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## AN ASSESSMENT OF THE KNOWLEDGE, ATTITUDE AND BELIEF ABOUT HIV/AIDS AMONG STUDENTS IN TERTIARY INSTITUTIONS IN NIGERIA

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### ABSTRACT

*The assessment of the knowledge, attitude and belief about HIV/AIDS among students in tertiary institution is an important consideration to psychologists and educators since the discovery of HIV/AIDS in Nigeria. However, in this study, the effort to assess student's knowledge, attitude and belief is reported. The study was designed to assess these social variables of undergraduate student toward HIV/AIDS in Zaria. In order to effectively execute this study, six hypotheses, the sample size consisted of five hundred students who were drawn from three tertiary institutions in Zaria. Statistical methods employed in analyzing the data were One way analysis of variance (ANOVA), Pearson Product Moment Correlation Coefficient and t-test. The study revealed that non-significant difference exists between male and female students, resident and non-residents as well as married and unmarried students in their knowledge, attitude and belief in HIV/AIDS. In addition, significant difference exists between students in various academic levels and students from the three institutions understudied about their knowledge, attitude and belief toward HIV/AIDS. The study also shows that there is a relationship between students' socio-economic status and their knowledge, attitude and belief toward HIV/AIDS. It was recommended that students' should take HIV/AIDS course and pass before graduating. This will give them sound information and equip them against the disease.*

### INTRODUCTION

The Acquired Immune-deficiency Syndrome (AIDS) is a fundamental problem, a cosmopolitan, transcontinental and therefore qualifies as a pandemic. There is no nation, community or society without HIV/AIDS. It flourishes

everywhere on this planet earth. These days, the epidemic has been a topical subjects where it originated is yet to be established, particularly where and when the pandemic began. The targeted populations are youths that are leaving from a smaller community into larger societies that could be

agent of transmission of the disease. They are to be observed, studied, understood, educated and guided to become responsible adults. They are the nation's richest resources and guardians of our society into the future. Nevertheless, moral laxity in our society today, particularly among the youths poses a great danger to the nation. The moral laxity that our youths are exposed to makes them potential victim of the disease AIDS.

Despite the evidence that prevention programs are carried out in most of the world, the HIV/AIDS epidemic continue to grow. By 2005, the number of those infected had grown to more than 40 million, double in 1995, with Africa accounting for more than 60 percent of the cumulative cases of HIV/AIDS infection worldwide (UNAIDS, 2005).

Again, the sexually active members of the population usually undertake heterosexual relation. In this case, young adult or youth are more involved in heterosexual relation than other members of the population'. Hence, this group becomes the ideal target of any AIDS prevention programmed. Moreover, one setting where this target group of young adults can be located is at the tertiary institutions.

The impact of HIV/AIDS is still not fully understood, particularly when the long term is considered. The epidemics come in successive waves. With the first wave being HIV infection, followed several years later by a wave of opportunistic disease, and later still by a wave of AIDS illness and then death. The final wave affects societies and economics at various levels, from the families and community to the national and international levels.

The Acquired Immune-deficiency Syndrome (AIDS) has killed more than 30 million people since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history. Despite recent improved access to antiretroviral treatment and care in many regions of the world, UNAID and WHO (2005) in their survey have estimated that about 445.3 million people are living with HIV and that sub-sahara Africa has the highest number of infected people with HIV/AIDS. The epidemic is not homogeneous without region but some countries are more afflicted than others. Even at the country level, there are wide variations in infection level between different areas.

The distribution of HIV/AIDS victims in Africa varies with occupation and sex. Laah (2003) in his study shows that the highest victims of HIV/AIDS are civil

servant (male and female) between the ages of 15- 49 years. In the same vain UNAIDS (2005) found that the adult between the ages of 15 – 49 years has the highest prevalence of HIV in the sub-sahara Africa which varies within regions. Studies have shown that the exact number of people living with HIV/AIDS is not known in Nigeria. The Federal Ministry of Health had estimated that over two million Nigerians were infected with HIV by mid-1999. This number may be mere speculation given the fact that it is practically difficult to give accurate information on prevalence rate in Nigeria because like other developing countries, under-reporting the result of management and logistics problems can hamper efficient data collection and analysis. Presently Southern Africa is the highest hit region with adult prevalence rate exceeding 20% in more countries in the region, and even 30% in Swaziland and Botswana. Eastern Africa also experience relatively high levels of prevalence with estimates above 10% in some countries. Although there are signs that the pandemics is declining in this region, e.g. Uganda which previously recorded one of the highest prevalence rate on the continent has now reduced. Teka (1993) in Aluta (2005) reports that epidemiological survey conducted in Ethiopia since 1987, indicate that the prevalence HIV infection seems to be increasing.

