Relationship between Knowledge of HIV/AIDS and Sexual Behaviour among Adolescents in Jos Metropolis

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Abstract
The study investigated the relationship between knowledge of HIV/AIDS and students' sexual behaviour in Jos metropolis. To achieve this, two null hypotheses were postulated and tested. A cross-sectional correlation design was employed on 200 students. The sample was drawn from 5 schools using disproportionate stratified sampling techniques. A self developed 20-items scale was used in collecting the data. Data were analyzed using paired sample t-test and Pearson product moment correlation coefficient. Results revealed significant differences in hypothesis one and significant relationship in hypothesis two. Recommendation offered, suggested encouragement to form clubs that will enlighten students on transmission and prevention of HIV/AIDS as well as avoiding risky sexual behaviour among students.

Keywords: HIV/AIDS, Sexual Behaviours, Jos, School Students

Introduction
AIDS stand for Acquired Immune Deficiency Syndrome. It is caused by human immune deficiency virus (HIV). The virus spares no gender, religion, classes of people, political inclination and race. It affects anybody that comes into contact with it. AIDS epidemic is global crises and a formidable challenge to the development and social progress of the entire world since it was discovered in 1981. It has become one of the destructive epidemics recorded in history despite the effort of world bodies such as the World Health Organization (WHO), United Nation Children Education Fund (UNICEF), United Nation Development Programme (UNDP), United Nation on Acquired Immune Deficiency Syndrome (UNAIDS), and much scientific researches yet there is no vaccine to prevent HIV and no cure has been found for now. Prevention relies mainly on public awareness campaign and individual behaviour change in a supportive environment. According to a report by UNAIDS, in 2010, they said young people are at the centre of the global AIDS epidemic of 1.7 million young people worldwide, 5.4 million are estimated to be living with HIV. About 4 percent of new HIV infection are among young people (UNAIDS, 2010). These young people remain more prone to HIV/AIDS epidemic in terms of rate of infection, vulnerability, impact and potential for change. The young generation were born and brought up in a world contaminated by AIDS, but many of them lack the knowledge on how to prevent HIV infection. The situation persists even though the world has agreed that young people have the human right to education, information, and services that could protect them from harm. After knowing the
silence inherent in the epidemic and climates in AIDS by the stakeholders there are little incentives for adolescents to be encouraged to seek for counselling and testing.

It is easy for the adolescent to proclaim that he can avoid HIV infection because he/she has never had any casual sex before marriage. Obviously, one can get infected through other means of transmitting HIV/AIDS, such as blood transfusion, using unsterilized needle or knife and so on. Equally it is not easy for the adolescents to overcome the temptation of trying to experiment sexual intercourse. Children in secondary schools experience physical changes in their body as they grow. They always experience new emotional feelings about friends of the opposite sex that urges them to try sex. There is also pressure from the peer group to experiment sex before marriage. Indeed this is not the culture of the African tradition. The casual sex culture is neither that of African nor the Christian or Muslim religion (Sambo, 2009). A casual sex is dangerous to the life of all and sundry because it will expose them to sexually transmitted diseases. A feeble minded adolescent who might think that having sex is safe, fun and harmless and might not overcome the temptation and desire that urges him/her to experiment sex, thus allowed him/her to be pushed into it for the first time, the first experience in sex will made it possible to desire for more experiences in it. It may be too late before he/she discovered that he/she is infected by HIV/AIDS.

Plateau state had suffered from a lot of crises and uprising for the past 14 years. These reason made the Federal Government of Nigeria to deploy peace keepers to calm the situation in the state from various part of the country leaving their wives behind. One could possibly have in mind that, if, these soldiers and policemen would go after local girls (mostly adolescents in secondary schools) to quench their sexual urges. This action can lead to the spread of HIV infection in the state. The Inter-agency Standing Committee (2005) observed that sexually transmitted rates among armed forces personnel are generally 2 to 5 times higher than in civilian population. The Federal Agency for Control of AIDS (2012) said, it can be much greater in terms of conflict. This might be the reason for the state to be rated as the 6th state in the federation with the highest HIV prevalence rate.

