School Location And Secondary School Students' Awareness Of Human Immuno-Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) In Imo State Of Nigeria

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Abstract This paper evaluates the influence of school location on the level of awareness of secondary school students about HIV/AIDS. Research questions and hypotheses were formulated and tested at 0.05 level of significance. The study employed descriptive survey method. A total number of 500 questionnaires tagged “Students Awareness of HIV/AIDS Questionnaires” (SAHAQ), which consist of forty-items each, were administered. Subjects of the study were students in junior and senior secondary school in both rural areas and urban centres. Percentages, bar charts and one way analysis of variance were the statistical tools used for data analysis. The study found out that secondary school students in rural and urban centres are aware of HIV/AIDS, but students in urban centres have more sources of information about HIV/AIDS than their counterparts in rural areas. Also, the study found out that females in urban schools have good knowledge of preventive measures of HIV/AIDS than males in urban schools as well as both sexes in rural areas.

Keywords: Location, Awareness, HIV/AIDS, Education, Misconceptions

Introduction

The spread of Human Immuno deficiency Virus (HIV)/ Acquired Immune Deficiency Syndrome (AIDS) is one of the great health challenges from about middle of 20th century into the 21st century. It is a disease whose cure has not been found despite the global advancement in science, medicine and technology. However, the disease spreads like bonfire without regard to geographical boundary, age limit, sex or creed. Ruxin, Binagwaho and Wilson (2005), state that HIV/AIDS is a global catastrophe, threatening social and economic stability in the most affected areas, while spreading relentlessly into new regions. More worrisome is the fact that the disease mostly affects the productive segments of the society (adolescents and young adults) and more importantly, it decimates the lives of the “future of the country”- the secondary school students. The sentinel surveillance data of the Federal Ministry of Health cited by Hodges (2001) reveals that 4.9% of adolescents between the ages of 15 and 19 are affected, while 8.1%, of young people between the ages of 20 and 24 are affected. The data shows that school age population (secondary and tertiary institution) is worst hit by this disease. Adelakun (2005) states that this problem is a result of liberalization and commercialization of sexual activities among this population since they are very sexually active and sex is the major route of transmission of HIV. Schenker and Nyrienda (2003) attribute 75% cases of HIV to sexual contact. Hodges (2001), states that 80% of the cases are through sexual activities, while Soper (1999) links 90% of the cases to such. What all these emphasize is that sex is the major route of HIV transmission. Many secondary school students also engage in other activities that promote the spread of HIV/AIDS such as tattooing, mucosal piercing, scarifications (especially in rural areas) with unsterilized instruments, incisions from cult-related activities and so on. Some of these students do these things out of ignorance. Many do not even believe that HIV/AIDS is in Africa (Unachukwu 2003). National Action Committee on AIDS (NACA, cited by Elsie (2002) posits that most HIV victims in Nigeria caught the disease as teenagers. Similarly WSHCA cited by Unachukwu (2003) states that in developing countries like Nigeria, up to 60% of new HIV infections are among the 15-24 year olds with generally new infection in young women than men. This fact may not be surprising because Adolescence (secondary school years) is a period that is generally characterized by crises, experimentation, curiosity and rebellions. These explain why secondary school students, engage in risky behaviours that promote the spread of HIV. Adelakun (2005) states that as a result of hormonal
influence, adolescents are physiologically vulnerable to HIV, most of them not only experiment with sex but also uncontrollably engage in unprotected sex. He further explained that, to them, engaging in sexual activities is a sign of “arrival” or “initiation into adulthood and getting infected with sexually transmitted diseases (STD) is a mark of popularity. Many of them are naïve without sound knowledge of the implications of their actions.

The society in general is adding to the problem of these youths. The sex-crazy world in which these adolescents live is not helping matters. For anything to be attractive, interesting and have high market value, it must have sexual appeal. There is large patronage of pornographic materials (journals, books, films, magazines etc) among youths. The lyrics of many hit songs are sexually explicit. There is need to create awareness among these youths about the dangers of contracting HIV/AIDS. Everybody has the right to know. Every individual in the world needs information.

