Original Research Article

Evaluation of Adolescents’ Level of HIV/AIDS Awareness and Sexual Behaviour in Selected Secondary Schools in Ibadan

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ABSTRACT

HIV/AIDS is a potentially life threatening condition which affects the body immune system and render it unable to fight infections. An estimated 11.8million people between the ages of 15 and 24 (adolescence and young people) are living with HIV/AIDS. Currently young people, account for approximately 30% of new HIV infections. Adolescent and youths are the most risky population in the world. They are victim of different avoidable sexual and reproductive health negative consequences such as sexually transmitted infections including HIV/AIDS. The objective of this study was to evaluate the level of awareness of HIV/AIDS and the sexual behaviour of in-school adolescents.

A descriptive cross sectional study that utilized structured questionnaire to collect data from adolescents in two randomly selected secondary schools in Ibadan North West Local government. The questionnaire obtained information on socio-demographic data, knowledge of HIV/AIDS, sexual activity and determination of what led them to sexual intercourse. A total of 300 students (male 51%; female 49%) were selected through stratified random sampling techniques.

The mean age of respondents was 16±1.77years. Majority 253(87%) of respondents has high knowledge or awareness of HIV/AIDS infection. The source of information were majorly from school 99(45%) and media66 (30%).One hundred and ninety seven (68%) respondents were not sexually active. There was a significant relationship between respondents knowledge of HIV/AIDS and their sexual behavior (p-value=0.01).The study also revealed that watching blue films(57%)and reading of pornographic books(50%) preceded sexual intercourse among the adolescents. Finally, it was observed from the study that there is no relationship between gender and level of HIV/AIDS awareness.

It is therefore recommended that adolescents should be discouraged from watching blue films and reading pornographic books.

Keywords: Adolescents, HIV/AIDS, Awareness, Sexual behaviour.

INTRODUCTION

The term ‘adolescence’ and ‘young people’ are defined by the World Health Organization (WHO) as the age-group between 10 and 24 years. (1) The meaning of adolescence as a cultural construct is understood in different ways in different societies. Adolescent is a bridge between childhood and adulthood, during this time; individuals continue to experience significant changes in cognitive, moral, and social development. (2) Young people as a group are universally regarded as an important target audience for all activities
aimed at promoting healthy attitudes and behaviours or changing unhealthy attitudes and behavioural practices because they are naturally flexible beings and more likely to learn and change than adults who have acquired fixed habits. Most knowledge and behavioral patterns acquired during adolescence last a life time and impact adult health. (3,4)

HIV/AIDS was recognized as a global crisis by the mid-1980s and by the end of 2000, an estimated 58 million people had acquired HIV infection worldwide. Today there are approximately 36.9 million people living with HIV and tens of millions of people have died of AIDS-related causes since the beginning of the epidemic. (5) Also an estimated 11.8 million people between the ages of 15 and 24 are living with HIV/AIDS. (6) In 2005 among young people aged 15 and 24 years an estimated 4.6% of women and 1.7% of men were living with HIV. (7) Currently, young people account for approximately 30% of new HIV infections. In sub-Saharan Africa, young women account for 63% of young people living with HIV. (5)

Estimates show that nearly 50% of the people living with HIV acquired the infection before the age of 25 years through sexual transmission. (8) In Nigeria approximately 20% of males and 37% of females 10 to 19 years old had commenced sexual intercourse. (8) This gives a clear picture that young people are at the centre of HIV/AIDS scourge and preventing HIV infection among them is vital as they are in their formative period and many of their behaviour and life styles are formed during this period.

