KNOWELEDGE, RISK PERCEPTION AND BEHAVIOUR ON HIV/AIDS AMONG STUDENTS OF TERTIARY INSTITUTIONS IN LAGOS STATE, NIGERIA

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Abstract

This Study was focused on the behavior and risk perception of HIV/AIDS among students of tertiary institutions in Lagos State, Nigeria because researches have shown that the school environment provide fertile grounds for high sexual risk behavior (Adefuye et al.,2009). The study which was conducted over a period of three months considered a sample of five randomly selected tertiary institutions in the State and 1200 multiple-choice format questionnaires were distributed to the students out of which 1095 (91.33 percent) were completed and returned.

Data generated were analyzed using SPSS version 15. Apart from simple descriptive statistics, correspondence analysis was used to show relationship between the demographic background of the students, their health risk perception and behavior on HIV/AIDS. The result showed that as many as twenty four percent of the students have multiple sex partners, about 44 percent of who do not like using condom. Having multiple sex partners was found to have significant effect on decision on infection prevention technique adopted by the student. About 43.69 percent of those who have multiple sex partners agree that they are engaging in risky sexual behavior. Only 54.63 percent of those who have heard about HIV/AIDS are willing to use condom and 71.33 percent of the respondents are very concerned about the alarming rate of spread of the disease.

The correspondence analysis showed that within the age range of 26 to 30 years students are not too comfortable with having roommates who are HIV/AIDS infected while the older students (those who are 30 years and above) feel very comfortable with sharing hostel room with them. Also, it was found that most students with multiple sex partners use female condom while those

with single partners prefer using male condom. Number of sex partners was found to determine the periods between going for HIV/Aids test. While those with multiple sex partners have undergone HIV test within six months before our survey, those with single sex partners have not do so in the last six months. Age was found to be a factor in determining the decision to use protection during sex. The population at risk are those in the age bracket of 19 to 30 years, as they have multiple sex partners and seldom go for test. The implication for insurance was discussed.

Key words: Aids, perception, partner, age, insurance

Background

Akwara, Madise &Hinde (2003) observed that studies on perception of risk of HIV/AIDS, are poorly understood and inconclusive because of the difficulty of separating and disentangling the complex relationship between the variables. According to them, the meaning and context of sexuality differ across populations and cultures and this has greatly affected the understanding of sexual behavior. Quoting Bongaarts (1995) they opined that *"sexual behavior is probably responsible for much of the differences in heterosexual HIV/AIDS epidemics among countries, as well as for the equally large differences among regions and demographic groups within countries"*.

Among the various groups, the college environment was found to provide great opportunity for HIV high-risk behaviors, including unsafe sex and multiple partnerships (Adefuye, Abiona, Balogun &Lukobo-Durrell, 2009). To buttress this point, Durojaiye (2009) explained that the pandemic of HIV remains on the increase with young people at increased risk of infection. He observed that though, knowledge of some aspects of the disease was quite high in the study group, yet, low risk-perception hindered the commitment to behavior change. In an earlier study by Okunbor and Agwubike (2007) assessed strategies for reducing HIV/AIDS scourge among students of five Tertiary Institutions in Edo State, Nigeria, it was observed that some respondents perceived themselves as not vulnerable to AIDS. Citing Umeh and Umeh (2003) they averred that poor economic situation in the country has significant effect on parental control and discipline which in turn aggravated the spread of HIV/AIDS which has reached epidemic proportions in certain communities, especially around tertiary institutions.

In defense of the aforementioned positions, Rutenberg et al (2002) observed that though perceived risk of HIV infection is an important antecedent for adopting protective behavior, yet, measures of risk perception, particularly among adolescents are often simplistic and do not differentiate between "accurate" and "inaccurate" perceptions. According to them,

"   while risk perception, the calculation of the risk, and behavior are consistent for some adolescents, a significant proportion of adolescents , particularly those that considered

themselves at low risk of HIV infection in the next 12 months have inaccurate perceptions of their HIV risk"

According to Durojaiye (2009), HIV/AIDS remains incurable and devastates many communities and nations. He explained that since the disease was first reported in the United States of America in 1981, it has spread unremittingly to many parts of the world with Africa which has

just over 10 percent of world's population remaining the most affected region. Phaswana-Mafuya & Peltzer (2006) explained that in 2003, the prevalence of HIV/AIDS around the world was 7.4 million for Asia, 25 million for Sub-Saharan Africa, 480,000 for North Africa and Middle-East, 1.3 million for Eastern Europe and Central Asia, 1.6 million for Latin America, 950,000 for United States of America and 580,000 for Western Europe.

In a study on Tanzania by Maswanya et al (1999), it was reported that 54 percent (75 percent of boys and 40 percent of girls) of students in that country were sexually active with 39 percent having a regular sex partner and 13 percent have multiple sex partners. Also, 30 percent of these sexually active individuals did not always use condom while 39 percent of those having multiple partners did not use condom. Though, students were found to be well aware of the risk but they failed to change their behavior towards it. Ulysses,Brown, Ursula and Braxton (2005) observed that AIDS has devastated the lives of citizens of the United States of America to the extent that the incidence rate of the disease for young Americans between the ages of 13 to 25 years rose nearly 20 percent and approximately 50 percent of new infections are among individuals who are younger than 25 years old. They argued that finding better methods of communicating AIDS risk knowledge to those who are at greater risk of infection is paramount in the fight against the deadly scourge.

A study undertaken in Mozambique by Prata, Morris,Mazive,Vahidnia and Stehr (2006) shows that in 2000, an estimated 12 percent of adults aged 15 to 49 were infected with HIV and that most estimates show an increasing prevalence of infection and about one-half of new infections occur among 15 – 24 year olds. The study concluded that the relationship between individuals' perception of their risk for acquiring HIV and their use of condoms is poorly understood which they argued are crucial to the development of effective strategies to fight HIV and AIDS.

Studies have associated many variables with behavior towards HIV/AIDS. Mnyika et al (1997) associated tendencies such as urbanization, early sexual debut, travel, alcohol use and sex under the influence of alcohol with multiple sex partners which in turn results in increased condom use and higher risk of the disease. In another study Johnson et al (2008) observed that men who had sex with men remain at great risk for HIV infection while Peltzer et al (2009) opined that though, HIV Counseling and Testing is an entry point to both prevention and treatment of the disease but this is limited by factors such as age, marital status, educational level, occupation, household wealth, area of residence, fear of unsolicited disclosure, fear of stigma and discrimination, lack

of confidentiality and so on. Alcohol use is associated with multiple risks of HIV transmission among both men and women (Weiser et al, 2006).

