

ASSESSMENT OF EFFECTIVENESS OF HEALTH EDUCATION AND CAMPAIGN ON KNOWLEDGE AND ATTITUDE OF ADOLESCENTS TO HIV/AIDS IN OSUN STATE, NIGERIA

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ABSTRACTS

Youths including adolescents are sexually active and vulnerable to the dreadful HIV infection. The manner in which messages are delivered to them, reinforced will determine their level of motivation and subsequently prevalence figures. The objective of this study is to assess the effectiveness of health education and campaign session on knowledge and attitude of adolescents to HIV/AIDS in Osun State in South western Nigeria. Materials and methods: Descriptive cross sectional study. Students from five schools attended the health education session, but 400 students from three of the five schools were recruited into the evaluation study using multistage sampling method in sample selection. Survey instrument for the pre and post test were graded, pre-coded, semi structured questionnaires administered by trained assistants. Data was analyzed using the SPSS software. Results: The average knowledge and attitude score of basic facts about HIV, mode of transmission, non modes of transmission, people at risk and prevention increased significantly when pre health education and post test scores were compared. Conclusion: Health education session and campaigns are cost effective way of improving knowledge on HIV/AIDS, and encouraging behavioural change among adolescents.

INTRODUCTION

About one third of Nigeria's total populations of 140 million are youths between the ages of 10 and 24 (Population Reference Bureau, 2000). By 2025, the number of Nigerian youths will exceed 57 million (World Population Prospects, 1999). Several

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studies have reported high rates of premarital sexual activity among Nigerian adolescents (Feyisetan & Pebley, 1989; Nichols *et al*, 1986; Orubuloye, Caldwell & Caldwell, 1991). Several hypotheses have been offered to explain the high rates of sexual activity and STD infection among Nigerian adolescents, such as Nigeria's deteriorating socioeconomic situation, the erosion of traditional African values (Feyisetan & Pebley, 1989), the early onset of menarche, a widening gap between age at menarche and age at marriage (Senderowitz & Paxman, 1985), infrequent and ineffective use of barrier contraceptives (Nichols *et al*, 1986), the decreased value placed on virginity (Renne, 1993) youthful exuberance and the wish to experiment with sex influenced by peer pressure cannot be ruled out.

While most youths within the ages of 15 and 24 knew about HIV/AIDS (NPC, 2000), more than 60 percent of new HIV infections occur among youths aged 15 to 25 (Okonofua *et al*, 1999). Among sexually active youths in one study, 87 percent of males and 78 percent of females knew that having sex with a stable partner and using condoms consistently could prevent HIV infection. Although many youths chose contraception in order to prevent disease with casual partners, these youths did not choose condoms significantly more often than other methods (Araoye & Fakeye, 1998).

Adolescents are classified as youths between the ages of 10 and 19 years, and by convention are still in the period of self discovery, indecision and great influence by peers most especially on issues on sexuality. The source of information to adolescents may go a long way to determine how well the information will spread to other peers, and how it would be taken. Information on HIV/AIDS through the mass media is very helpful and effective, but it tends to promote a negative attitude toward those with HIV/AIDS by over-emphasizing the dreadfulness of HIV infection.

The poor attitude of parents, teachers and even school authorities towards introduction of family life health education (or sexual and reproductive health education) into secondary school curriculum serves as a negative factor towards adequate awareness of HIV/AIDS among adolescents. Situation was worse in private secondary schools where issues like sex was regarded as a none discuss. This is further worsened by cultural and religious factors militating against discussing sexual issues in formal settings.

Lack of sexual health information and services places these young people at risk of unintended pregnancy, abortion, sexually transmitted infections (STI), and HIV/AIDS. In addition, early marriage and childbearing may limit youth's educational and employment opportunities. Innovative programs can provide youths with the sexual health information and services they need. Thus, a change of attitude among all stake holders is desired.

In achieving these, everyone has roles to play including schools, governments, the community institutions, families and individuals. The need too give relevant information to adolescents as well as assess their knowledge and attitude to STIs including HIV is important. The objective of this study was to assess knowledge, attitude of adolescents

towards HIV as well as evaluate effectiveness of a health educational and campaign programme on knowledge, attitude and practice of adolescents towards HIV in Southwestern Nigeria.

METHODOLOGY

Lagos is a metropolitan, highly urbanized city situated in the Southwestern part of Nigeria, with secondary schools - both government and privately owned combining and polarizing the whole state. This is a descriptive cross sectional study of knowledge and attitude of secondary school students towards HIV/AIDs, as well as an evaluation of a health education campaign carried out among these students. The target population constituted all secondary school students in the senior secondary school classes in Lagos state.

This study was carried out during reproductive health day celebrations activities of one of the compound schools (about 5 secondary schools in one compound in a locality). Before the health campaign exercise, a pre test was conducted on all the students to assess their pre knowledge on HIV/AIDs. Each student was identified with a code containing their name, school, class and personal identification code number. With all invited senior secondary school students in attendance, the health education session was thoroughly conducted in a participatory manner, followed by question and answer sessions. Special area of emphasis include mode of transmission, people at risk, HIV testing and management among others.

Three months after the campaign exercise, some of the students who attended the campaign exercise were recruited to take part in the post test. Using the Leslie Fischer's formular for sample size calculation for populations greater than 10000, four hundred and eighty students were recruited into the study.