The adolescent period is a time of exploration and experimentation during which internal conflict caused by hormonal changes, the influence of peer group, and the attitude and practices of significant adults in their lives such as teachers, parents and societal pressure contribute to mould the character and behavioural patterns that are carried onto adulthood. (8) Adolescents are sexually active without adequate knowledge of dangers inherent and the urge to know and probably experiment what sexuality entails often exposes them to health dangers such as HIV/AIDS. Adolescence is both a period of opportunity as well as a time of vulnerability. They are particularly vulnerable to HIV/AIDS because of their physical, psychological, social and economic attributes. Many adolescents are economically dependent and socially inexperienced, have not been taught or have less access to health care than adults. (10) This period therefore provides the opportunities to positively influence behaviours, choices and life styles that will last into adulthood. Hence prevention of HIV among youths represents a sound investment for the future especially when there is no functional cure for AIDS. (11)

Therefore the researcher aims to evaluate adolescent’s level of HIV/AIDS awareness and sexual behaviour in two randomly selected secondary schools in Ibadan northwest local government area.

**MATERIALS AND METHODS**

The study is a descriptive survey conducted among adolescents in two out of nine senior secondary schools in Ibadan northwest local government area. The nine schools in the local government area were grouped according to their geographical location; Eleyele zone comprising of five senior schools and Jericho zone comprising of four senior schools. Eleyele high school Ibadan and Urban day secondary school Jericho Ibadan were randomly selected from each of the zones. A sample size of 300 was used for the study which was arrived at using the formula: (12)

\[
fr \frac{n}{1+n/N}
\]

Where \(nf\) = the sample size when population is less than 10,000.
n = sample size (desired) i.e. 30% of the population size = 352
N = the population size i.e. 1172
nf = \frac{352}{1+352} = \frac{352}{1172} = 0.298

n = 271 plus 10% Attrition Rate = 298
Approximately 300

The sample size was proportionately distributed between the schools. Respondents were recruited from each school. Selection of respondents was done using stratified random sampling. Stratification by class was performed before student’s selection by simple random method. This is to ensure that each class (SS1, SS2 and SS3) is adequately represented. The instrument for data collection was a structured questionnaire developed after extensive literature review. The questionnaire consisted of five sections (A, B, C, D and E). Section A solicited for the respondents’ background information, Section B contained statements on knowledge of HIV/AIDS including the causes, mode of infection, signs and symptoms and treatment. Section C assessed respondents’ sexual behaviours, Section D assessed perception of risk behaviours and Section E – preventive measures against HIV/AIDS. The reliability of the questionnaire was done by distributing it to 10 (ten) willing students of another secondary school with similar characteristics. The coefficient alpha value was 0.78 which implies the instrument is 78% reliable.

Participation in the study was voluntary and personal identities of the participants were protected and they were assured that the information collected would be for academic purpose only. After due permission from the principals of the two randomly selected secondary schools, the researcher was introduced to the students. Explanation was given on the study, the purpose and benefits and criteria for selection of participants. Consent forms indicating willingness to participate in the study was signed by students selected. They were also informed that they are free to withdraw at any point if they so desire. Questions were answered for clarification and questionnaires were administered for the collection of data. To ensure substantial return of questionnaire, they were administered and collected on the same day.

The data was analysed using both descriptive and inferential statistics. Mean scores, frequencies, figures and percentages were used to answer the research questions. Hypotheses were tested using chi-square at 0.05 level of significance. The following hypotheses were tested;
1. There is no significant association between adolescents HIV/AIDS awareness and sexual behavior.
2. There is no significant difference between female adolescent level of HIV/AIDS and male adolescent level of awareness of HIV/AIDS.
3. There is no significant difference between female adolescent sexual behaviour and male adolescent sexual behavior.

FINDINGS AND RESULTS
Out of the 300 data collected, only one was not adequate for analysis. The age range of the participants was between 12 and 22 years, with the mean age of 16.1+1.8 years. One hundred and fifty three (51%) respondents were male and 146 (49%) were female. 190 (64%) out of 299 (99%) respondents were students of Iseyele high School Ibadan, while 109 (36%) were students of Urban day Secondary School, Jericho Ibadan. Senior Secondary School three (SS3) students were 91 (31%), SS2 students were 122 (41%) while SS1 were 82 (28%).