This is also the situation in Tanzania, which is known to have reported the largest number of AIDS cases in any country of the world. West Africa on the other has been much less affected by the pandemic, several countries reportedly have prevalence rates around 2 to 3% no country has yet rates above 10% although in two of the regions most populous countries, Nigeria and Code d'voire, are between 5% and 7% of adults reported to have carried the virus.

### **OBJECTIVE OF THE STUDY**

The following stated objectives of the study are to determine:

1. Various levels of academics concerning student's knowledge, attitude and belief toward HIV/AIDS.
2. The difference between married and unmarried students  
Students on the level of knowledge, attitude and belief toward HIV/AIDS.
3. The relationship of socio-economic status of students and their knowledge, attitude and belief toward HIV/AIDS.
4. Gender difference on students' knowledge, attitude and belief towards HIV/AIDS.

5. Knowledge, attitude and belief of students' resident on campus and outside campus concerning HIV/AIDS.
6. students from different institution; in knowledge, attitude and belief towards HIV/AIDS.

### **HYPOTHESES**

The following hypotheses were formulated to guide the study

1. There is no significant difference among students' of various level of academics (400L, 100L, HND II, OND I and NCE I) on their knowledge, attitude and belief toward HIV/AIDS.
2. There is no significant difference between married and unmarried student on the level of knowledge, attitude and belief toward HIV/AIDS.
3. There is no significant relationship between students socio-economic status and their knowledge, attitude and belief towards HIV/AIDS.
4. there is no significant difference between male and female students on the level of knowledge, attitude and belief toward HIV/AIDS.

5. There is no significant difference between resident and non-resident students, on the level of knowledge, attitude and belief toward HIV/AIDS.
6. Students' from different institution do not differ significantly in their knowledge, attitude and belief towards HIV/AIDS.

### **RESEARCH DESIGN**

A survey research method was use to carry out this study. It was adopted due to its ability to study small and large population group or groups of people. Its ability to determine the status of a given phenomenon also accounts for its applicability to this study.

### **POPULATION**

The population for this research consists of the undergraduate students with a total population of 47,7000 in the selected tertiary institutions in Zaria educational Zone of Kaduna state.

### **SAMPLE AND SAMPLING PROCEDURE**

The students from these institutions were randomly selected. Five hundred (500) respondents from the selected institutions were used for the study.

**Table 1: Showing Samples of Respondents.**

S/No	Institutions	Population	Samples
1.	Ahmadu Bello University Zaria	21,000	200
2.	Federal College of Education Zaria	16,000	150
3.	Nuhu Bamali polytechnic Zaria	10,000	150
	<b>Total</b>	<b>47,000</b>	<b>500</b>

Out of a population of 47,000 in the selected institutions, 500 was taken, this is in line with Roscoe, 1969 cited in Mammam, (2004) who suggested that 500 respondents can be used as the sample size, no matter how large is the population.

#### **INSTRUMENTS FOR DATA COLLECTION**

The questionnaire titled Knowledge, Attitude and Belief Questionnaire (KABQ) was adapted from Shehu, (1997) and modified by the researchers and use for students. The structured questionnaires were divided into five sections: A. personal data, B. knowledge of HIV/AIDS, C. attitude towards HIV/AIDS, D. socio economics status and E. belief about HIV/AIDS. The questionnaire was based on the Likert attitude measurement scale which always requires the respondents to agree or disagree or even not sure with given statement. The higher the score the more influence the respondent is by the scale.

#### **VALIDITY AND RELIABILITY**

The instrument was shown and subjected to proper scrutiny by lecturers in the faculty of Education, Ahmadu Bello University, Zaria. This is to establish its content validity. Kerlinger, (1973) observed that validation by others is an effective method for content validation of research instrument. After modifications and corrections resulting from observations and criticism of other educationists, a pilot study was conducted to estimate the reliability of their questionnaire. For the reliability coefficient, the split half method was used to determine the reliability of the research instruments. A reliability estimate of 0.61 was found. This gave the researcher some level of confidence in the relevance and reliability of the instrument.

## ADMINISTRATION OF INSTRUMENTS

In preparing the instrument, the researcher designed and framed the items in simple terms in order to make it easy for the respondents to interpret and fill appropriately.