In Sub-Saharan Africa where the disease is most endemic,it was found that an almost universal awareness of AIDS lethality and of HIV transmission mechanism coexists together with a reluctance in adopting consequent preventive measures as protected sexual intercourse (Bernardi, 2002). The situation in Nigeria is not encouraging. Quoting from Federal Ministry of Health (1996), Chng,Eke-Huber, Eaddy and Collins (2005)explained that in Nigeria, the HIV epidemic is spreading at an alarming rate with sero-prevalence rates increasing from 0.9 percent in 1990 to 1.8 percent in 1992, 3.8 percent in 1994, 4.5 percent in 1996 and 5.4 percent in 1999. Quoting further from Makinwa, Adebusoye & Pauline (1991), they observed that Nigerian youths between the ages of 15 and 24 are the most affected because of their sexual behavior. College and University students due to unsafe sexual behavior, experimentation with alcohol and drugs, and failure to see themselves at risk of infection, are particularly vulnerable to the disease.

Although, there are research studies on knowledge and behavior of students of tertiary institutions in Nigeria, few have discussed the situation in Lagos State which is the most populous State in Nigeria. The State is micro-Nigeria with every ethnic group well represented in its population. It also has one of the largest concentrations of tertiary institutions in the country and these characteristics make it unique and appropriate for this study.

The paper is divided into six sections. Background which is the first section justifies the need for the study. Section two explains the study area while section three discusses the methodology. Section four explains the analysis while section five displays the results and section six discusses the insurance implication, findings, recommendation and conclusion.

The Study Area.

Lagos State was created on May 27, 1967, through Decree Number 14, by the Federal Government. What was then the Federal Capital of Nigeria was merged with the old colony province of the defunct Western Region of Nigeria to form the new State. The state lies approximately between longitude $2^0 42$' East and $3^0 42$' East and latitude $6^0 22$' North and $6^0 52$' North. It is bounded in the South by the Guinea Coast of the 180km Atlantic Coastline, in the West by the Republic of Benin and in the North and East by Ogun State (Odumosu, Balogun and Ojo, 1999). The State has twenty local government areas, namely; Agege, Alimosho, Ibeju-Lekki, Surulere, Ojo, Lagos Island, Awori-Ajeromi, Ajeromi-Ifelodun, Shomolu, Epe, Ikorodu, Apapa, Eti-Osa, Badagry, Lagos Mainland, Ikeja,Mushin, Kosofe, Amuwo-Odofin and Ifako-Ijaye.

It has a total area of 3,577 square kilometer about 22 percent of which is water (Oke *et al.*, 2000). Despite its position as the smallest State in the Federation in terms of land mass, occupying only 0.4 percent of the area of Nigeria, it has gone through series of administrative transformation to metamorphose into a frontline position amongst the thirty-six states making up the federation of modern day Nigeria. Lagos State with a population of 9,013,534 million, distributed as 4,678,020 males and 4,335,514 females), is the most urbanized state in Nigeria.

In 1963, the population of Lagos State was 1,444,000 with 603,000 males and 591,000 females. This grew to 5,725,116 in 1991 with a male population of 3,010,604 and 2,714,512 females. The population density of Lagos State is 2,455.(National Population Commission and National Bureau of Statistics, 2006)

Over 50 percent of industries in Nigeria are located in the state, contributing about 70% of the national gross industrial output (Oke, Adedokun, Ogunlade, Soretire, Adetoro and Faweya, 2001). The state accommodates about 6.2 percent of the total population of Nigeria and its annual population growth rate is over 9 percent.

Methodology

The study was conducted over a period of three months. Students of tertiary institutions in Lagos State were approached and requested to fill a multiple-choice format questionnaires. Five randomly selected institutions (using simple random sampling) in Lagos State form the sample. The sample elements are: University of Lagos (Including College of Medicine), Lagos State University, Federal College of Education (Technical), Adeniran Ogunsanya College of Education and Yaba College of Technology. The number of questionnaires assigned to each School was based on the size of such school. Out of the 1200 questionnaires distributed across institutions, only 1095, making 91.33 percent of the total were finally returned. A student forms the sample unit.

Apart from the demographic characteristics of the elements in the sample such as Age, Gender and Marital Status, other variables such as Number of Sex Partners of the respondent, Whether Respondent uses latex condom, Whether the respondents has ever heard about HIV/AIDS, Frequency of Sex, How comfortable would the respondent be working with HIV/AIDS infected

person, How comfortable would the respondent be living with HIV/AIDS infected person and so on were included in the questionnaire.

Correspondence analysis was considered for the study. The aim of correspondence analysis is to show the relationships between the rows and columns of a correspondence table. Its use in this case enables us, to graphically display the relationship between demographic background of our students and their sexual behaviors. Adeleke and Ibiwoye (2009) studied the relationship between the health risk behavior of public service employees and their lifestyle using correspondence analysis. According to them one of the goals of correspondence analysis is to describe the relationships between two nominal variables in a correspondence table in a low-dimensional space, while simultaneously describing the relationships between the categories for each variable. However, there is similarity between contingency tables for test of independence and correspondence analysis. An analysis of contingency tables often includes examining row and column profiles and testing for independence via the chi-square statistic. Correspondence analysis, on the other hand, assumes nominal variables and can describe the relationships between categories of each variable, as well as the relationship between the variables. In addition, correspondence analysis can be used to analyze any table of positive correspondence measures (see the works of Hoffman and Franke, 1996).

Richard et al.(1994)showed that similarity between objects is determined using the technique refers to a data matrix $X_{(N \times P)}$, where the rows represent N values on each of P discretely distributed variables. The elements of the data matrix are first divided by the sum of all the elements in the matrix, that is,

$b_{ij} = x_{ij} \Big/ \sum_{i=1}^{N} \sum_{j=1}^{P} x_{ij}$, the transformation from X to B, converts the elements to proportions that may be

interpreted as probability value and matrix B is then an N-by-P contingency table in the sense of Fisher (1940). The rational for this transformations is based on the development of a measure of similarity between objects and between variables. Each element of B is scaled according to $b_{ij} \big/ b_{i.}$, where $b_{i.}$ is the

row sum of the ith row. It should be noted that $\sum_{j=1}^{P} b_{ij} \Big/ b_{i.} = 1$, thus all rows sum to unity and the

dimensionality of the problem is therefore reduced to by 1.