Ignorance is a disease in itself, whereas Education is the social vaccine that can prevent the spread of any disease including HIV/AIDS. The major way to empower the teenager is to let them know the implications of any course of action they are taken because “knowledge” they say, “is power”, and “prevention is better than cure”. Teaching secondary school students or creation of awareness about HIV/AIDS is the responsibility of all. Formal, informal, and non-formal HIV/AIDS education involves organized HIV/AIDS education or teaching in schools by professionals such as teachers. Health educators, school nurses, guidance counselor etc. Informal HIV/AIDS education involves teaching by parents, knowledgeable members of the society, places of worship etc. while non-formal HIV/AIDS education is mass education through television, radio, magazines, newspapers, journals, posters, films etc. the aim of all these forms of HIV/AIDS education is to create awareness about HIV/AIDS. There is a great chasm between health information that is provided in urban and rural areas (villages) most especially, information on HIV/AIDS.

Statement of the Problem

HIV is a serious medical and social problem in Nigeria. It is a serious medical problem because its cure had not been found and researches are on going to find solution to the problem. It is a social problem because it is not age, sex or location-specific. The virus has no regard for social status, educational background or religion affiliation. However, the problem is that the prevalence rate is higher among adolescents and young adults; and these people seem not to take the threat of the disease very seriously. Secondary school age is a period in students life that is characterized by curiosity and experimentation with sexual activities and drug use. This is mostly as a result of hormonal pressure, peer influence and electronic materials that freely promote sexual activities. Secondary school students are among the most sexually active people in the society. Besides many of them seems not to know ways of preventing HIV/AIDS. For instance, UNAIDS/WHO (2008) reported that only 23 percent of young people (on the average) aged 15-24 correctly identified two ways of preventing the sexual transmission of HIV and rejected two misconceptions about HIV transmission in Nigeria. The report revealed a slightly high percentage of twenty-five (25%) for male as against twenty (20%) for female. Similarly, UNICEF (2007) gives the percentage of young males who have comprehensive knowledge of prevention of HIV in Nigeria between the year 2000 and 2008 at twenty-one (21%), while only eighteen percent (18%) females have such knowledge. This explains the high prevalence of HIV in Nigeria between 2000 and 2006 at 21 percent, while only 18 percent females have such knowledge. And this explains the high prevalent rate of HIV/AIDS among the population of 15-19 years. Adequate awareness about HIV seems not to have been uniformly created between rural and urban dwellers. People in Urban areas in Nigeria seem to have an edge over the rural dwellers in terms of access to information perhaps because of poor infrastructural development in the rural areas. This invariably may affect the students in rural areas. Some times, people in urban centers who are in charge of providing information to rural dwellers often fail in their responsibilities either because of logistics problems or because they are unwilling to go to rural areas. This sometimes leaves rural dwellers to wallow in abysmal ignorance. This
problem may create a chasm in the students' knowledge of HIV/AIDS in rural and urban areas. Recent statistics on HIV/AIDS shows that there is still need to worry. It is with this background that this study is designed.

Purpose of the Study

The main purpose of this study is to look at the influence of school location on the level of awareness of secondary school students on HIV/AIDS.

The study is specially designed to:
1. Find out the available sources of information on HIV/AIDS to secondary school students based on school location (rural & urban).
2. Examine the extent of students' knowledge of preventing HIV infection based on their school locations.
3. Determine if there is a difference in the level of awareness of male and female students in urban and rural centres about epidemiology of HIV/AIDS.
4. Find out if there exist misconceptions about HIV/AIDS among both male and female students in rural as well as urban areas.

Research Questions

1. What are the sources of information on HIV/AIDS that are available to secondary school students in urban and rural areas?
2. To what extent are secondary school students in both rural and urban centres aware of ways of preventing HIV infection?
3. How does the level of awareness of male and female secondary school students about epidemiology of HIV/AIDS in urban areas differ from secondary school students in rural areas?
4. What type of misconceptions about HIV/AIDS exists among secondary school students in rural and urban schools?

