622 new AIDS cases, 30 African countries reported 5,491 while 27 European Nations reported 6,328. **[8]** assessed high school students' knowledge, attitudes and beliefs about AIDS in Ibadan. The students were 750 male and female high school students who were drawn from six high schools randomly selected. Majority of the students, 70 percent are unaware of the subject 9AIDS) is spread through sexual intercourse. He then concluded that Government negligence and inadequacy in providing necessary information on AIDS for students is a major contribution to the lack of knowledge on the part of students.

[4] surveyed 860 high school age adolescents in a Northeastern state of United States of America. Their results indicate many adolescents remain misinformed about AIDS, especially regarding mode of transmission. This is disturbing since 70% of the respondents reported to be sexually active.

In Nigeria there is need for a better understanding of student's knowledge, attitudes and beliefs about AIDS in efforts to prevent the spread of this disease. This was the advocacy from the study which was carried out in Ibadan the capital of Oyo State, Nigeria by **[8]**.

College Students Knowledge of AIDS

College students enrolled in health classes were asked to respond to a series of AIDS – related knowledge and attitude questions and to rate themselves on a "worry index". While the level of knowledge of respondents to this survey is better than previous surveys, a major gap in knowledge of particular AIDS issues continues to exist. Prejudicial inclinations towards AIDS related attitude statements were also found to exist. Students' level of worry was stronger for AIDS than for any other health condition mentioned. This information has implications for application to health education planning for college aged individuals.

METHODOLOGY

Research Design

In other to assess if a significant difference existed in the knowledge of AIDS between the rural high school adolescents who were exposed to AIDS education and their counterparts who were not, the randomized control-group pre and post test design was employed. This design was particularly appropriate because it allowed for random selection of subjects and random selection of subjects to groups. The design also allows for conclusion that is drawn to be generalized to all the population that possess similar characteristic like the sample used.

Table 1: Randomised Control – Group Pre and Post Test Design

NO NAMES OF SCHOOLS	POPULATION	SELECTED RESPONDENTS
1. Burutu Gram. School, Burutu	51	20
2. River Nun Gram. School, Agbere	52	20
3. Ojobo Gram. School, Ojobo	50	20
4. Torugbene Gram. school, Torugbene	51	20
5. Tuomor Gram. school, Tuomor	50	20
6. Okpokunu Gram. school, Okpokunu	50	20
7. Enekorogha Gram. school, Enekorogha	50	20
8. Ogulagha Gram. school, Ogulagha	52	20
9. Obotebe Gram. school, Obotebe	54	20
10. Ayakoromo Gram. school, Ayakoromo	50	20
	510	200

GROUPS	PRE- TEST	TREATMENT	POST TEST
Experimental (R)	T	X	T
Control (R)	1		2
	T		T
	1		2

NOTE: R = Random Assignment

The study was conducted in the respondents' natural setting, taking cognizance of the fact that the subjects vary in age, intelligence and motivation. These variables were not controlled in this study. Nevertheless, the respondents showed a lot of similarities in terms of educational background, culture, occupational calling (Fishing) socio-economic status and their natural setting.

Population of Study

The sampling technique that was utilized in this research is the random sampling technique. It was done in two stages:-

Stage 1:- Selection of ten secondary schools in Burutu local government.

Stage II:- Selection of students:- A total of 400 final year students from population of 1020 students.

The recommendations made by the experts were implemented in the final draft of the test items.