Awareness/Source of information on HIV/AIDS: Majority 87% (253) of the respondents were aware of HIV/AIDS while 13% (38) were not aware of it. The frequently reported source of information on HIV/AIDS includes school 99 (45%),
Friends/ Radio/TV 66 (30%) and health workers 24 (11%) while Parents (5%) are the least.

Knowledge of HIV/AIDS: Two hundred and seventy five (92%) were sure HIV causes AIDS. Table 1 shows other details respondent’s knowledge of HIV/AIDS.

Respondents Sexual Behaviour: In table 2, 67.5% of respondents claimed they have no sexual partner while 25% claims to have a sexual partner. The pie chart (figure 1) revealed adolescent condom use.

### Table 1: Adolescents Knowledge HIV/AIDS

<table>
<thead>
<tr>
<th>Variable</th>
<th>YES N[%]</th>
<th>NO N[%]</th>
<th>I don’t know N[%]</th>
<th>TOTAL N[%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV is a virus that causes AIDS</td>
<td>275 [92.0]</td>
<td>4 [1.3]</td>
<td>20 [6.6]</td>
<td>299 [100]</td>
</tr>
<tr>
<td>*Knowledge of mode of infection of HIV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS can be prevented through</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being faithful to your sexual partner who is also faithful to you</td>
<td>217 [75]</td>
<td>42 [15]</td>
<td>30 [10]</td>
<td>289 [100]</td>
</tr>
</tbody>
</table>

*Multiple responses

### Table 2: Respondents Sexual Behaviour

<table>
<thead>
<tr>
<th></th>
<th>YES N%</th>
<th>NO N%</th>
<th>I don’t know N%</th>
<th>Total N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a sexual partner?</td>
<td>7325</td>
<td>197</td>
<td>67.5</td>
<td>292 [100]</td>
</tr>
<tr>
<td>Do you ever have any sexual partner?</td>
<td>4214</td>
<td>232</td>
<td>74.7</td>
<td>293 [100]</td>
</tr>
<tr>
<td>Do you know whether your current partner have more than one sexual partner?</td>
<td>39 14</td>
<td>145</td>
<td>51</td>
<td>286 [100]</td>
</tr>
<tr>
<td>Have you ever had sexually trans mitted infection (discharges or sores on your genitals)</td>
<td>33 21</td>
<td>221</td>
<td>80</td>
<td>276 [100]</td>
</tr>
</tbody>
</table>

Figure 1: Adolescent Condom Use

Perception of Risk Behaviour: The study observed that the following may lead or have led adolescents to have sexual intercourse; watching blue films 167 (57%), reading pornographic books 142 (50%), rape 142 (49%) and consumption of alcohol 116 (40%).

Factors associated with Sexual Behaviour: Adolescent’s awareness of HIV/AIDS had a significant influence on their sexual behaviour.

P-value = 0.01. However there is no significance difference between the female and male adolescents with respect to their awareness of HIV/AIDS, p-value 0.5. There is significance difference between adolescents male and female’s sexual behaviour with respect to their practice of condom use for sexual intercourse. P-value = 0.032.
DISCUSSION

The mean age of respondents is 16±1.77 years which falls within the age range of WHO definition of adolescents.\(^{(1)}\) It is also in line with Ariba\(^{(13)}\) definition of adolescence, as the period between 11 and 19 years.

Majority of the participants in this study were aware of HIV/AIDS and their source of information is majorly from schools (45%) and radio/television (30%) however very few indicated parents as source of information. It was reported that parent-adolescent sexuality communication is a protective factor for adolescent sexual and reproductive health, including HIV infection.\(^{(14)}\) Unfortunately in this study parents (5.5%) were the least reported adolescent source of information. This may probably be due to cultural standards placed on sexual matters which discourage parents from discussing sexual issue with adolescents.