There is high risk of HIV vulnerability among refuges and internally displaced persons in Plateau state as a whole and in Jos North Local Government Area in particular. In emergency situation rape and exchange of sex for survival are the most likely visible manifestation of violence in every society. This can lead to a fast and wide spread of HIV infection within the population.

The adolescents’ falls between the ages of 12 to 25 years (Iliya, 2010). This age bracket falls in between the ages with the highest HIV prevalence in Plateau state. Plateau AIDS Control Agency (PLACA) (2005) posited that, those people in the age bracket of 15-49 years constituted 60% of people living with HIV/AIDS in the state. Most of the students in the secondary schools fall in this age bracket (15-49 years). Therefore, the thrust of this study is to investigate the relationship between knowledge of HIV/AIDS and sexual behaviour among adolescents in Jos metropolis.

Statement of the Problem

Majority of adolescents are faced with the problem of lack of knowledge of preventing themselves from contracting HIV/AIDS, yet quite a number of them are engaged in pre-marital and extra-marital sexual relationship (Adam, 2015). Earlier Adam (2013) observed that, adolescents were influenced by peer group to participate in an unprotected sexual
relationship. It may likely that, the sex partner was infected; therefore, the possibility of contracting the disease is positive. Some of the adolescents are engaged in sexual behaviour because friends in their group see them with high prestige and regard them as brave (Adam, 2015). Obviously, this negative societal attitude is likely to encourage the spread of HIV/AIDS among adolescents. Therefore, this paper is targeted at filling the gap by providing enlightenment that would bring a change on sexual behaviour among adolescents in secondary schools in Jos metropolis.

Objectives of the Study
The objectives were postulated to give a guide to this research work. The study tends to;
1. To examine the deference between knowledge of HIV/AIDS and sexual behaviour of male and female adolescents in secondary schools in Jos metropolis.
2. To examine the relationship between sexual behaviour and contraction of HIV/AIDS among adolescents in Jos metropolis.

Research Questions
The following research questions were formulated to give a focus to this study:
1. What is the difference between knowledge of HIV/AIDS and sexual behaviour of male female adolescents’ in secondary schools in Jos metropolis?
2. What is the relationship between sexual behaviour and the contraction of HIV/AIDS among adolescents in Jos metropolis?

Hypotheses
The following hypotheses were employed to guide this study:
1. There is no significant difference between knowledge of HIV/AIDS and sexual behaviour of male and female adolescents in secondary schools in Jos metropolis.
2. There is no significant relationship between sexual behaviour and contraction of HIV/AIDS among adolescents in secondary schools in Jos metropolis.

Methodology
Cross-sectional co relational research design was employed in this study. Thus, data was collected from representative samples or cross-sectional of the population and studied over a short period of time. The rationale for this design is to determine the appropriateness of the relationship that exists between knowledge of HIV/AIDS among adolescents as it correlates to their sexual behaviour in Jos metropolis. Awotunde & Ugodulunwa (2004) posited that, cross-sectional correlation determines the appropriateness of the relationship between two or more variables. It is said to relate variables that are related or not. The population for this study consisted of six thousand four hundred and twenty (6,420) SS I students from public secondary schools in Jos metropolis. It includes both male and female students. A purposive sampling technique was used in drawing five (5) secondary schools as sampled schools for the study. The rationale for using purposive sampling technique is to ensure that each zone has an equal number of schools representations. The local government was divided into five zones. Each zone is represented by one (1) school. The disproportionate stratified sampling technique was used in drawing the sample of two hundred (200) students. Forty (40) students (twenty (20) males and twenty (20) females) were drawn from each of the four schools. The fish and bowl method was used in the selection of the schools. All the names of the schools with each stratum were written in order of the zones on pieces of papers and the
papers with names of the schools from the zones. One paper was randomly selected and the names of the schools on those pieces of papers were those that participated in the study.