Richard et al (1996) gave measure of distance between objects q and r in the contingency table distance as

$$d_{qr}^2 = \sum_{j=1}^{P} \left(\frac{b_{qj}}{b_{q.}\sqrt{b_{.j}}} - \frac{b_{.j}}{b_{r.}\sqrt{b_{.j}}} \right)^2$$ which shows that each of the axes of variable is stretched by a factor

of $1/\sqrt{b_{.j}}$ and the distances between objects are obtained from objects points having as coordinate, $b_{ij}/b_{i.}\sqrt{b_{.j}}$. Accordingly, the covariance for variables i and j can be written as

$$c_{ij} = \sum_{s=1}^{N} b_{s.} \left(\frac{b_{si}}{b_{s.}\sqrt{b_{.i}}} - \sqrt{b_{.i}} \right) \left(\frac{b_{sj}}{b_{s.}\sqrt{b_{.j}}} - \sqrt{b_{.j}} \right),$$ where the terms $b_{.i}$ and $b_{.j}$ are the centers of gravity of

variables i and j respectively, such that

$$\sum_{s=1}^{N} b_{s.} \frac{b_{si}}{b_{s.}\sqrt{b_{.i}}} = \sqrt{b_{.i}}$$ which is the multinomial mean of variable i.

Data Description

About 36 percent of the respondents are students of the University of Lagos while about 25 percent of them belong to the Lagos State University. Nearly 20.3 percent study at the Yaba College of Technology while only 3.1 percent attend the Lagos State Polytechnic. Those who attend Federal College of Education (Technical) are 0.4 percent while the remaining 6 percent belong to other tertiary institutions in the State. Slightly less than 56 percent of the Students are studying for their Bachelor's degree certificates, 24.5 percent for the Ordinary National Diploma, 9.6 percent for the Higher National Diploma and 6.6 percent are graduate students while the remaining 3.5 percent belong to other carrier group.

Male respondents are 53.6 percent while the remaining are females. About 97 percent of the students have heard about HIV/AIDS. While 56 percent of the respondents believe that HIV/AIDS cannot be transmitted by having oral sex with a person who is HIV positive, as many as 94.4 percent of the respondents agree that sharing needles when using steroids could lead to

HIV transmission. Also, 94.7 percent of the respondents agree that having sex with multiple partners can increase the chance of being infected with HIV.

Only 34 percent of the respondents will feel very comfortable working with someone who has HIV/AIDS while 36.6 percent will not feel comfortable doing so. Over 50 percent (50.8 percent) of the students will not feel comfortable having a room-mate with HIV/AIDS. About 43.4 percent of the respondents have never gone for HIV test. Up to 38.9 percent of the students do not think they are at risk, and 9.3 percent are afraid they could test positive.

HAVING SEX WITH MULTIPLE PARTNERS AND FREQUENCY OF SEX

About 24 percent of those who have multiple sex partners had sex about a week before the survey while 15.2 percent of them had sex in the last three weeks preceding the survey. Amongst those who had sex less than a week before the survey, 89.88 percent have multiple sex partners while 95.6 percent of those who had sex within three weeks before the survey have multiple sex partners. Having multiple sex partner and frequency of sex are found to be significantly related ($\chi^2 = 16.794$, p<0.05).

HAVING SEX WITH MULTIPLE PARTNERS AND USE OF CONDOM

About 95 percent of male who use condom during sex have multiple sex partners. Only 1.5 percent of the students who use condom are females. Among those who have multiple sex partners, 97.3 percent are males while 77.78 percent of the females who use condom have multiple sex partners. Having sex with multiple partners and use of condom are found to be significantly associated. ($\chi^2 = 25.310$, p<0.05). About 44 percent of those who have multiple partners do not like using condom. Close to 37 percent of the students prefer abstinence as a method of preventing infection, while 22.66 percent would use condom and 31.65 percent would rather stick to a single partner. Number of sex partners was found to significantly affect decision on infection prevention technique ($\chi^2 = 56.992$, p<0.05).

HAVING SEX WITH MULTIPLE PARTNERS AND ENGAGING IN RISKY SEXUAL BEHAVIOUR

About 43.69 percent of those who have multiple sex partners agree that they are engaging in risky sexual behavior, out of this number 13.58 percent confessed that they are always doing so while 20.33 percent

agree that they did so only a few times. Among those who did not agree that they are engaging in risky sexual behavior, 95.3 percent have multiple sex partners while 97.2 percent of those who agree that they engaged in risky sexual behavior have multiple sex partners. Risky sexual behavior and having multiple sex partners are found to be associated ($\chi^2 = 17.274$, p<0.05).

HAVING SEX WITH MULTIPLE PARTNERS AND COURSE OF STUDY OF THE RESPONDENTS

Only 49.27 percent of those who have multiple sex partners are in Management /Social Science faculties, 12.7 percent of them in the Natural Sciences, 14.49 percent in the Faculty of Education, 7.73 percent in Engineering, 3.86 percent in Arts while 6.96 percent are in other faculties. However, it was found that having multiple sex partners is not significantly associated with the Course of study of the respondent ($\chi^2 = 2.988$, p>0.05).

KNOWLEDGE OF HIV/AIDS AND WILLINGNESS TO USE CONDOM

More than 54.63 percent of those who have heard about HIV/AIDS are willing to use condom for protection while the remaining are unwilling to use condom. However, Knowledge of HIV/AIDS does not affect Attitude to use of condom($\chi^2 = 0.180$, p>0.05).

KNOWLEDGE OF HIV/AIDS AND METHOD OF PREVENTION OF HIV/AIDS

Slightly over 97.59 percent of those who practice abstinence have heard about HIV/AIDS. This is 98.07 percent among those who use condom, 90.65 percent among those who remain faithful to a single partner .Amongst those who have heard about HIV/AIDS,38.2 percent practice abstinence, 24.1 percent use condom, 32.99 percent are faithful to a partner and 4.63 percent do not use any method.It is worthy of note that Knowledge about HIV/AIDS is not significantly associated with the method used in preventing the disease($\chi^2 = 4.177$, p>0.05)

KNOWLEDGE OF HIV/AIDS AND CONCERN ABOUT THE ALARMING RATE OF THE DISEASE

Amongst those who have heard about HIV/AIDS, 71.33 percent are very concerned about its alarming spread, 12.77 are somewhat concerned, 7.07 percent are indifferent, 2.64 percent show no concern at all, while 6.15 percent do not know. Amongst those who are very concerned, 96.42 percent have heard about the disease and this is 98.54 percent among those who are somewhat concerned.