Another study in Delta State Nigeria confirmed that parents 5(1.6%), friends 27 (6.2%) and health workers 19 (4.3%) were not adolescents main sources of information of HIV/AIDS but electronic media 264 (60.4%).\(^{(15)}\) Also in Calabar, mass media was the main source of information on HIV/AIDS to secondary school adolescents while parents recorded the lowest 13 (2.2%) source of information.\(^{(16)}\) Parents should be encouraged through the mass media, churches and mosques to inform their children about HIV/AIDS and not shy away or consider them too young to be involved in such discussions.

Adolescents in this study were knowledgeable of the full meaning of HIV/AIDS, the causative organism and mode of infection. This is consistent with the findings of Ogundele\(^{(17)}\) that majority of the students of federal college of education (special) Oyo are adequately aware of the disease AIDS and have fairly accurate information about it. It also corroborates the report of Onah et al.\(^{(18)}\) that all undergraduates (505 respondents) of university of Nigeria Enugu had heard of HIV/AIDS. However, these findings are contrary to the finding of a study among in-school adolescents in eastern Ethiopia which reported only a quarter 677(24.5%) to have comprehensive knowledge of HIV/AIDS.\(^{(19)}\) The current study also is not consistent with another study among physical and health education teachers in Nsukka Enugu State who were reported not to have adequate knowledge or understanding of HIV/AIDS infection.\(^{(20)}\)

The study found that adolescents are knowledgeable about prevention of HIV/AIDS. The greatest number (84%) felt that HIV/AIDS could be prevented through abstinence from sex while 78% and 75% respectively agreed it can be prevented by avoiding casual sexual partners and being faithful to one sexual partner. Abstinence has the highest score and this may indicate that respondents were likely practicing abstinence in order to prevent HIV/AIDS infection. This may likely be the fact that many culture and religions in Nigeria discourage and preach against pre-marital sexual intercourse but encourage abstinence until marriage.

This is similar to previous findings that reported adequate knowledge on HIV preventive measures.\(^{(3)}\) It also supports the statement that adolescents accurate knowledge about the cause and nature of HIV/AIDS, the methods of spread and the preventive measures will greatly influence their attitude towards the disease as well as result in a change in their sexual behaviours in favour of abstinence or at least a lower practice of unsafe sex.\(^{(3)}\) Interestingly the result is not consistent with the study in eastern part of Ethiopia which reported condom use (47.7%) followed by abstinence (37.1%) as methods to prevent unwanted pregnancy and not HIV/AIDS.\(^{(21)}\) Among Secondary School adolescents in Calabar, only a few, 281 (48.4%) of the adolescents knew that avoidance of sex, keeping one sexual...
partner 15(2.6%), use of condom 101 (17.4%) and screening blood before transfusion 31 (5.3%) could prevent HIV/AIDS transmission. (16)

Result also revealed that a good number 68% of respondents, have no sexual partner, indicating they were practicing abstinence, and were not sexually active, which may be attributed to their high level of knowledge of HIV/AIDS infection. This means that having knowledge of HIV/AIDS would motivate logical safety sexual behaviour. This supports theoretical framework social cognitive theory that the higher the level of adolescent education the lower their risk of practicing unsafe sex and vice versa. (22)

The study shows that very few of the respondents use condom for sexual intercourse while majority claimed they have never used condom. This is in agreement with Idowu et al, (23) findings that 63% of the total respondents do not use condom while 37% use condom though it was reported that this group of people were sexually active. It can also be compared with another study which reported 77(25.9%) of adolescents to have never used condom. (24) This is contrary to Toroitich-Ruto (25) observation that young people in Kenya despite their high perception and knowledge of self-risk, risk taking behaviour (multiple partners, sex with high risk partners, sex without condom among others) among young people was still high.