In order to acquire more appropriate response, the randomly selected students' were made to understand that the questionnaire was purposely designed for research and they were required to give honest responses.

## DATA ANALYSIS

After collecting the data, the One-way ANOVA, t-test and Pearson Product Moment Correction Coefficient (PPMC) were used for analysis. Retention or rejection of hypotheses was determined at 0.05 level of significance. The computer statistical package for Social Science (SPSS) was used in analyzing the data.

## RESULTS

**Table 2: There is no significant differences among students of various levels of academics (400L, 100L, HND II, OND I and NCE I) on their knowledge, attitude and belief toward HIV/AIDS.**

Oneway ANOVA on the differences of various academic levels of students knowledge, attitude and belief toward HIV/AIDS.

Varieties	Levels	N	x	SD	df	F	Sig.
Knowledge	400L	188	39.19	4.51	499	3.37	.010
	HND II	75	38.56	4.16			
	100L	89	39.37	4.86			
	NCE I	72	37.45	4.04			
	OND I	76	37.69	4.79			
Attitude	Total	500	38.65	4.55	499	7.64	.000
	400L	188	36.51	5.73			
	HND II	75	36.64	5.58			
	100L	89	36.17	4.54			
	NCE I	72	40.34	5.89			
Belief	OND I	76	38.43	7.21	499	3.43	.009
	Total	500	37.31	5.95			
	400L	188	32.75	4.72			
	HND II	75	32.13	4.57			
	100L	89	33.33	4.35			
	NCE I	72	32.69	4.94	499	3.43	.009
	OND I	76	30.81	4.78			
	Total	500	32.46	4.72			

**(P<0.05) Significant**

Table 2 above shows significant differences on knowledge, attitude and belief of students' levels of

academic pursuit toward HIV/AIDS, therefore the hypothesis is rejected.

**Table 3: There is no significant difference between married and unmarried students on the level of knowledge, attitude and belief toward HIV/AIDS.**

t-test analysis on the differences between married and unmarried students on the level of knowledge, attitude and belief toward HIV/AIDS

Variables	Marital Status	N	x	SD	df	t-cal	Sig.	t-critical
Knowledge	Married	42	39.40	3.98	492	1.10	.272	1.96
	Single	452	38.60	4.55				
Attitude	Married	42	37.71	5.80	492	0.42	.661	1.96
	Single	452	37.28	5.87				
Belief	Married	42	32.92	4.40	492	0.57	.553	1.96
	Single	452	32.50	4.63				

(P>0.05) Not significant

Table 3 above shows that there is no significant difference in the mean score of married and unmarried students' on their knowledge, attitude and belief

towards HIV/AIDS, hence, the hypothesis is accepted. The underlying reason here is that all the calculated values are less than their value.

**Table 4: There is no significant relationship between students' socio-economic status and their knowledge, attitude and belief toward HIV/AIDS.**

Intercorrelation matrix between knowledge of HIV, attitude, belief as well as socio-economic status of students.

Intercorrelation matrix	Knowledge	Attitude	Belief	S.E.S
Knowledge	000			
Attitude		000		
Belief			000	
S.E.S	.188r	.307r	.266r	000

Correlation is significant at the 0.01 level (2 tailed )

There is significant relationship between socio-economic status of students' and their knowledge, attitude and belief toward HIV/AIDS. However, the reliability index for attitude/knowledge, belief/knowledge and

belief/attitude is 0.61. the results show a very high significant relationship in all cases. The high level of relationship shows obvious and inevitable impact of these socio elements toward HIV/AIDS. Therefore, the hypothesis is rejected.

**Table 5: There is no significant difference between male and female students in the level of knowledge, attitude and belief toward HIV/AIDS.**

t-test analysis on the significant deference between male and female students level of knowledge, attitude and belief towards HIV/AIDS.

Variables	Sex	N	x	SD	t-cal	t-critical
Knowledge	Male	271	38.72	4.38	.389	1.96
	Female	229	38.56	4.75		
Attitude	Male	271	37.91	5.87	.347	1.96
	Female	229	36.60	5.97		
Belief	Male	271	32.11	4.41	-	1.96
	Female	229	32.86	5.05		

**(P>0.05) Not Significant**

Table 5 indicates that there is no significant difference between male and female respondents in their

knowledge and belief toward HIV/AIDS; therefore, the hypothesis is accepted. This is



because their t-calculated is less than t-critical. Concerning attitude, the hypothesis is rejected; the reason being that t-calculated is greater than t-critical.