Hypotheses

H₀₁ There is no significance difference in the level of awareness of male and female secondary school students about epidemiology of HIV/AIDS in rural and urban areas.
H₀₂ There is no significant difference in the level of misconceptions of male and female secondary schools about HIV/AIDS in rural and urban areas.

Research Method

Descriptive survey design was employed for this study.

Population of the Study

The population of the study comprises secondary school students in Imo State.

Sample and Sampling Techniques

The sample of the population comprised of 500 students drawn from six secondary schools. Three schools were drawn from the rural area, while the other three were selected from the urban centre. Two-stage stratified random sampling technique was used to select the schools and the students for the study. Schools
in urban areas were identified and grouped separately, while schools in rural areas were also grouped separately. Thereafter, simple random technique was used to select the sample from rural and urban schools. In selecting students for the study, stratified random sampling was used to group males and females after which, simple random technique was employed to select the desired sample size.

Research Instrument

The research instrument that was used for this study was a questionnaire tagged “Students’ Awareness of HIV/AIDS Questionnaire” (SAHAQ), which was developed by the researchers. The questionnaire was divided into the three sections, A-C. Section A sought background information about the respondents while sections B and C were designed to seek information about the respondents’ awareness of HIV/AIDS. Section C was further sub-divided to take care of various aspects ranging from misconceptions to facts about HIV/AIDS. Respondents were required to indicate their opinion on each item based on a 5-point Likert scale of Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD), and Undecided (UN).

Reliability of the Instrument

The measure of reliability of the instrument was determined by the use of split-half reliability co-efficient of internal consistency. The forty-four items of the questionnaire were split into two halves. “Pearson’s product moment correlation” technique was adopted to correlate the two sets of scores. A reliability coefficient of internal consistency of 0.62 was obtained for the half of the instrument (i.e. the 22 of the 44 items). To obtain the reliability coefficient of the whole questionnaire of 44 items, Spearman-Brown prophecy formula was applied. Thus a final reliability coefficient of 0.77 was obtained for the instrument. This final reliability coefficient was considered adequate for the instrument.

Method of Data Analysis

Frequencies, means (X) and standard deviation (SD) were used to take decisions on various questionnaire items. The mean of 3.0 was used as cut off point for accepting or rejecting each of the items. For research questions 1 and 2, simple bar chart was used to compare student’s level of awareness. However, one-way analysis of variance was used to test all hypotheses. All decisions were taken at 0.05 alpha levels.

Results

Table 1: Sources of secondary school students’ awareness of HIV/AIDS by sex and school location. (N= 500 { n= 125})
Table 2: Knowledge of students about prevention of HIV/AIDS by school location and sex

<table>
<thead>
<tr>
<th></th>
<th>Abstain from sex</th>
<th>Use condoms</th>
<th>Stay with uninfected partner</th>
<th>Avoid CSWs</th>
<th>Safe blood transfusion</th>
<th>Safe injection</th>
<th>Use clean piercing instrument</th>
<th>Prayers</th>
<th>No way to avoid it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban boys</td>
<td>77</td>
<td>69</td>
<td>56</td>
<td>66</td>
<td>82</td>
<td>67</td>
<td>56</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Urban girls</td>
<td>103</td>
<td>63</td>
<td>51</td>
<td>50</td>
<td>79</td>
<td>74</td>
<td>67</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Rural boys</td>
<td>45</td>
<td>86</td>
<td>32</td>
<td>15</td>
<td>29</td>
<td>45</td>
<td>34</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rural girls</td>
<td>40</td>
<td>80</td>
<td>28</td>
<td>15</td>
<td>13</td>
<td>10</td>
<td>18</td>
<td>40</td>
<td>8</td>
</tr>
</tbody>
</table>

NB: CSW means Commercial Sex Workers

Table 3: One-way Analysis of Variance (ANOVA) on the level of awareness of male and female students in rural and urban centres about the epidemiology of HIV/AIDS.