The most reported risk behaviour that led respondents to sexual intercourse was watching blue films followed by reading phonographic books and the third major risk was rape. This is not in line with a study conducted in Bahir Dar University Ethiopia where it was reported that sexually active adolescents engage in sexual intercourse after watching porn videos 73(24.6%), drinking alcohol 102(34.3%) and chewing khat 51(17.2%). (24)

The result of analysis of hypothesis confirmed that there is significant relationship between adolescent knowledge of HIV/AIDS and their sexual behavior, this may be due to the fact that 87% of adolescent that was studied were found to be aware of HIV/AIDS while 68% claimed not to have sexual partner and this is attributed to their high level of awareness. This supports Olaitans study (26) which revealed significant relationship between University students’ knowledge of HIV/AIDS and the use of condom as preventive measure. Nwanwenda (27) also found a correlation between adolescent high knowledge of HIV/AIDS and the transfer of this knowledge to change of behaviour. The result is not consistent with another study by Okonta and Oseji (15) which reported that knowledge of HIV/AIDS by in-school adolescent in Asaba has no significant influence on their sexual behaviour.

The finding is not in agreement with the findings of Idowu, Adeogun, and Dansu, (23) which revealed that secondary school students in Oshodi/Isolo Lagos state are sexually active 72%. It is also contrary to Oronsaye and Anakam, (28) they observed in their study that there is no adequate knowledge of the practice of safe sexual activity among the adolescents in three rural populations in Edo state Nigeria.

Analysis also reveals that there is no significant difference between female adolescent level of awareness of HIV/AIDS and male adolescent level of awareness of HIV/AIDS. It shows that gender of respondents had no influence on their awareness of HIV/AIDS. This however is not in agreement with Akintunde (29) observations that the gender of respondents (students of University of Calabar) had influence on their knowledge of HIV/AIDS. He reported that the females know more about HIV/AIDS than their male counterparts but swept all cautions aside because of money. Another study
recorded that males had more comprehensive HIV/AIDS knowledge (27.3%) compared to the females (17.3%).\(^{(19)}\) UNAIDS and WHO\(^{(7)}\) also reported that male adolescents are 20% more likely to have knowledge of HIV/AIDS than their female counterparts.

There is significant difference between male and female adolescents sexual behaviour with respect to the practice of condom use for sexual intercourse. Though majority claimed not to have used condom (68%). This disagrees with Idowu et al.\(^{(23)}\) report that the sampled subjects (adolescents in Oshodi area of Lagos state) were sexually active and had a good awareness of condom use. However, they concluded that adolescents have not been using condom for prevention of HIV/AIDS but for the prevention of premarital pregnancy. It is also not in line with Berglund et al.,\(^{(30)}\) which reported that Nicaraguan men are sexually active and tend to have more sexual partners than the females.

CONCLUSION

The study findings reflect that adolescents have high level of awareness and knowledge about HIV/AIDS infection and their sources of information are majorly through the school and media. Gender issue is not a hindrance to HIV/AIDS awareness. A considerable number of adolescents practice abstinence from sex. However, watching of blue films and reading pornographic books are the major risk behaviours that predispose adolescents to risky sexual behaviours.

There is significant relationship between adolescent knowledge of HIV/AIDS and their sexual behaviour.

Although the results of this study indicate that majority of the students had adequate knowledge of HIV/AIDS. It is necessary to educate the students from time to time. This group of people is at high risk hence preventive medicine should be intensified by the Nigerian government through health education that focuses on AIDS control, prevention and change of behavior programmes. Parents have a role to play in the family life and HIV/AIDS education of their children and thus help in the prevention and control of the disease.

Recommendations

In the light of the findings of this study, the following recommendations are made:

1. It is essential for parents to be involved in the family life and HIV/AIDS education of their children. This should not be left for teachers alone.
2. Adolescents should be discouraged from watching of blue films and reading of pornographic books through their parents, schools, mass media, churches and mosques.
3. Youths-Friendly reproductive health services and programmes should be made available for young people to divert their attention from negative behaviours e.g. watching of blue films.
4. It is essential to promote the use of condom for sexually active adolescents, during all sexual encounters, and make same accessible and affordable.
5. Adolescent should be consistently reminded and encouraged to embrace sexual abstinence through continual HIV prevention outreach and education programs.

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