The instrument for data collection was a researcher designed structured questionnaire titled Adolescent Knowledge of HIV/AIDS and Sexual Behaviour Scale (AKHASBS). It was a twenty (20) items scale, which was modified on 4 point Likert scale of strongly agree (SA); agree (A); disagree (D); strongly disagree (SD). Experts in the Unit of Guidance and Counselling and Management and Evaluation at Abubakar Tafawa Balawa, Bauchi, validated the instrument. It yielded reliability co-efficient of 0.90 using Cronbach alpha method. Two statistical methods were employed to analyse the hypotheses. Hypothesis one was analysed using the paired sample T-test, this is to determine the significant difference in the mean of knowledge of HIV/AIDS and sexual behaviour of male and female adolescents in secondary school in Jos metropolis. Hypothesis two was analysed using the Pearson Product Moment Correlation Coefficient (PPMCC). The justification for the use of this statistics was that, it is useful for determining the strength and direction of relationship between adolescents’ sexual behaviour and contraction of HIV/AIDS. Punch (2001) posited that, PPMCC is a procedure that computes the pair wise association for a set of two variables. The choice of this procedure is therefore, considered appropriate. The level of significant was set at 0.01.

Findings

A summary of data on the differences between knowledge of HIV/AIDS and sexual behaviour and the relationship between sexual behaviour and contraction of HIV/AIDS among adolescents in Jos metropolis were presented as thus;

**Research Question 1**: What is the difference between knowledge of HIV/AIDS and sexual Behaviour of male and female adolescents in secondary schools in Jos Metropolis?

**Table 1: knowledge of HIV/AIDS and sexual behaviour of male and female adolescents**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male test scores</td>
<td>100</td>
<td>15.27</td>
<td>2.70</td>
</tr>
<tr>
<td>Female test scores</td>
<td>100</td>
<td>12.07</td>
<td>1.36</td>
</tr>
</tbody>
</table>

*Source: field work 2014*

*Table 1: showed lower mean result of 12.07 ( SD= 1.36 ) in the female test scores on the knowledge of sexual behaviour as against the mean scores of male of 15.27 ( SD=2.70 ). This indicates that males’ level of knowledge and sexual behaviour is higher than that of the female participants. Thus, the research question can be adequately answered by concluding that male adolescents’ students have more knowledge on HIV/AIDS and sexual behaviour than female adolescents.*

**Research Question 2**: What is the relationship between adolescents’ sexual behaviour and the Contraction of HIV/AIDS in secondary schools in Jos metropolis?

**Table 2: adolescents’ sexual behaviour and the contraction of HIV/AIDS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male test scores</td>
<td>100</td>
<td>55.12</td>
<td>7.68</td>
</tr>
<tr>
<td>Female test scores</td>
<td>100</td>
<td>56.42</td>
<td>4.04</td>
</tr>
</tbody>
</table>

*Source: field work 2014*
Table 2: Showed lower mean result of 55.12 (SD=7.68) of male scores as against the mean result of 56.42 (SD=4.04) of the female test scores. Thus, the research question can be adequately answered by concluding that female adolescents participate in sexual behaviour and have higher risk of contracting HIV/AIDS than the male adolescent students.

Hypotheses:
HO1: There is no significant difference between knowledge of HIV/AIDS and sexual behaviour of male and female adolescent in secondary schools in Jos metropolis.

Table 3: The paired sample t-test of the difference on knowledge of HIV/AIDS and Sexual behaviour male and female adolescents in secondary schools in Jos metropolis

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>P-value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male test scores</td>
<td>100</td>
<td>15.27</td>
<td>2.70</td>
<td>12.96</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Female test scores</td>
<td>100</td>
<td>12.07</td>
<td>1.36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: field work 2014.