KNOWLEDGE OF HIV/AIDS AND ATTITUDE TO THOSE WHO HAVE THE DISEASE

Among those who have knowledge about HIV/AIDS, 33.59 percent would feel comfortable working with someone who has the disease,

KNOWLEDGE OF HIV/AIDS AND TYPE OF TERTIARY INSTITUTION ATTENDED

About 65 percent of those who have heard about HIV/AIDS are University students, 34.34 percent are students of Colleges of technology/Polytechnic while 0.4 percent attend Colleges of education. Amongst the University students 97.31 percent have heard about HIV/AIDS. This is 96.34 percent amongst those who attended Colleges of Technology/Polytechnics. It was discovered that Knowledge of HIV/AIDS is not significantly related to the type of tertiary institution attended ($\chi^2 = 5.255$, p>0.05).

Results

Figures 1-9 illustrate the biplots of the underlying relationships between demographic background of our students and their sex behavior and attitude towards HIV.
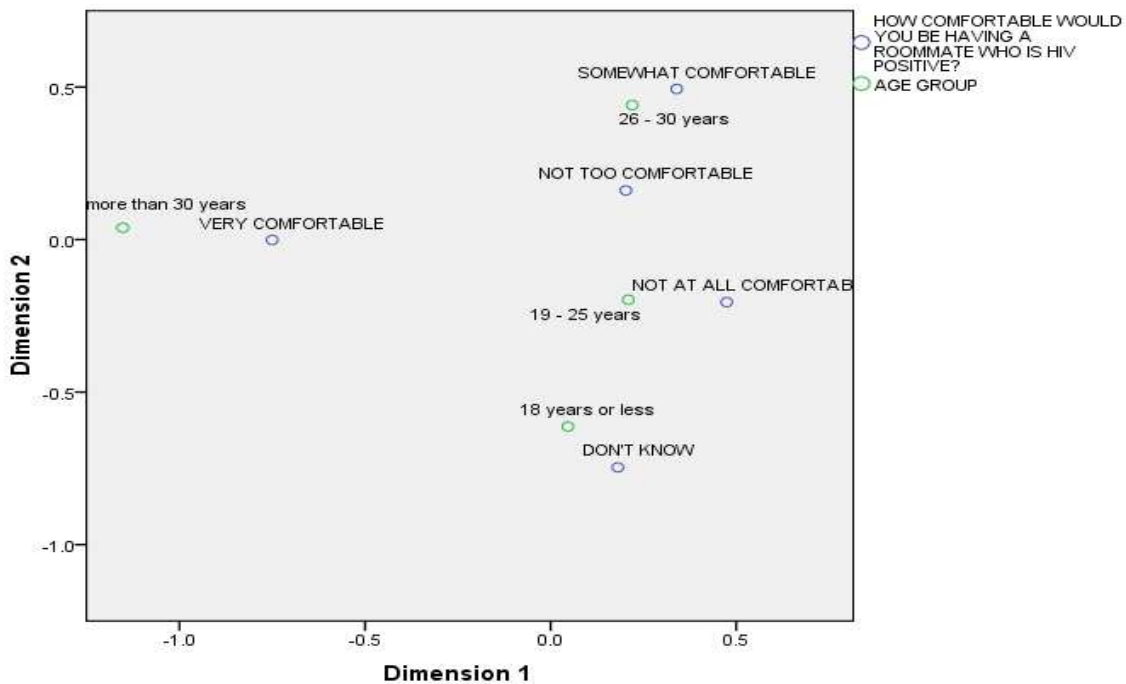
Figure 1: Biplot for frequency of how comfortable a student will be to have room mate who is HIV positive and the age

group of the student

In figure 1, the first and second dimensions separate the age group of students and how comfortable they are with having a room mate who is HIV positive. The plot showed that the students in the age bracket of 26-30 years are either "somewhat comfortable" or " not too comfortable" living with roommates who are HIV positive while those in the 19-25 years age group are not at all comfortable. Those who are 30 years and above are very comfortable while 18 years or less are indifferent to having a room mate who is HIV positive.
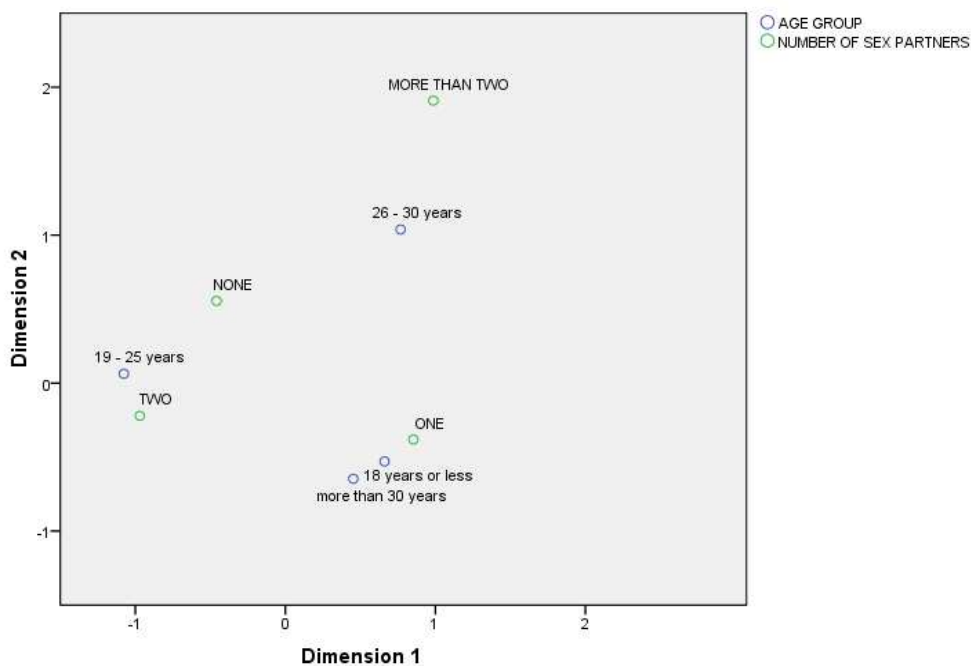
Figure 2 : Biplot of frequency of student's age group and number of sex partners they have

