

ADOLESCENTS UNDERSTANDING OF THE CONCEPT OF HIV AND AIDS IN CALABAR SOUTH, SOUTH SOUTH NIGERIA

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Abstract

Background: Human Immunodeficiency Virus (HIV) is an infectious agent that causes Acquired Immune Deficiency Syndrome (AIDS). Over half of the world's population is under 25 years old; this age group is more threatened by AIDS than any other. It is the same group that has more power to fight the epidemic than any other. Young people are particularly vulnerable due to risky sexual behavior and substance use and a host of other social and economic reasons. This study was a quantitative research to determine the awareness, preventive skills and safe behavior competences about HIV infection and AIDS disease of adolescents in Calabar South, South-South, Nigeria. Permission was obtained from the Local Government authorities. An HIV/AIDS/STI awareness behavior test, a standardized instrument by J.O. Akinboye was the instrument used for data collection after obtaining copyright from the author. Of 500 students, 260 (52%) were males while 240 (48%) were females. For awareness of HIV, 180 (36%) had very great awareness, 245 (49%) had great awareness, 45 (9%) had awareness, 20 (4%) had little awareness and 10 (2%) were ignorant. For AIDS awareness, 34% had very great awareness, 36% had great awareness, 17% are just aware and 13% were ignorant. Adolescents here are more knowledgeable about HIV than AIDS. Over 30% of them have low preventive skills and safe behavior competences. Comprehensive and skills-based health education, including reaching out to people before the initiation of sexual activity should be implemented.

Keywords: Adolescent, Preventive skills, AIDS, Calabar South

Introduction

An estimated 11.8 million young people aged 15-24 are living with HIV/AIDS (UNFPA, 2007). About half of the 6,000 new infections each day occur among young people. It is estimated that about half of all people who have had HIV were infected when they were between the ages of 15 and 24. If current trends continue, it is expected that the number of young people infected with HIV/AIDS could increase to 21.5million by 2010 (UNFPA, 2007). Education can help to fight HIV, and it must focus on young people (Lahai-momoh et al, 1997). The fact that adolescents are particularly vulnerable to HIV is an important reason for focusing efforts on HIV/AIDS transmission, prevention and care efforts on those under age 25 (Akinboye, 2004). The risk of HIV transmission is not only linked to the fact that young people are having sex, but also to their lack of the knowledge and the skills they might use to protect themselves, lack of creative ideas, lack of innovation to turn their ideas to usable forms of sexual health, are terrible deficiencies that make the youngsters very much vulnerable (Akinboye, 2004).

The 2003 National HIV Sero-prevalence Sentinel Survey by the Federal Ministry of Health and presented by Prof. Eytayo Lambo reported a prevalence of 12.0 percent in Cross River State; this was the highest prevalence rate in the country (This Day, 2004). That of 2005 rates cross river at a prevalence of 6.0 percent and the sixth in the country.

Young people are more vulnerable to sexually-transmitted HIV and HIV infection than adults, as a result of drug usage. Young people of ages 15 to 24 years old account for half of all new HIV infections worldwide. More than 6,000 people become infected with HIV every day, and more than third of all the people living with HIV or AIDS are under the age of 25, with almost two-third of them being women (Robert et al, 2006).

Some 80% of HIV infections in Nigeria are transmitted through heterosexual sex (Adeyi et al, 2006). Factors contributing to this include lack of information about sexual health and HIV, low levels of condom use and high levels of sexually transmitted infections (STIs) such as Chlamydia and Gonorrhea, which makes it easier for the virus to be transmitted. It has been reported that blood transfusions account for up to 10% of new HIV infections in Nigeria (Adeyi et al, 2006). There is a high demand for blood because of blood loss from surgery and childbirth, road traffic accidents, anemia and malaria. Not all Nigerian hospitals have the technology to effectively blood screen; therefore contaminated blood is often used. Another main transmission route is mother-child transfusion. In 2005, it was estimated that 240,000 children were living with HIV, most of which became infected from their mothers (Kanki et al, 2006).

Currently, little information is known about adolescent awareness, preventive skills and safe behaviour competencies about HIV Infections and aids disease from this part of the country. In an attempt to document the extent of the problem, this study was undertaken.

Materials And Methods

The cross-sectional study was carried out in Calabar South Local Government Area of Cross River State, south-south, Nigeria. The Local Government Area has a population of 191, 630 (NPC, 2006). The male to female ratio is 51% to 49%, Adolescent population is 76,652 (NPC, 2006).