**Table 6: There is no significant difference between residential and non-residential students knowledge, attitude and belief toward HIV/AIDS.**

t-test analysis on the significant difference between residential and non-residential students' knowledge, attitude and belief toward HIV/AIDS.

Variables	Residence	N	x	SD	df	T	Sig.	t-critical
Knowledge	On camp.	216	38.98	4.34	498	1.80	.161	1.96
	Off camp.	284	38.40	4.69				
Attitude	On camp.	216	37.08	5.88	498	-.74	.455	1.96
	Off camp.	284	37.48	6.00				
Belief	On camp.	216	33.03	4.66	498	2.37	.018	1.96
	Off camp.	284	32.02	4.73				

(P>0.05) Not Significant

Table 6 reveals that there is no significant difference between residential and non-residential students' knowledge and attitude towards HIV/AIDS; hence, the hypothesis is therefore accepted.

Concerning belief, there is a significant difference between residential and non-residential toward HIV/AIDS therefore the hypothesis is rejected.

**Table 7: Students from different instructions from where the research subject were drawn do not differ significantly in their knowledge, attitude and belief towards HIV/AIDS.**

One-way Descriptive analysis of variance on students' from different institutions on their knowledge, attitude and belief towards HIV/AIDS.

Variables	School	N	x	SD	Df	F	Sig.
Knowledge	ABU	200	39.12	4.78	498	1.90	.150
	FCE	151	38.56	4.39			
	NBP	148	38.17	4.30			
	Total	499	38.67	4.53			
Attitude	ABU	200	35.87	5.35	498	13.53	.000
	FCE	151	39.12	5.77			
	NBP	148	37.45	6.40			
	Total	499	37.32	5.95			
Belief	ABU	200	33.45	4.73	498	8.28	.000
	FCE	151	32.20	4.67			
	NBP	148	31.44	4.50			
	Total	499	32.47	4.71			

(P<0.05) Significant

Table 7 reveals that there is a significant difference between respondents from the three institutions in their attitude and belief towards HIV/AIDS, here, the hypothesis is therefore rejected. Concerning knowledge toward HIV/AIDS there is no significant difference between them; the hypothesis is accepted.

### DISCUSSION

The results obtained are very much surprising because from all the hypotheses, the research findings show that students level of knowledge toward HIV/AIDS seems to be moderately high especially where it touches or concerns the danger in contacting the disease. This did not however prevent them from engaging in indiscriminate sexual intercourse. It appears, however that this be, because of the erroneous belief and intolerant attitude they have toward the disease.

This habit of indiscriminate sexual intercourse by the students could lead to contact with HIV/AIDS, the very menace that has devastated the social and economic fabric of the population. For example, several youths have become orphans because of the virus infection.

The first hypothesis, which states that there is no significant difference among students' of various level of academic pursuit on their knowledge, attitude and belief toward HIV/AIDS, was tested and rejected. The reason was that the results shows significant difference. It should therefore be noted that majority of the undergraduates students have adequate knowledge, attitude and belief in the existence of HIV/AIDS. However, students' do take undue risk when it comes to negotiating for sex. This may be because of the so-called campus freedom that is having a negative effect on their attitude.

The study has proved in the past that undergraduate students have an understanding toward the disease. They developed positive attitude and belief on the existence of HIV/AIDS. The source holds that the Western nations are using the pandemic to put Africa in check. However, this study agree with finding of Lucky (2000), in which he explained that students responses clearly indicate that they knew what HIV/AIDS is, how it can be transmitted and how it can be avoided but that their attitude to the disease is worrisome. Students also belief that the indiscriminate rate of sexual intercourse at the university is very high; a situation

that contributes to the spread of HIV/AIDS.

The second hypothesis, which states that there is no significant difference between married and unmarried students on the level of knowledge, attitude and belief toward HIV/AIDS, was also accepted because the result has clearly shown that but married and unmarried students have similar knowledge, attitude and belief toward the existence of the disease. However, from the mean scores it was observed that married students tend to be more accurate in their knowledge as well as attitude and belief when compared to their single counterparts. This further explains that married students may be more mature in their approach to the disease than the single students may.

This result hypothesis three shows significant relationship between socio-economic status of students and their knowledge, attitude and belief towards HIV/AIDS. By implication, students economic dependency increases their vulnerability to HIV. Research has shown that the economic vulnerability of women makes it more likely that they will exchange sex for money or favours, less likely that they will succeed in negotiating protection they perceived to be less risky. However, it is likely that improvement in financial status of

students will reduce HIV/AIDS in our tertiary institutions.