Sampling Technique

Pre-Test

Post Test Experimental (Table 3)

Table 3: Post Test Experimental

S. No.	NAME OF SCHOOLS	POPULATION	SELECTED RESPONDEDNTS
1.	Burutu Gram. school, Burutu	51	20
2.	River Nun Gram. School, Agbere	52	20
3.	Ojobo Gram. School, Ojobo	50	20
4.	Torugbene Gram. School,	51	20
5.	Torugbene Tuomor Gram. School, Tuomor	50	20
		254	100

Post Test Control (Table 4)

Table 4: Post Test Experimental

S/NO NAME OF SCHOOLS	POPULATION	SELECTED RESPONDEDNTS
6. Okpokunu Gram. School, Okpokunu	51	20
7. Enekorogha Gram. School, Enekorogha	50	20
8. Ogulaha Gram. School, Ogulagha	52	20
9. Obotebe Gram. School, Obotebe	54	20
10. Ayakoromor Gram. School, Ayakoromo	50	20
	256	100

In other to ascertain the reliability of the test items a pilot study employing 50 students of Moniya High School in Ibadan was conducted. A test-retest reliability model was used. The test items were administered to the fifty students who were randomly selected. The choice of this group of students was due to the fact that they have the same orientation as the subjects used for the final study. After two weeks interval the same set of students were given the same test items. The scores obtained from both tests were computed and the reliability coefficient was found to be r = 0.94; this is interpreted as a high reliability.

Validity and Reliability of Instrument

To enhance the content validity of the test items, experts in the area of Health Education were requested to determine if there were ambiguities in the items. This process enabled the researcher to modify some items

Administration and Collection of Data

The investigator, having obtained permission from the appropriate authorities went to the schools in Burutu Local Government Area of Bendel State. The sampled students of the whole ten schools were engaged in the pre-test and after this the ten schools were divided into two groups. Five of them served as control (those not exposed to the treatment (Teaching plan) and the second group served as experimental (those exposed to the teaching plan. At the end of teaching session a post test of the test items were administered. The choice of two groups was to prevent possible contamination through diffusion of information from the experimental group to the control group.

Data Analysis

Data collected from the test items were coded. Descriptive Statistics by the use of Frequencies, Mean, Mode, Percentages and Standard Deviation was applied.

Finally, Analysis of Co-Variance was used to compare two means in order to determine whether there is a significant difference in the knowledge of AIDS between the students who had the intervention and their counterparts who were not exposed, if any significance at 1 degree of freedom.

From **Table 5** it shows that 62.5% were males and 37.5% were females. It was observed as indicated in this table that more males were sampled than the female.

Table 6 indicates the age distribution of the subjects used for the study. None of the respondent's age range fell below 10 years or more than 20 years. 12.5% fell between the age of 10 years to 10 years to 12 years, 24.5% 12 years to 14 years, 27.5% between 14 years to 16 years, 25% between 16 years to 18 years while 10.5% fell between 18 years to 20 years.

One can infer from this table that majority of the students in the Burutu local government area of Bendel state fall under the ages 12 to 14 years and 14 to 16 years which scored the highest percentage of 27.5% and 25% respectively.

The **Table 7** above shows that 78% of the respondents are single which is the highest percentage while 18.5% are married and all those married belong to the male subjects because females cannot be seen to be married and still continue their education.

The results in table equally indicat that marriage is contracted very early in life since 18.5% where already married as adolescent, following up closely from this 3.5% were already separated from the spouses; which is slightly different from the situation in many urban cities. **[6]** in Benin found that those in urban area had delayed marriage.

Table 8 above shows the religion of the respondents used for the study. It indicates that 57.5% of the respondents claimed their religion is Christianity. Next to this figure are those claiming to belong to the traditional religion which is quite high (40%). This can be attributed to the worship of popular Beni Kurukuru Shrine in conjunction with other smaller shrines like the Tuomor Kalanama shrine. When asked why they preferred to worship in the traditional way, most of them explain this to the indoctrination by their parents who are worshippers of these shrines.

Table 9 above indicates that only 20% of the respondents have their interest in Science which is quite a small figure, while the highest interest was recorded for the Arts subjects. This may be attributed to the fact that almost all the schools in that area lack basic science equipments as well as science teachers.

Duration

The programme last for five weeks from Monday to Friday of the week, one hour was used in each of the schools to teach the same topics AIDS.