The sample size necessary to produce results accurate to a specified confidence and margin of error was determined using: $n = Z^2 (pq)/d^2$. Where n =sample size, $Z=1.96$ which was the standard normal deviation that corresponds to 95% confidence interval, p was the proportion of the target population, from the total population, this was 40% which = 0.4, $q=1.0-p$ and $d=0.05$ (degree of significance). The minimum sample size was estimated to be approximately 370, but 500 adolescents was sampled to allow for non-response and to improve the accuracy of data collected.

Permission was obtained from the Local Government authorities. An HIV/AIDS/STI awareness behaviour test which is a standardized instrument by J.O Akinboye was the instrument used for data collection. Copyright was obtained from the author of the instrument before use..

Multistage sampling technique was used in the study. The first stage was stratification of schools into day and boarding schools. Day school was chosen for the study. The second stage was simple random sampling in which 5 day schools were chosen by lottery. In the third stage, the school was stratified into junior and senior secondary school. Using the class register for good judgement and applying simple random sampling, 50 students were from junior secondary 3 and senior secondary 3 respectively in the 5 schools. 100 students were taken from each school, making a total of 500 students.

Data was collected with adolescent HIV/AIDS/STI awareness behaviour Tests by J.O.Akinboye (PhD). Data was gathered by distributing the instrument to student in the secondary school (5 secondary Schools). Questions not clearly understood by the respondents were explained to improve their understanding of the questions and to also limit bias in answered questions.

Inclusion criteria were apparently healthy adolescent consisting of male and female aged between 11-25 years. They were resident in the study area for the previous six months, parental consent and willingness of selected students to participate in the study. Willing subjects or students whose parents refused to give consent as well as unwilling subjects whose parents

gave consent were excluded from the study. All eligible participants were informed that participant was voluntary.

Statistical analyses of the data obtained were performed using the SPSS program version 18.0. Numerical variables were presented as mean \pm standard deviation and the *t*-test was used to compare the differences for statistical significance. *P* value < 0.05 was taken as statistically significant.

Result

Out the 500 respondents, 320 (64%) were within the age bracket 11-15 years, 155 (31%) were within the age bracket 16-20 years and only 25(5%) of the adolescents were within the age brackets 21-25 years (table 1). Out of the 500 respondents, 260(52%) were males while 240 (48%) were females as shown in Table 1.

The percentage distribution of the adolescents, with regards to group counseling, on sexuality education and HIV/AIDS/STIs result showed that 220(44%) of the respondents had not been involved in any group counseling, 145(29%) as been involved in group counseling on two occasions and 135(27%) of the adolescents had been involved in counseling for up to three times (Table2).

The percentage distribution with regards to the question – I want to join the virgin/abstinence group revealed that 285 (57%) of the adolescent replied positively, 90(18%) of the adolescents replied negatively and 125 (25%) had no answer.(Table 5)

Table 1: Percentage Distribution Of Respondents By Age Bracket

Age Bracket	Frequency	Percentage (%)
11-15	320	64
16-20	155	31
21-25	25	5
Total	500	100

Table 2: Percentage Distribution Of Respondents By Group Counseling On Sexuality Education And Hiv/Aids/Sti

Group Counseling	Frequency	Percentage%
Zero Times	220	44
Two Times	145	29
Three Times	135	27
Total	500	100

The percentage distribution of the respondents with regards HIV awareness showed that 180(36%) of the adolescents were within scores 208-260 which implies a very great awareness about HIV, the cause of AIDS. 245(49%) of the adolescents were within scores 156-208 which indicates they have a great awareness about the infection. 45 (9%) of the respondents scored between 104-156 which indicates an awareness about HIV infection. 20 (4%) of the respondents scored between 52-104 which indicates a little

awareness about the virus. 10(2%) of the adolescents were within scores 0-52 which meant they ignorant about the virus which causes AIDS. (Table3).

The percentage distribution of the respondents with regards AIDS awareness showed that 170 (34%) of the respondents scored between 136-170 which indicated they had a very great awareness about the disease. 180(36%) of the respondents scored between 102/136 which showed they had the great awareness about the disease cause by the virus. 85(17%) of the respondents were within score 68-102 indicating they were just aware of the disease. No one was within scores 34-68 and 65 (13%) of the adolescent were within scores 0-34 which indicated they were ignorance about the AIDS disease. (Table 4)

Table 3: Percentage Distribution Of The Respondent With Regards To Hiv Awareness.

Score	Frequency	Percentage%
208-260	180	36
156-208	245	49
104-156	45	9
52-104	20	4
0-52	10	2
Total	500	100

Table 4: Percentage Distribution of The Respondent With Regards To Aids Awareness.