In figure 2, the first and second dimensions separate the age group of students and the number of sex partners they have. The plot shows that students who are 18 years or less and those who are 30 years and above are associated with "having one partner" while the 19 – 25 year old are associated multiple partners. This is an indication that students who are more than 30 years of age or at most 18 years are likely to have one sex partner while other age groups have the tendency to keep multiple sex partners.
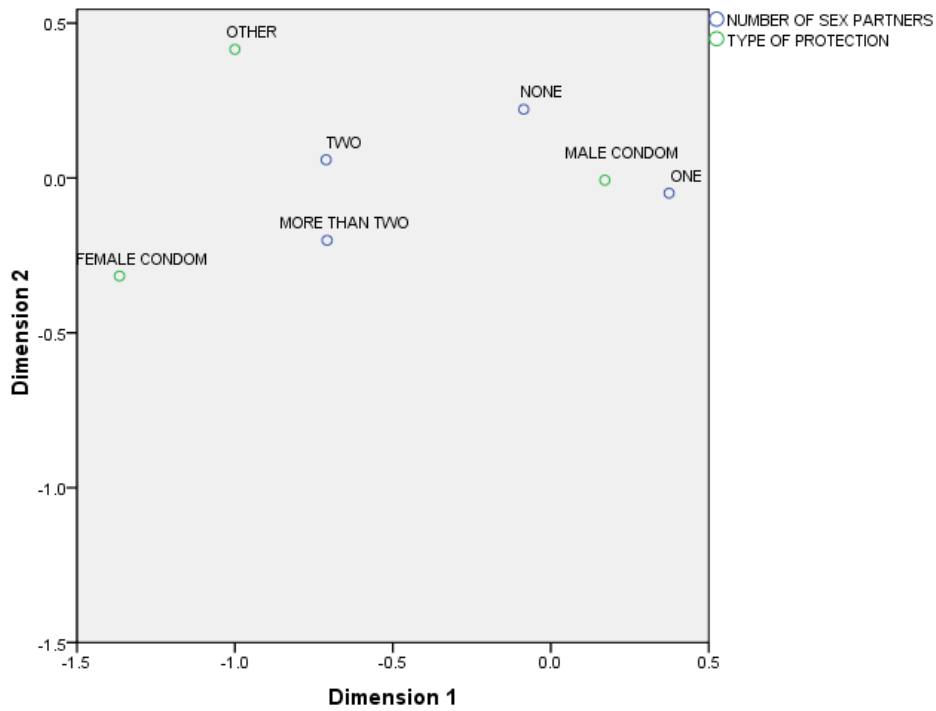
Figure 3: Biplot of frequency of number of sex partners students have and the type of protection they adopted

Figure 3 shows that students with one partner are associated with the usage of male condom as a means of protection. This shows that students with only one partner are likely to use male condom as a form of protection from HIV/AIDS infection.
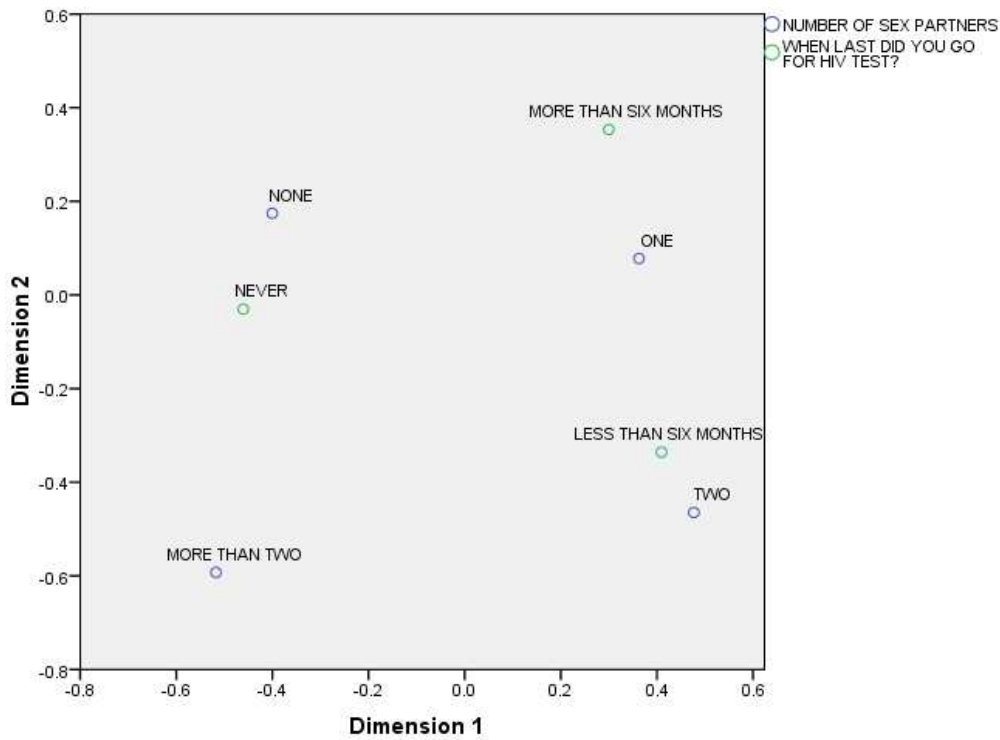
Figure 4 : Biplot of frequency of numbers of sex partners and HIV test by students