The result on table 3 showed that the P-value of .000 is less than the calculated t-value of 12.96 at 0.01 level of significant. This implies that the null hypothesis which stated there is no significant difference between knowledge of HIV/AIDS and sexual behaviour of male and female adolescents in Jos metropolis is rejected. This means there is significant difference between knowledge of HIV/AIDS and sexual behaviour of male and female adolescents in Jos metropolis. Therefore the alternative hypothesis is accepted.

HO2: There is no significant relationship between sexual behaviour and contraction of HIV/AIDS among adolescents in secondary schools in Jos metropolis.

Table 4: Pearson Product Moment Correlation Coefficient of the relationship between Sexual behaviour and contraction of HIV/AIDS in secondary schools in Jos metropolis

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>r-value</th>
<th>r-crit</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male test scores</td>
<td>100</td>
<td>55.12</td>
<td>7.68</td>
<td>.532</td>
<td>.267</td>
<td>Significant</td>
</tr>
<tr>
<td>Female test scores</td>
<td>100</td>
<td>56.42</td>
<td>4.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correlation is significant at 0.01 levels

Source: field work 2014

The result in table 4 showed that the female scores on no significant relationship between adolescents sexual behaviour and the contraction of HIV/AIDS in secondary schools in Jos metropolis indicates that the critical r-value of .267 is less than the calculated r-value of .532 at P < 0.01 level of significant. This means that there is significant relationship between adolescents’ sexual behaviour and the contraction of HIV/AIDS in secondary schools in Jos metropolis. To this end HO2 is hereby rejected and the alternative hypothesis is accepted.

Discussion of Findings
From the analysis of the data collected and the hypotheses tested, it was discovered that there is significant differences between the knowledge of HIV/AIDS among male and female students in Jos metropolis. This finding coincide with the findings of Dele-Osibanjo (2012).
who observed that there was no significant difference between sexual behaviour and lack of knowledge of HIV/AIDS among students in secondary schools.

Findings from the second hypothesis also showed a significant relationship between adolescents’ sexual behaviour and the contraction of HIV/AIDS. This agrees with Senior (2012) who reported that adolescents are not always reached by effective intervention or preventive educational programme that will protect them from contracting HIV/AIDS. Obviously lack of receiving this type of information usually makes them get involved in risky sexual behaviour. In similar vein Centre for Disease Control and Prevention (CDC) (2014) in their findings, gave a statistics of 8,300 young people aged 13 – 24 years in the 40 states in United State of America were infected by HIV in 2009 due to indulging in risky sexual behaviour.

In another study on adolescents HIV relevant sexual behaviour in a major North East City, where there is major HIV/AIDS related knowledge, the adolescents reported high level of sexually risky behaviours. In addition they found that taking moderate intoxicants (alcohol and marijuana) can lead adolescents to risky sexual behaviour. It was concluded in the data obtained in a finding, it indicates the urgent need to develop preventive strategies that will prevent the spread of HIV among intercity youth based upon relevant predictors of risky sexual behaviour (Elsevier, 2014).

Conclusion
It is well documented that areas, that suffer crises and uprising are at high risk of sexually transmitted infection with Human Immunodeficiency Virus (HIV) although a growing amount of literature suggested that this pandemic indicates an urgent need to develop preventive strategies among adolescents, to curtail its spreading of HIV/AIDS. For it is a known fact that it has no immunization or cure for now.

Recommendations
Based on the findings of the present study, the following recommendations were made:
1. Establishing functional Guidance and Counselling Centres in the schools by employing the services of professional personnel that can aid in the dissemination of information as well as providing strategies on prevention that will curtail the spread of HIV/AIDS.
2. Students should be encouraged to form clubs that would challenge and discourage risky sexual relationship that can lead to the transmission of HIV/AIDS.

References


UNAIDS (2010). Reports on the global epidemic. UNAIDS.