After the intervention the post-test was administered concurrently to the experimental and control groups

Testing of Hypothesis (Table 10-17)

In order to test the hypothesis, the data obtained were subjected to Analysis of Covariance (ANCOVA). So as to determine if there were any significant differences in general knowledge of the students due to instruction.

DISCUSSION

The results in the study apparently revealed that the rural high school adolescents who received instructions in AIDS Education had a significant effect on the general knowledge about AIDS and which consequently

improved their learning activities than their untrained counterparts. However the findings supported the results as outlined by **[5]** in his unpublished work which showed that the danger of lack of AIDS knowledge is worst for the rural students. In his research, he looked at the knowledge of both the Urban and Rural High School Students in South-West Nigeria and found that urban High School Students are more knowledgeable about AIDS than their counterparts in the rural area. In fact more students in the rural than urban schools had never heard about AIDS before the study was conducted. They were ignorant about what it really means and how it relates to health. These information were elicited from the pre-test given before any form of treatment.

One of the fundamental goals of AIDS Education is to impact a general knowledge about AIDS and as much as possible AIDS Education to be integrated or built into the activities of the students. This approach, as the result of this study suggests, would facilitate students acquisition of knowledge on AIDS which is geared at the control and total eradication of AIDS in Nigeria.

SUMMARY

The purpose of this study was to assess rural high school adolescent's knowledge about AIDS and investigate the effect of AIDS education programme on the knowledge about AIDS among rural high school adolescents of Burutu local government area of Bendel State which is basically a riverine settlement. The researcher was prompted to conduct this research because in the last few years the problem of Acquired Immune Deficiency Syndrome (AIDS) has made a strong impact on the attention of the public Health problem. No one has ever recovered from the disease and the number of cases is doubling every year. Now fears are growing that AIDS epidemic may spread beyond Gays and other high risk groups to threaten the population at large.

In order to collect the data on this study, 60 – items Achievement test was used. This Instrument was designed to measure the knowledge of rural high school adolescent about the Cause, Signs and Symptoms, Mode of Transmission, Treatment, Control and Prevention Measures, High Risk Factors, Availability of Test and Where these Tests are done to diagnose AIDS. The instrument was validated by experts in the area of Health Education and was also tested for reliability by the test-retest method. `

RECOMMENDATIONS

This research findings and conclusions have given an insight into making these recommendations which will be utilized by

planners of the school curriculum, the government and individual in the country at large. Other researcher who are interested in the area of AIDS may gather some ideas from the study.

1) AIDS education should be incorporated into the secondary school curriculum and the total educational system of the country.

2) Nigeria should be in charge of her AIDS programme to ensure that each Nigerian as much as possible has all the correct available information on HIV- related diseases.

3) The federal, state and local governments should embark on setting up guidelines for effective school health education to prevent the spread of AIDS. These guidelines should be able to help school personnel and others to plan, implement and evaluate educational efforts to prevent unnecessary morbidity and mortality associated with AIDS.

4) Planning and implementation of effective school health education about AIDS. The nation's public and private schools have a capacity and responsibility to help ensure that young people understand the nature of the AIDS epidemic and the specific actions they can take to prevent HIV infection, specially during their adolescence and young adulthood.

There is need for more studies and researches to be conducted in the area of AIDS in adolescent, to this end government should vote in more fund to encourage research programmes on AIDS Education just like the case of the U.S. where an additional 43 million Dollars for 1985 and 1986 to bring the budget request for AIDS research to $1,263 million.

At this stage, the Nigerian government should not rely solely on the jingles about the devastating effect of AIDS in the electronic media and the few display of poster on AIDS. This is not enough means of disseminating information as these jingles and posters don't penetrate the rural areas, worst still, the students who cannot afford any of the electronic equipment is completely cut off from such vital information.

Hence the advocacy of AIDS education at every level of our educational system to provide the answer to the problem.

Government should also encourage those who are working on AIDS education and research by creating employment opportunities and appointing AIDS coordinators in all the levels of government not just at the federal level alone.