Based on hypothesis four, the result as shown in the analysis revealed that there is no significant difference between male and female students on the area of knowledge and belief toward HIV/AIDS. With regards to attitude of male and female students toward HIV/AIDS, the result in the analysis shows significant difference. Judging from the situation, students may not have gotten specific and their belief may be erroneous, which probably will lead to poor attitude toward the disease.

This has further revealed that both male and female students' may have adequate knowledge and belief toward the existence of HIV/AIDS but their attitude toward it is poor. The poor attitudes against precautionary measures portend many dangers for these institutions and their efforts toward reducing and eradicating the epidemic.

The intolerant attitude of students toward HIV/AIDS could also be as a result of cultural background of the respondents. For example, some cultures consider it a normal social attainment and sometimes encourage young men to experiment sexually before marriage. These cultural attitudes towards sex often result to HIV

infections to HIV infections to both male and female. Parents and teachers have to ply to educate the youths on the pandemic and thus help in prevention and control of the disease. The students should also be encouraged to read more literature on HIV/AIDS made available in their instructions.

In the case of hypothesis five, the results that there is no significant deference between resident and non-resident students' knowledge and attitude towards HIV/AIDS. The hypothesis is accepted. However, there is a significant different between their belief toward HIV/AIDS. The hypothesis is rejected. The mean scores revealed that residents students have reasonable knowledge but intolerance attitude than the non-residents students towards HIV/AIDS. One can confidently say that community influence may be a factor on the intolerant attitude of the non-resident students. In addition, resident students believe more in HIV/AIDS than the non-resident students.

This has clearly shown that both resident and non-resident students' have similar knowledge and attitude, but their disposition toward what they believe about HIV/AIDS varies. It is evident than the place of students' resident, slightly affect their attitude. Significant difference in their belief may be differences in their

home setting which has a strong effect on their belief. This agree with the findings of UNAIDS (2005). According to the United Nations, people are influence by their background; some of which may be very negative in the context of HIV.

Finally, the result of hypothesis six states that there is significant difference in students attitude and belief towards HIV/AIDS from different institutions. The hypothesis is rejected. About knowledge the results shows not significant, therefore the hypothesis is rejected. This shows that students' in tertiary institutions have moderate level of knowledge and it is homogeneous about the transmission of symptomology and prevention of the disease, though, with great deal of misconception regarding HIV/AIDS. However, their attitude and belief toward the disease is questionable.

This further explained the fact that students may have reasonable knowledge about the role of sexual contact, blood transfusion, infected needles and vertical transmission but their attitude and belief may as well be erroneous toward HIV/AIDS. This agree with the finding of Deshmukh, (1999), in Oyaziwo, (2003), which revealed that students were knowledgeable about transmission and syptomology, but there were misconception about their attitude and belief toward the mode of HIV

transmission. Conversely, Chakarabarty, (1996) in Oyaziwo, (2005), explained in his finding that students knowledge was inadequate.

### **CONCLUSION**

The study has identified knowledge, attitudes and belief of students toward HIV/AIDS. In the study, it was observed work against their knowledge though, they have moderate level of knowledge and it is homogeneous about the transmission of symptomology and prevention of the disease with great deal of misconception regarding HIV/AIDS. However, their attitude and belief toward the disease is questionable. This implies that tackling this menace to educational development in our campuses and the society, it should be joint effort of planners, researchers, universities, government and Nigeria in general. This will bring a lasting and best way of controlling the spread of the disease.

### **RECOMMENDATIONS**

Because of the findings and conclusions reached in the study, the following recommendations were made:

AIDS education should be made part of the General Studies or Foundation Studies courses in various academic levels of tertiary

institutions. It should have strong influence on students GPA and they should be required to take the course and pass it before graduating. Give the present lack of curative drug for AIDS, the emphasis

Community and Non Government Organizations (NGOs) need to provide loan/grants to students, particularly those students' from low socio-economic status, to enable them become self reliant through income Generating Activities (IGA) in order to alleviate poverty which is the major cause of HIV/AIDS transactions.

Open discussion about HIV are still rare in our institutions of higher learning, this should not be so. A day should be set aside as a special AIDS day in each semester for a general awareness on HIV/AIDS, where related how to protect themselves from the epidemic especially in the area of gender differences.

Enlightenment campaigns on the spread and effect of HIV should be organized by the counselling center of our institutions of higher learning in collaboration with other agencies like Ministry of Health as part of education of the youths.

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