In figure 4, the first and second dimensions respectively separate the number of sex partners students have and the last time they underwent HIV test. The plot shows that students with one partner are associated with having test in more than six months to our study while students who have no partners are found never to have done HIV test while students with multiple partners are found to do the test within six months to the study.
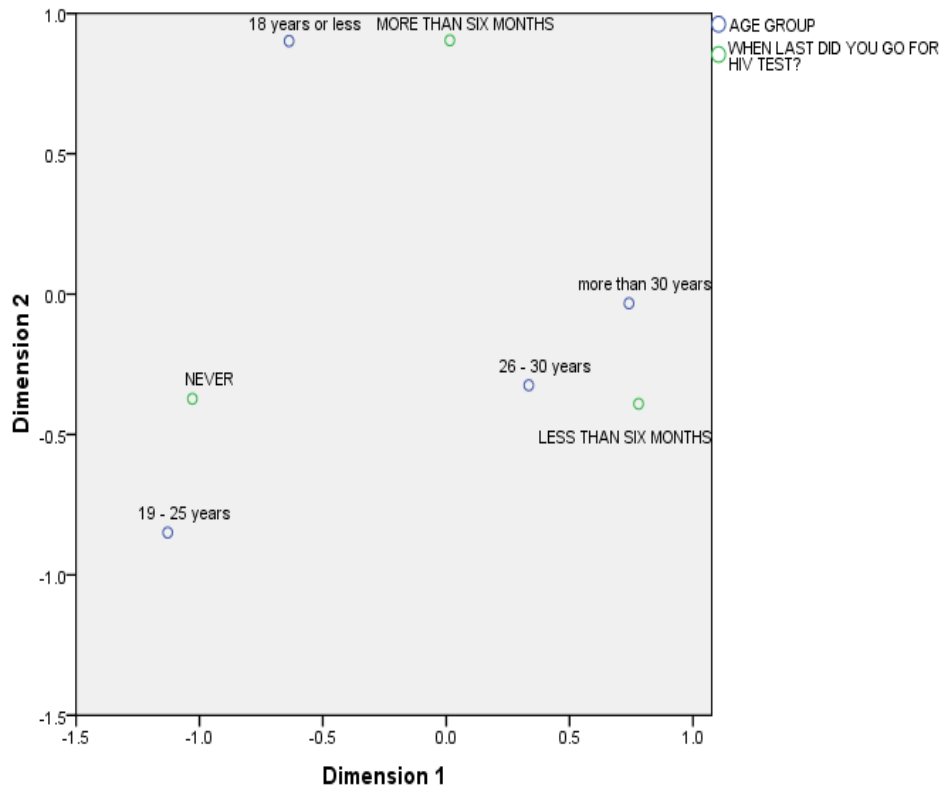
Figure 5: Biplots of frequency of age group of students and last time they go for HIV test

In figure 5, the first and second dimension separates the age groups students and the last time they did HIV test. The plot shows that students who are 18 years and below are found to have done the HIV test in a period longer than six months. Those who are 26-30 years are associated with less than six months before the commencement of our study while those who are 19- 25 years are associated with "never done the test".
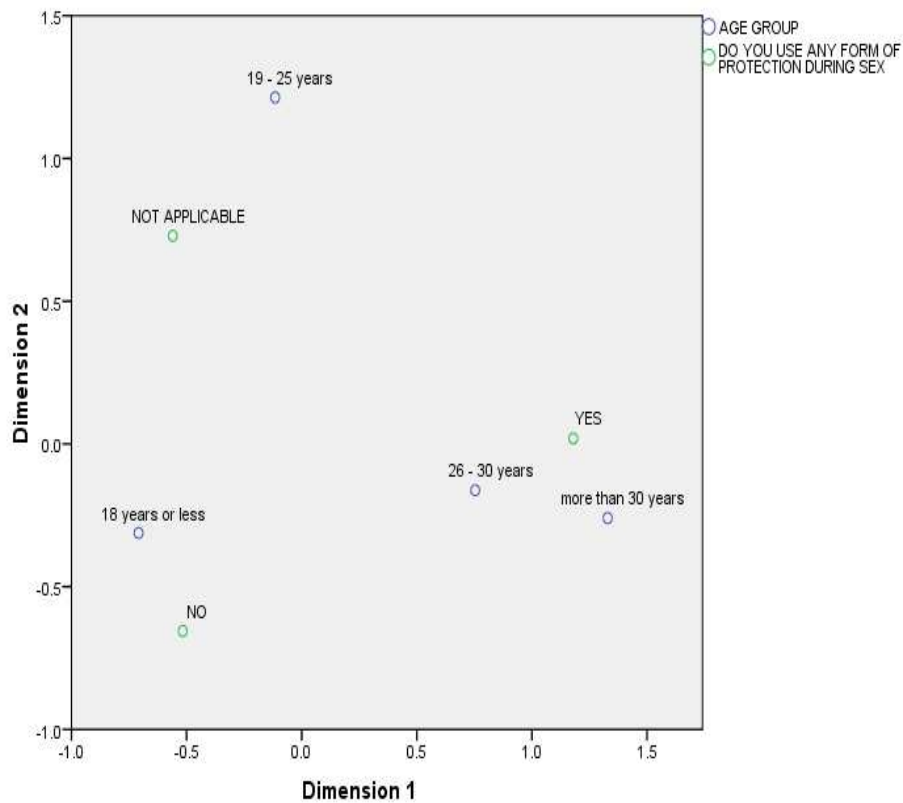
Figure 6: Biplot for frequency of age group of students and use of protection during sex

In figure 6, the origin of first and second dimension separates the age group of students and use of protection during sex. The plot shows that student in the age bracket of 26-30 years and 30 years above are associated "yes". That is they use protection during sex while those who are 18 years and below are associated with no. That is, "Never done a test", and those who are 19-25 years are associated with not applicable.
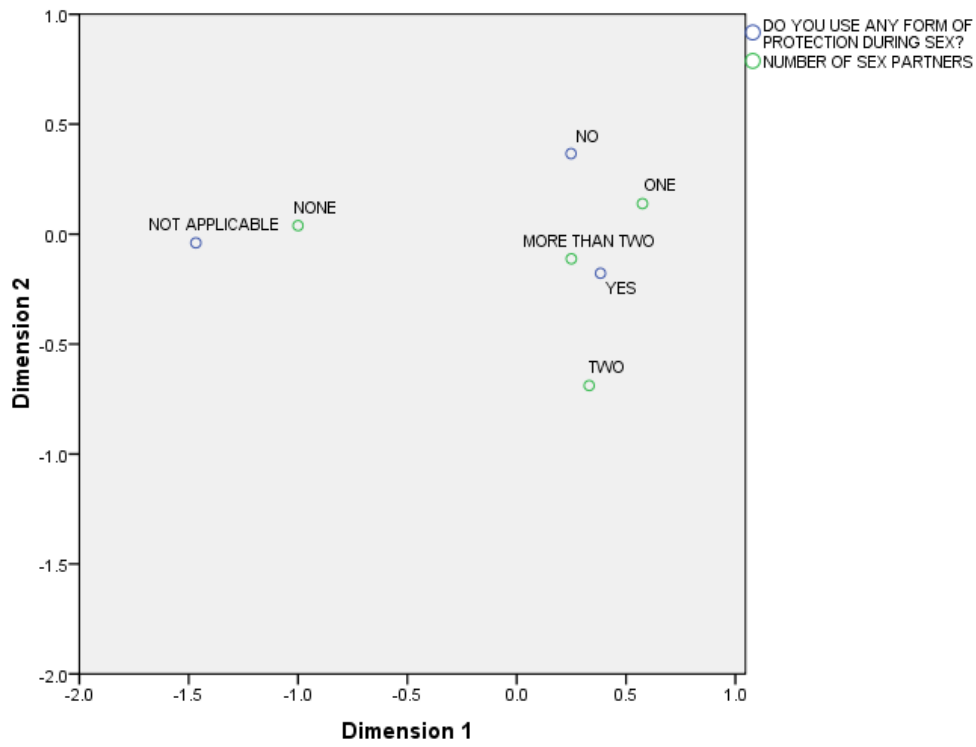
Figure 7: Biplot for frequency of use of protection and numbers of sex partners