CONCLUSION

The analysis of covariance findings of this study served as the basis for the conclusions made as follows:

There is significant different in the general knowledge about AIDS between the rural high school adolescents that are exposed to a formal AIDS education programme and those of their counterparts not exposed to it in Burutu local government area of Bendel state.

This was confirmed after subjecting the responses of the adolescents to analysis of covariance test, out of the eight null hypothesis stated, the whole eight were rejected and this prompted the acceptance of the alternative hypothesis that now state:-

1) There is significant difference in the knowledge about the cause of AIDS between rural high school adolescents exposed to AIDS education and those not exposed to it.

2) There is significant difference in knowledge about the signs and symptoms of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it.

3) There is significant difference in the knowledge about the mode of transmission of AIDS between the rural high school adolescents exposed to it.

4) There is significant difference in knowledge about high risk factors of AIDS between the rural high school adolescents exposed to AIDS education and those not exposed to it.

5) There is significant difference in knowledge about control and preventive measures for AIDS between the rural high school adolescent exposed to AIDS education and those not exposed to it.

6) There is significant difference in knowledge about the High risk factors of AIDS between the rural high school adolescent expose to AIDS education and those not exposed to it.

7) There is significant difference in the knowledge about on what tests are available between rural high school adolescent exposed to AIDS education and those not exposed to it.

8) There is significant difference in knowledge about where the tests are available between the rural high school adolescent exposed to AIDS education and those not exposed to it.

From this study one can infer that in Nigeria there is gross inadequate basic AIDS information strategy systems for the general public and students in the rural area in particular as shown by the results of this particular study. The findings in the study

equally tally and agree with the earlier studies conducted in this area such as those of **[8]**.

And hence in Nigeria there is need for a better understanding of students (adolescents) knowledge, attitude, and beliefs about AIDS in the efforts to prevent the spread of the disease.

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REFERENCES

[1] Mann JM, AIDS: A global Challenge, World Health, 1988.

[2] Ransome Kuti: Fifty questions and answers on AIDS, National Expert Advisory Committee on AIDS, 1988.

[3] Abebe E, AIDS in Nigeria, Quality Magazine, 1989.

[4] Struim L and Hingsen S, Concern over AIDS deepens, over 16,000 cases reported, The Nations' Health, 1986.

[5] Atolagbe JE, Knowledge of urban and rural high school students in south west Nigeria about AIDS, (Unpublished research).

[6] Omu A, Adolescent Induces abortion in Benin-City, Int. J. Obsterics and Gynaecology.

[7] Mann JM, AIDS: A shadow in our world, World Health, March, 1988.

[8] Omishakin A, Knowledge, attitudes and beliefs about AIDS of urban high school students in Ibadan Nigeria: a paper presented at the XII World Conference on Health Education, Houston, Texas, August 28th, September 1st-2nd Oct., 1988.

Table 5: Sex of the Respondents: N 400

SEX	NUMBER	PERCENTAGE
MALE	250	62.5
FEMALE	150	37.5
TOTAL	400	100

Table 6: Age Distribution of Respondent: N 400

AGE RANGE	NUMBER	PERCENTAGE
10-12 years	50	12.5
12-14 years	98	24.5
14-16 years	110	27.5
16-18 years	100	25
18-20 years	42	10.5
Total	400	100

Table 7: Marital Status of The Respondents N 400

Variables	Number	Percentage
Single	312	78
Married	74	18.5
Separated	14	3.5
widow	-	-
total	400	100

Table 8: Religion of Respondents N 400

Variables	Number	Percentage
Christianity	230	57.5
Islam	10	
Traditional	160	2.5
others	-	
		40
		-
Total	400	100

Table 9: Subjects of Interest N 400

Variables	Number	percentage
Science	80	20
Mathematics	10	10
Arts	170	42.5
Languages	45	11.25
Agricultural science	65	16.25
Total	400	100