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>65071.14</td>
<td>3</td>
<td>21690.38</td>
<td>0.000377</td>
<td>** S</td>
</tr>
<tr>
<td>Within Groups</td>
<td>58358.29</td>
<td>24</td>
<td>2431.598</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123429.4</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant

The table above shows the p-value of hypothesis which states that there is no significant difference in the level of awareness of male and female secondary school students about epidemiology of HIV/AIDS in rural and urban areas. The summary of the analysis of variance shows that the result is significant.

Table 4: One way Analysis of Variance (ANOVA) on misconceptions about HIV/AIDS

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Group</td>
<td>104549.5</td>
<td>3</td>
<td>34849.84</td>
<td>0.00171</td>
<td>**S</td>
</tr>
<tr>
<td>Within Group</td>
<td>246499.1</td>
<td>56</td>
<td>4401.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>351048.6</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**S=Significant
The table above shows the p-value of hypothesis 2 which states that there is no significant difference in the level of misconceptions of male and female secondary schools about HIV/AIDS in rural and urban areas. The summary of the analysis of variance shows that the result is significant.

**Discussion**

Considerable efforts have been made by government, non-governmental organization, media houses, individuals and many other groups to get information about HIV/AIDS across to people including secondary school population. More often, information on HIV/AIDS is presented on radio and television. It is interesting to note that over 70% of students in both rural and urban centres have heard about HIV/AIDS on radio. More male students (83%) in rural areas have had access to information on radio than any group under consideration. This has further confirmed the leading role of radio as a medium of communication. It has larger audiences since it is easily affordable, easy to operate and can be powered by batteries where there is no electricity. Furthermore, its audience can engage in other activities while listening to radio. With these advantages over other means of communication, students in both rural and urban centres have equal access to information about HIV/AIDS on radio. Although Hodges (2001) states that over half of rural households own radio, many students who do not have radio or whose parents do not have radio sets still listen to radio in the homes of friends and neighbours. This finding is slightly different from the national survey on access of women to mass media, which was conducted in 1999 and cited by Hodges (2001). There, it was stated that only 51.3% of females between the ages of 15 and 19 listen to radio and invariably may have had access to information about HIV/AIDS through radio. A further breakdown in the national survey shows 72.2% in urban areas as against 41.9% in rural area. However, this finding shows that almost equal percentages of students in rural and urban centres, (72% and 71% respectively) listen to radio most especially on HIV/AIDS. The rate is even higher a bit in rural areas, perhaps because female students in urban centres have other better sources of information that are not available to rural students. On the other hand, male students in rural areas listen to information on HIV/AIDS on radio more than their male students in urban areas.

Television is another major source of information on HIV/AIDS for students in terms of access to information through television. Female students in urban area have heard information about HIV/AIDS more than their male counterparts in urban centres and both sexes in rural areas. However, it is worrisome that only about 48 percent of female students in rural areas have heard about HIV/AIDS on television. The national survey of 1999 cited by Hodges (2001) shows that only 39.4 percent of female adolescents between the ages of 15-19 have access to television. This may be as result of non-affordability of television set or lack of rural infrastructure such as electricity, the reason for this is beyond the scope of this study, but its implication is of major concern. ‘Seeing is believing’ says a popular maxim, if rural students had access to television, majority of them, if not all, would have seen it on their television set that HIV/AIDS is real in Africa. Besides, many of their erroneous beliefs about HIV/AIDS would have been debunked. The visual effect of television would have created real and lasting impression in the minds of the students. This finding notwithstanding, shows that electronic media (radio and television) are at the vanguard of HIV/AIDS awareness creation among secondary school students in secondary schools.