Figure 7, separates usage of protection during sex and numbers of sex partners students have. The plot shows that students with one partner are associated with "no protection" while students with multiple

partners are associated with "yes, I use protection". Students with no partners (none) are associated with
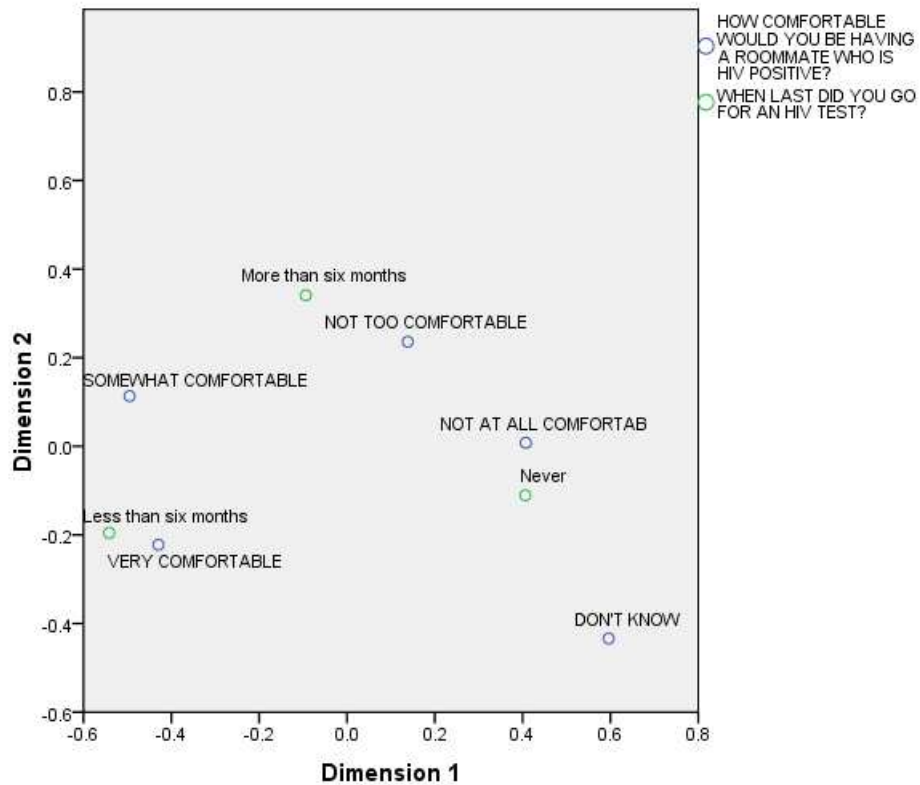
not applicable.

Figure 8: Biplot of frequency of how comfortable a studend is and the last time he or she go for HIV test

In Figure 8, the second dimension separates how comfortable a student would be to have an HIV person as a room mate and the last time he went for an HIV test. It can be seen from the plot that students who are not too comfortable are associated with 'more than six months", those who are not comfortable at all are associated with never, while those who are comfortable are associated with less than six months.
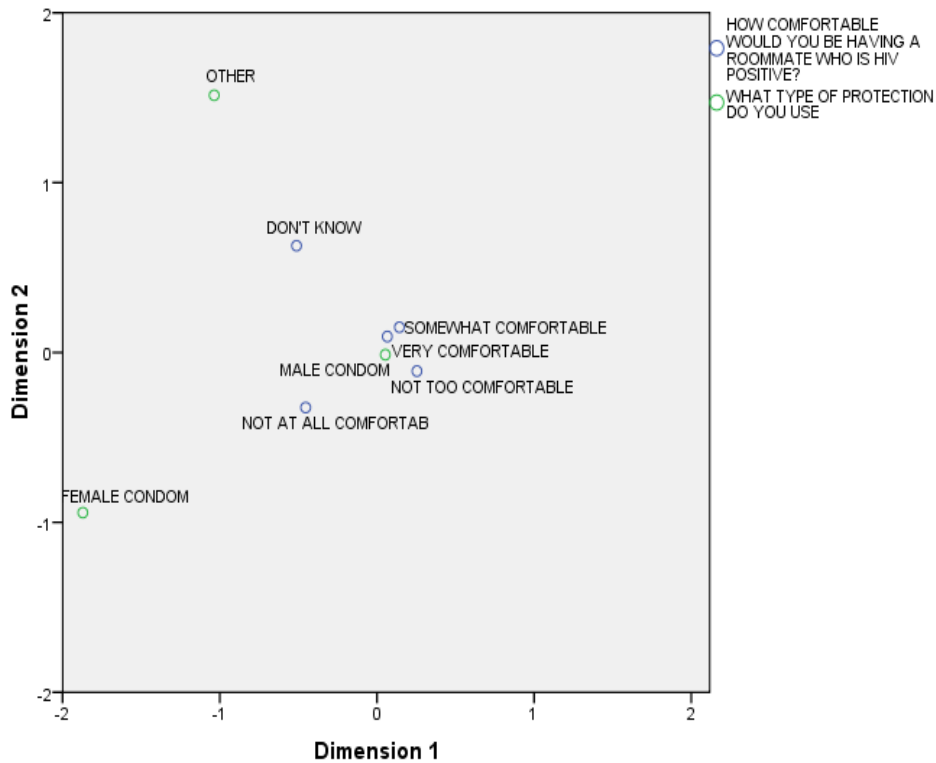
Figure 9: Biplot of frequency on how comfortable a student is and the type of protection used

In figure 9, the first and second dimension separates how comfortable a student would be to have an HIV person as a room mate and the type of protection used by student before sexual intercourse. There is a closer, close, fairly close and relatively close association between student who use male condom and those who are very comfortable, somewhat comfortable, not too comfortable, and not comfortable at all with having an HIV person as a room mate respectively.