Score	Frequency	Percentage%
136-170	170	34
102-136	180	36
68-102	85	17
34-68	0	0
0-34	65	13
Total	500	100

Table 5: Percentage Distribution With Regards To The Question: I Want To Join The Virgin/Abstinence Group (Vag).

VAG Group	Frequency	Percentage (%)
Yes	285	57
No	90	18
No answer	125	25
Total	500	100

Discussion

Majority of adolescents had no access to group counseling, on sexuality education and HIV/AIDS/STIs. For those that have been involved in group counseling, the quality information, with regards to its effect on our preventive skills and save behaviour competence cannot be determined.

With regards to joining the virgin/abstinence group, the high majority of the adolescents replied positively, indicating that if the group was

established in their schools or environment they would be members. This was similar to the study conducted in 2005 to determine AIDS awareness and sexual experience of girls in secondary and tertiary institutions were a high majority showed a high degree of keenness and interest from involvement in AIDS prevention Campaigns (Schenker, 2005).

A low percentage had a *very great awareness* about HIV. Also a very little below half of the adolescents had *great awareness* about the deadly infection. They however need to develop necessary skill to be applied to their levels of awareness to protect them from infection. A very low percentage of the respondents had just awareness. This implies they must try hard to continue to make their awareness great about the deadly infection. They have to develop necessary skills to protect themselves from infection. They should abstain from sex till marriage. If they must be involved in sexual intercourse let it be with one uninfected person and latex condom should be used always. They should always know the status of their partners always and protect themselves by all means from being infected. A much lower percentage had **little awareness** about HIV. It is a serious matter because knowledge is power. There is little chance of protection from the infection. Chances of accidental infection are very high. It is encouraged they get themselves informed through reading books, joining clubs or other sources of information so as to urgently increase their awareness and so that chances of protecting themselves from infection can be increased. Those who were **ignorant** about the virus that causes the deadly AIDS disease had the least percentage. This group should ensure no information opportunity escape. They should learn information about HIV from available materials such as books, television radio, newspapers, internet and other information media. This will increase awareness about HIV infected and they should also learn to be protected from the infected. They should be serious, committed, disciplined about knowing of HIV infected.

A low percentage of the adolescents had a very great awareness about AIDS. Even with this, necessary protection and prevention skills should be developed to act on the awareness. They should practice abstinence before marriage. If they must be involved in sexual intercourse, the status of the partner should be known, (is the partner negative or positive?), stick to one faithful uninfected partner and always use latex condom effectively for protection. Those in this group were likely to have had positive preventive skills and save behaviour competences. Another low percentage had great awareness about AIDS. They needed to develop practical skills based on the great awareness that can protect them from being infected with HIV. If any of them had tested positive for the virus, necessary positive healthy lifestyle that can prevent AIDS should be adopted. Another low percentage had poor awareness about AIDS. The result was similar to the study conducted by the

Center of Law Enforcement Education, Lagos (Danesi, 2004), where this similar percentage had wrong information about AIDS. These percentages in both studies had similar characteristics, which were poor preventive skills and safe behaviour competences because they lacked adequate information. It will be essential to educate the categories that were ignorant about HIV and AIDS. Education might improve important cognitive skills including literacy, enhanced decision making, analytical skills, or other cognitive skills which in turn allow individuals to be more successful in managing their health problems, in interacting with the health care system, or in preventing future health problems (Schenker, 2005).

Education may improve health by laying the foundation for the individual's integration in the society, not only in terms of learning acquired for effective functioning, but in terms of social competences and the ability to function in hierarchical, structured settings and within supportive networks (Schenker, 2005).

Education might also influence the biological pathways including neurologic, inflammatory and endocrinologic processes or structures (Schenker, 2005).

Referencing research from several countries, the authors tried to explain a paradox: more educated people showed higher HIV prevalence rates. They argued that higher mobility and socio-economic status of better-educated persons enabled sexual encounters with a greater number and range of partners, therefore increasing their susceptibility to HIV infection. "This positive correlation can subsist", argued the authors, "only as long as the epidemic is at an early stage, and that reversal in the trend occurs once infection rates expand among broader population segments. The dominant explanation for this phenomenon is that as the epidemic advances and people gain knowledge and skills, the more educated are better able to change their behavior, thus reducing their risk to HIV".

In conclusion, awareness on HIV/AIDS is high but the knowledge of the disease is poor. A published compendium of HIV/AIDS education initiatives is required to educate adolescents on HIV and AIDS.

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