Table 10

ITEM	GROUP	TEST	SCORES	PERCENTA
CAUSE OF AIDS	EXPERIMENTAL	PRE-TEST	230	57.00
		POST-TEST	284	71.00
	CONTROL	PRE-TEST	220	55.00
		POST-TEST	251	62.00
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	108.42	1	108.42	15.74
ADJUSTED TREATMENT	3062.11	1	3062.11	99.07
RESIDUAL	11929.56	386	30.80	
TOTAL	14991.67	388		

Table 11

ITEM	GROUP	TEST	SCORES	PERCENTA
SIGNS & SYMPTOMS	EXPERIMENTAL	PRE-TEST	881	48.94
		POST-TEST	1493	82.94
	CONTROL	PRE-TEST	777	43.14
		POST-TEST	874	48.56
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	212.91	1	212.91	11.95
ADJUSTED TREATMENT	2881.04	1	2881.04	
RESIDUAL	14595.40	386	30.80	76.22

Table 12

ITEM	GROUP	TEST	SCORES	PERCENTA
MODE OF TRANSMISSION	EXPERIMENTAL	PRE-TEST POST-TEST	400 418	50.00 77.25
	CONTROL	PRE-TEST POST-TEST	367 389	45.8 48.63
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	198.15	1	198.15	9.46
ADJUSTED TREATMENT	2747.72	1	2147.72	37.25
RESIDUAL	22256.27	386	57.66	
TOTAL	24403.89	388		

Table 13

ITEM	GROUP	TEST	SCORES	PERCENTA
TREATMENT OF AIDS	EXPERIMENTAL	PRE-TEST POST-TEST	183 292	45.75 73.00
	CONTROL	PRE-TEST POST-TEST	165 182	41.25 45.50
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	347.39	1	3437.39	16.12
ADJUSTED TREATMENT	4127.93	1	4127.93	6124
RESIDUAL	26019.46	386	76141	
TOTAL	30147.39	388		

Table 14

ITEM	GROUP	TEST	SCORES	PERCENTA
CONTROL &PREVENTION	EXPERIMENTAL	PRE-TEST POST-TEST	282 392	4.0 6.3
	CONTROL	PRE-TEST POST-TEST	264 276	44.0 46.0
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	178.64	1	178.64	19.14
ADJUSTED TREATMENT	1984.22	1	1984.22	
RESIDUAL	20117.67	386	52.12	38.07
TOTAL	22101.89	388		

Table 15

ITEM	GROUP	TEST	SCORES	PERCENTA
HIGH RISK FACTORS	EXPERIMENTAL	PRE-TEST POST-TEST	222 394	31.70 56.30
	CONTROL	PRE-TEST POST-TEST	228 236	32.60 33.70
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	216.11	1	216.11	7.46
ADJUSTED TREATMENT	2446.36	1	2446.36	
RESIDUAL	17151.82	386	44.43	55.06
TOTAL	19598.18	388		

Table 16

ITEM	GROUP	TEST	SCORES	PERCENTA
AVAILABILITY OF TEST	EXPERIMENTAL	PRE-TEST POST-TEST	229 277	45.80 55.40
	CONTROL	PRE-TEST POST-TEST	168 175	33.60 35.00
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	326.18	1	326.18	12.49
ADJUSTED TREATMENT	2108.25	1	2108.25	
RESIDUAL	19674.28	386	50.97	41.36
TOTAL	21782.53	388		

Table 17

ITEM	GROUP	TEST	SCORES	PERCENTA
TEST LOCATIONS	EXPERIMENTAL	PRE-TEST POST-TEST	275 638	34.38 79.75
	CONTROL	PRE-TEST POST-TEST	218 235	27.25 29.38
ANCOVA SOURCES	ss	df	ms	f
COVARIATE	184.73	1	184.73	10.34
ADJUSTED TREATMENT	1889.17	1	1889.17	
RESIDUAL	16849.35	386	43.65	43.28
TOTAL	18738.53	388		