Summary, Discussion and Recommendation

Research shows that HIV/AIDs accounts for a great chunk of deaths in Africa with devastating socio-economic and demographic consequences. As shown in our study, there are reasons why youths, particularly, those attending higher institutions engage in unprotected sexual intercourse and keep multiple partners at a time. According to Bernardi (2002):

' *In sub-Saharan Africa, an almost universal awareness of AIDS lethality and HIV transmission mechanism coexists together with a reluctance in adopting consequent measures…..*"

The import of this statement is clearly indicated in the current study where almost every respondent (student) have heard about HIV/AIDSand yet only 54.63 percent are willing to use condom for protection while only 43.69 percent of those who have multiple sex partners agree that they are engaging in risky sexual behavior. Among those who do not agree that they are engaging in risky sexual behavior, 95.3 percent have multiple sex partners. All these are indications and support for the position of researchers who posit that despite awareness about the devastating effect of HIV/AIDS, people are often reluctant to imbibe available preventive measures.

In a study on breast cancer, Ojikutu & Adetifa (2010) premised the unwillingness to adopt preventive measures on the Health Belief Model (HBM) developed by Rosenstock in 1994 and the Laventhal's Self Regulatory Model (LSRM). HBM believes that people will engage in preventive behaviours when they feel susceptible to a health condition, when the condition is characterized by high level of severity (such as death, pains and social consequences) and the concept of engaging in preventive behavior is outweighed by the benefits. The LSRM on the other hand reports that individuals actively generate cognitive and emotional representations of health threats and that these representations guide and regulate behavior.

Moreover, the general belief by people that 'bad things' cannot happen to them may also spur the lethargy in them to seek for immediate preventive measure. The implication of the aforementioned is that there is need for policy decision makers to appreciate the importance of HIV/AIDS beyond provision of medical services. It is becoming increasingly exigent to introduce and design special curricula for educating the youths on risk assessment, thereby altering the low risk perception about sexuality and its far reaching implication.

Human perception of risky situation has been an interesting area of studies in the insurance literature. Human beings are complex creatures. Some get pleasure out of risk taking while others prefer to avoid risk if they are able to choose. This study has demonstrated that. Familiarity has been mainly adduced as the deciding variable in suggesting attitude to a particularly risky situation such as engaging in unprotected sex.

There will also be those who are guided by the likelihood of the event, regardless of its potential severity, and others who almost ignore the chance and concentrate on the effect. The latter view is possibly the more common and this has been suggested in the result that the knowledge of HIV/AIDS does not affect attitude to use condom. This is further confirmed by the result that the knowledge about HIV/AIDS is not significantly associated with the method used in preventing the disease.

As policymakers consider expanding insurance coverage for the human immunodeficiency virus (HIV+) population, it is useful to examine the implication of these results for the insurance industry. While acknowledging the developing nature of the health care facilities available in the country for HIV+ patients, it must be stressed that the cost that carefree sexual behaviour bears on the public and private insurance schemes cannot be ignored. Premature death is a certainty to those who contract the virus. Medical care received by such patients runs into tens of millions of Naira. It is expected that individuals should be concerned about managing their health risks, specifically the risk of being without sufficient income or means of paying for care in the event of an illness, injury or disability. Presently the National Health Insurance Scheme (NHIS) is yet to cover the entire country, private life and health insurers would be justified to want to identify high-risk insurance applicants so that homogeneity of exposure units and individual rate equity are maintained. Elsewhere, it is being debated whether or not life and health insurers should be able to test for AIDS or HIV exposure, and further, whether or not they should be allowed to deny coverage to those who test positive. The test, it is argued, is an invasion of privacy, because it could be used by others to deny people jobs, housing, and the like. What must be stressed in this regard is the need for people to take responsibility for their actions. Carefree attitude begets devastating consequences. Hence, irresponsible sexual behaviour should attract some sanctions from the insurance industry. Insurers safeguard their positions by requesting from applicants to supply their

HIV+ status at pre-contractual stage particularly when the sum assured is substantial. This is because they worry about the potential rise in applications by people who are aware of information that affects their likelihood of making an early claim but who choose not to inform their insurance company — a practice known as 'adverse selection' or 'anti-selection' Access to HIV/AIDS status information has benefits, they say: a negative test result will allow a person to obtain insurance at standard rates. Those with positive result are either rejected or caused to pay above standard rates. In particular, adverse selection has been proven to increase the cost of insurance, threatens the financial strength of insurers and negatively affects the availability of insurance.

Most people believe insurance companies should offer life cover to all applicants regardless of their health or future risk, including those with a terminal illness such as HIV/AIDS. This emphasizes the limitations of a private system in which people want access to affordable cover while retaining the right to delay purchase until the insured event becomes likely.

The above results on attitude of tertiary institution students to HIV/AIDS awareness demonstrate the need for closer look at this category of insurance applicants particularly more so for their literacy status. This has thrown up some challenges to the school authorities, the state and policymakers to address the general problems of paying for the care of people with chronic diseases and providing access to care for the uninsured and the underinsured; the number and distribution of the sexual behaviours that transmit infection with HIV and the effectiveness of policies to persuade people (particulars young adults) to modify their behaviours. If some of these measures are not taken, the nation stands to lose its potential leaders to the ravaging. HIV/AIDS endemic is due to lack of awareness and blurred perception of its devastating consequences. Consistent with prior studies, public insurance plays a major role in financing care for people with HIV infection. The experiences in developing economies are far from this ideal. Care free sexual behaviour should not be allowed to threaten the availability of insurance for the sexually responsible segment of the society

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