Three out of five schools represented were chosen at random by simple balloting. Questionnaires were proportionately allocated to each of the schools. In stage two, stratified random sampling was used to select the classes using their level of education as the stratifying factor. A class per level of education was chosen. In stage three and in each class, every one in three students on the class list were systematically selected, and administered the questionnaires until allocated questionnaires were exhausted. In situation where questionnaires were left over, another class is chosen to sample respondents.

Survey instrument for the pre and post test was a pre-coded, semi structured questionnaires administered by four trained assistants. The same pre and post test information on knowledge, attitude and practice towards HIV/AIDs was obtained from respondents. A knowledge score of responses was made with minimum of 5 points and maximum of 1 point based on the relative number of questions asked per section. Pre and post scores were then compared. Ethical issues were settled in appropriate quarters including the state ministry of education and the school administration levels.

This study had some limitations. Students may over-report socially desirable answers and underreport undesirable ones thus influencing validity of responses. In addition, extra care was taken to avoid direct questions related to sexual behavior and condom use, mainly because of ethical and cultural concerns.

The questionnaires were sorted and the data cleaned. The SPSS Version 10.0 statistical package was used for data entry and analysis. Frequency distributions of all relevant variables were produced, including charts where applicable. Pre and post test responses were compared. The Chi-square test was used to demonstrate relationships between categorical variables, and level of significance was determined at level of $P < 0.05$.

RESULT AND DISCUSSION

The table shows average scores pre and post health education/campaign exercise over a number of points that corresponds to the number of questions asked per section. All the sections recorded an increase in the average score when pre and post health education scores were compared. An average of number of scores was obtained by finding the arithmetic means of correct responses to scores in a section. The average knowledge score of basic knowledge about HIV, mode of transmission, non modes of transmission, people at risk and prevention increased when you compare pre and post test scores. With an allowable maximum average score of 5.0, the overall average score in pre health education session was 2.3 and 4.5 after the health education/training sessions. This amounts to an increment of 95.6% in score.

On basic knowledge about HIV including causes and beliefs in its existence, average allowable maximum score was 4.0. Pre intervention score was 2.5 and post intervention 3.6 giving an increment of 69.4%. On routes of transmission of HIV, average allowable maximum score was 5.0. Pre intervention score was 2.8 and post intervention 4.8 giving an increment of 58.3%. On non modes of transmission of HIV including myths surrounding transmissions of HIV, average allowable maximum score was 3.0. Pre intervention score was 1.0 and post intervention 2.6 giving an increment of 38.5%. On people at risk of contracting HIV, average allowable maximum score was 5.0. Pre intervention score was 1.7 and post intervention 4.5 giving an increment of 37.8%.

On prevention of HIV infection, average allowable maximum score was 8.0. Pre intervention score was 3.5 and post intervention 7.0 giving an increment of 50.0%. Attitude to prevention of HIV was also assessed. Four basic questions were asked, and expected correct answer assigned one mark. The average attitude score was also calculated for the respondents. The average allowable maximum attitude score was 4.0. Pre intervention score was 1.9 and post intervention 3.4 giving an increment of 55.9%.

In this study, awareness of basic knowledge and modes of transmission of HIV attracted an average score of about half of maximum available score points. This supports

another Nigerian study in which HIV/AIDS awareness among adolescents in Calabar was described as still poor. A little less than one third of respondents did not know the etiological agents of HIV/AIDS, but majority knew that HIV/AIDS is transmitted through sexual intercourse (Oyoita et al 2005). However these indices significantly improved after the health education campaign for the students.

Health education has always been a veritable way of improving knowledge, encouraging behavioural changes as well as assist adolescents to pass on correct information to peers and other friends. Health education session also help to resolve problems created by myths and wrong socio-cultural beliefs that could mislead the adolescents in their daily lives. The knowledge score of non modes of transmission suggests that adolescents under study still have lots of misconceptions about HIV transmission.

However the average knowledge score of preventive measures, which is also supported by other studies, calls for a more concerted efforts at sensitizing adolescents on preventive measures, since literatures proved their high sexual risky behavior. This may include abstinence from sexual intercourse, being faithful to only one sexual partner as well as use of condoms most especially condoms. A prospect for this assertion include the fact that knowledge score as well as attitude scores significantly improved after the health education session was given to the students compared to before the intervention measures, thus proving its effectiveness.

CONCLUDING REMARKS

Health education session and campaigns are cost effective way of improving knowledge on HIV/AIDs, and encouraging behavioural change among adolescents. This would greatly assist in the control of HIV/AIDs most especially among adolescents who are already adjudged to be sexually active.

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Table 1: Socio Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Age		
12-14	89	18.5
15-17	366	76.3
18-20	25	5.2
Sex		
Male	266	55.4
Females	214	44.6
Class		
SSS level 1	152	31.7
SSS level 2	158	32.9
SSS level 3	170	35.4
Religion		
Christianity	272	56.7
Islamic	208	43.3
Traditional	0	0
Others	0	0

Table 2: Assessment of Adolescent's Pre and Post intervention on Knowledge and Attitude to HIV and Prevention

Sections	Average maximum score	Average score Pre intervention	Average score Post intervention
Basic HIV knowledge	4.0	2.5	3.6
Transmission of HIV	5.0	2.8	4.8
Non modes of transmission	3.0	1.0	2.6
People at risk	5.0	1.7	4.5
Knowledge of prevention	8.0	3.5	7.0
Respondents attitudes towards prevention of HIV	4.0	1.9	3.4
1. Would like to avoid premarital sex			
2. Will like to stay faithful to only one sexual partner			
3. Would now avoid sharing sharp needles and objects			
4. Will now go for HIV test			