Newspapers and magazines are also playing significant roles in getting information about HIV/AIDS across to the students. However, more students in urban areas have access to newspaper and magazines than students in rural areas. This places students in urban areas at advantage, while female students in the rural areas are more disadvantaged. Students in urban areas have information about HIV/AIDS through pamphlets, posters, handbills and billboards than their counterparts in rural areas. In fact information through these media is almost non-existent in rural areas. (See table 2). The few students who have heard about HIV/AIDS through these media are those that visit towns and cities regularly or periodically. The implication of this is that government agencies and non-government organizations (NGOs) in charge of awareness
creation on HIV/AIDS are neglecting rural areas. Posters, handbills, billboards and pamphlets on HIV literacy every nooks and corners of towns and cities, but hardly any could be found in our villages. Rural population need these sources of information if not more than their urban counterparts because most of the time pictures speak louder than voices. Access to books on HIV/AIDS is also a problem in rural areas. While sixty-six percent (66%) of students in urban schools have read about HIV/AIDS in books, only 30 percent of students in rural schools have done so. Various factors could be responsible for this: it could be as a result of non-availability or/and non-affordability of books in rural areas. It is worthy of note that male students lag behind their female counterparts in both rural and urban centres in terms of reading about HIV/AIDS from books. Schools in urban areas equip their students on HIV more than schools in rural areas, most especially Girls Secondary Schools. Female students in both rural and urban centres learn about HIV/AIDS from their schools than their male counterparts from rural and urban areas. Faith-based HIV information is however not encouraging, most especially in rural areas. Only 6 percent of female and 19 percent of male students in rural areas as against 58 percent of female and 38 percent male students in urban centres have heard about HIV/AIDS in their churches and other places of worship. Nigerians irrespective of their ages and sexes are religious people, so the easiest way to pass vital information to them would have been through their religious leaders whom they always hold in high esteem. However, this source of information is not adequately exploited. This may be as a result of lack of adequate knowledge about HIV on the part of the religious leaders.

Parents, most especially in rural areas are not adequately informing their children about HIV/AIDS. Very few children in rural areas have learned something about HIV from their parents. The fact is that some parents in rural areas still hold firmly to the belief that sex matter as it relates to HIV should not be discussed with children. They still believe in the secrecy of discussions on sexual issues. Also, some parents, most especially, the illiterate parents do not know anything about HIV, hence they can not teach their children what they do not know. In urban centres, parents provide information on HIV more to their female children than male children. This may be as a result of the cultural belief that a girl-child should be sexually restricted while permissiveness is tolerated or even encouraged for male children. More worrisome is the fact that teachers in rural schools hardly teach or discuss HIV/AIDS issues with their students. Less than twenty-five percent (25%) in rural areas have heard information about HIV/AIDS from their teachers. This is a serious course of concern because schools play dominant roles in getting information across to students. While schools in urban areas always invite resource persons to talk to students on HIV, reverse is the case for schools in rural areas. Many students in rural areas do not know who a resource person is because they have not seen one. Although it may not be economical to invite resource persons to schools in rural areas, it is worthwhile to do so because students will learn tremendously from the resource person. Besides, the cost of having one HIV victim among students is more than the cost of inviting many resource persons to the school at a time. The most impressive finding in this study is that almost all students have heard about HIV/AIDS. All (100%) students in urban centres have heard of HIV/AIDS while 97 percent of students in rural areas have also heard of the disease.

Presently, HIV/AIDS has no known cure, hence its prevention among the younger population is the only sure ways of curtailing this dreadful disease. Generally in this study, the finding shows that knowledge of various methods of preventing HIV is higher among urban schools population than rural school population. Seventy two percent (72%) of students in urban schools know that abstinence is the major way of avoiding HIV, while only thirty three percent (33) of students in rural areas know this as a fact. Many students in rural areas are not aware of various ways of preventing HIV. However, it is interesting to note that both male and female students in rural areas know that the use of condoms limits the spread of HIV more than their counterparts in urban areas. The implication of this is that students in rural areas are more inclined to use condoms during sexual activities than students in urban areas. However this is dependent on its availability in rural areas. Besides, to what extent are students in rural areas know its correct usage? (These are beyond the scope of this study). Students in urban centers are more aware of various ways of preventing HIV. They
know that all things being equal, staying with one uninfected partner, non-involvement in sexual activities with commercial sex workers; safe blood transfusion; safe injection and the use of clean, sterilized piercing instruments are some of the preventive measures to HIV. A high percentage of students in rural and urban areas believe that prayers can help in preventing HIV. This portends danger to this population of youths. Some adolescents have been brainwashed that if they ‘believe’ or have ‘faith’ they can not be infected, while others believe that even if they are infected, prayers can cure the disease.

There is significant difference in the level of awareness of male and female secondary students in rural and urban centers about epidemiology of HIV/AIDS. Post hoc scheffe Test reveals that the difference is among rural students, both males and females. The test also reveals that the level of misconceptions about HIV/AIDS is very high among rural students. Students still associate HIV/AIDS to witchcraft, most especially in the rural areas. Many believe that it is a disease of white people.

**Recommendations**

Based on the findings of this study, the following recommendations were made:

1. HIV/AIDS and sexuality education should be introduced and be made compulsory in secondary schools.
2. Government through ministry of education should employ and deploy health educators, trained nurses and guidance counselors to secondary schools. These specialists will assist in creating awareness about HIV/AIDS and other related health issues.
3. Posters and pamphlets on HIV/AIDS should be produced and distributed to secondary school students most especially in the rural areas.
4. Principals in secondary schools should as a matter of policy invite resource persons to educate students on HIV/AIDS at least once in a session.
5. Schools’ principals should encourage students to form and join HIV/AIDS awareness clubs in their schools.
6. Since most students enjoy sports and inter-house sport as co-curricular activities, school’s sports wears and jerseys should carry HIV/AIDS information such as “AIDS is Real”, “Don’t Spread the virus”, “Abstinence is the best protection” etc.
7. Government and NGOs should spread their activities in creating awareness about HIV/AIDS evenly to rural areas, because the lives of secondary school students in rural areas are as important as those in urban schools.
8. Distributions of pamphlets and posters on HIV/AIDS should be done extensively in rural areas.
9. NGOs should strive to correct misconceptions about HIV/AIDS that is deeply rooted in rural areas. These misconceptions have led to the development of negative attitudes towards the realities of HIV/AIDS.
10. Parents most especially in the rural areas should create time to educate their children and wards about HIV/AIDS or sexually education.
11. Since people especially adolescents often believe religious leaders (Men of God) more, religious leaders should not mislead or misinform people about HIV/AIDS. They should avoid exaggerating their powers at curing HIV/AIDS.
12. Places of worship should produce pamphlets, handbills, posters etc on HIV/AIDS and distributes to their adherents who fall within the vulnerable group.
13. Government should ban places of worship that claim to be healing HIV through prayers, such as religious leaders should be arrested and tried for misinformation and economic crime.
Conclusion

HIV/AIDS has assumed a centre state among diseases that plague Nigerians in recent times with over three million Nigerians being infected. From a relatively unknown disease among Nigerian households in the 1980s, HIV/AIDS has become a common disease which everybody dreads. Although its spread has no geographical boundary or age limit, its rising prevalence among adolescents and young adults make the disease to be extremely worrisome. Interestingly, the disease is acquired, it is not congenital or inherited (except for babies that may be infected through their mother), and hence it is individual's action or inaction that may make him to be infected. Therefore with adequate knowledge of the disease, positive attitude and practices to stay healthy and uninfected on the part of adolescent and young adults, the spread of the disease can be halted. When these vulnerable groups are well informed, there would be positive attitudinal change that would help to curtail the disease. Providing information or creating awareness about the disease will go a long way in protecting the populace from this disease.

However based on the findings of this study, it is crystal clear that secondary school students are not ignorant of the disease. They know that the disease is not yet curable and it is not a respecter of anybody. They got their information from various sources, but some pieces of information at their disposal are misleading most especially at the rural areas. Much effort is concentrated at urban centres to get the people informed about HIV/AIDS while students in rural areas are hardly cared for, with female students in the rural areas being the worst victim of neglect. If HIV/AIDS is wiped off among urban dwellers without adequate attention on its elimination in rural areas, then nothing has been achieved because there will always be resurgence of the disease from the rural areas.

References


