

Full Length Research Paper

Basic sociological concepts, attitude, perception and effects on propagating the message of HIV and AIDS prevention and control on engineering student of some selected tertiary institutions in Ekiti State, Nigeria

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This study centres on the basic sociological concepts, attitudes, perception and its effects on propagating the message of the dreaded disease called human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) prevention and control using engineering student from selected tertiary institution in Ado-Ekiti, Ekiti State, Nigeria. HIV and AIDS prevention was examined prior and after HIV and AIDS education programme. It was discovered that majority of the students were aware of this deadly disease, but larger proportion of this class of students did not believe in necessity for the propagating the message of HIV and AIDS prevention due to either misconception or lack of proper awareness about the virus. This study revealed that HIV and AIDS education is essential to correct the students' opinion, attitudes and perception about propagating the message of its prevention. The students' levels of academic and awareness about the disease are also significant factors that could enhance their willingness to participate in propagating the message.

Key words: Attitude, perception, propagation, human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), control.

INTRODUCTION

There is no doubt about the reality that human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) are real in Nigeria. Everyone is fully aware of the pandemic nature of the scourge; HIV infection is known to affect virtually all the organs in the body causing different metabolic derangements in addition to depression of the immune system (Olubomehin and Balogun, 2005). Such metabolic abnormalities are also accompanied with body fat redistribution (Martinez and Gatell, 1999). According to the Global Burden of

the Global Burden of Disease (2004) Update, organised by World Health Organisation in 2008, it was revealed that AIDS will remain one of the ten leading causes of death globally (Keele, 2006). It is estimated that since the beginning of the epidemic, more than 15 million Africans have died from AIDS (UNAIDS/WHO, 2007). In this context, it becomes possible to understand the massive impact that the AIDS epidemic has had on families, institutions, communities, workplaces, national and regional development in Africa.

As noted by the World Watch Institute (2007), the HIV epidemic raging across Sub-Saharan Africa is a tragedy of epic proportion. It is not only a health but also a development crisis; one that is altering the region's demographic future, reducing life expectancy, raising mortality, lowering fertility, creating an excess of men over women and leaving millions of orphans in its wake (Koffi, 2000). According to Oladele et al. (2008), Sub-Saharan Africa is home to 70% of adults and children living with HIV and AIDS in the world today. According to Joint United Nations Programme on HIV/AIDS (UNAIDS) (2013) report on the global AIDS epidemic, it was estimated that 35.3 (32.2 to 38.8) million people were living with HIV in 2012.

It was made known that about 15,000 people throughout the world become infected with HIV every day and 60% of these people are women and men aged between 15 and 24 years (Williams et al., 1997). In many developing countries which Nigeria is included, data have shown that up to 60% of all new HIV infections are among 15 to 24 years old with females out-numbering males in the ratio of 2 to 1 (Adedoyin and Adegoke, 1995).

Globally, women comprise 52% of all people living with HIV in low- and middle-income countries, and men 48%. However, in sub-Saharan Africa, the centre of the global epidemic, women still account for approximately 57% of all people living with HIV (UNAIDS, 2013).

The recent statistics from Nigeria Red Cross Society, Natural Resources Conservation Service (NRCS) (2004) show that over four million Nigerians are already living with the virus. Interestingly, most infected people with HIV are student of tertiary institutions. Through the epidemiological survey carried out by Youth Action Rangers of Nigeria, YARN (2004), it was discovered that 60% of those living with HIV infection in Nigeria are within the ages of 10 and 24 years. Akande (1999) also observed that over 85% of those infected are aged between 20 and 59 years. The larger number of Nigerian students falls within the age ranges mentioned. The rapid rate of HIV infection among this class of age is as result of the ways most students live reckless life. Most of them are sexually active before marriage. The contraceptive or condom use among youths, especially students is generally low. Moreover, the adoptions of western culture that erodes traditional African values, which places emphasis on chastity have a more permissive attitude to increased activity among Nigerian youths, especially the students. With young people getting infected and affected by HIV, hopes for the future seem very bleak (Heard, 2004).

According to Mongkuo et al. (2010), most college students are knowledgeable about HIV transmission routes and protection methods, but this knowledge rarely deters them from engaging in risky sexual practice.

Moreover, the students tend to believe that they are of low risk for contracting the disease. To develop effective education and prevention strategies, a number of scholars have proposed that research should focus on college campuses (Mattson, 2002; Opt et al., 2007). Other scholars have suggested the need to extend this research effort to include comparative studies of college students in various institutional settings, such as private versus public colleges, religious versus secular, 2-year versus 4-year and commuter versus residential institutions (Lewis and Malow, 1997; Opt et al., 2007).

Most young people in Nigeria may lack basic information about sexually transmitted diseases, most especially HIV and AIDS. The rate of awareness about HIV and AIDS gets increases daily through propagation of the messages on radio, television and printing media like newspapers, leaflets etc. Meanwhile, increase in the rate of awareness about HIV and AIDS is still needed urgently to break the stigma attached to HIV and AIDS by Africans, especially in Nigeria. This could be achieved by synthesising efforts on HIV and AIDS education among the youths, especially the students. This needs to be accomplished with making these students to have access to information and skills required to reduce their vulnerability to HIV infection. In Nigeria, like most other African countries, preventive interventions are carried out through public enlightenment campaigns. The Federal government through the National Action Committee against AIDS (NACA), in collaboration with UNICEF has continued public enlightenment programmes to check the spread of AIDS. NACA in collaboration with the Society for Family Health with the support from USAID has supported messages on radio and TV, focusing on how to avoid HIV infection through abstinence, mutual fidelity and the use of condoms (Tumushabe, 2006). Similarly, in Uganda, the government launched an extensive AIDS education campaign in the 1990s which cut HIV prevalence rates in that country from an estimated 14% to approximately 8% in 2000 (Nolen, 2007).

With the background in mind, a study on engineering student in tertiary institution responses was conducted to investigate whether or not HIV and AIDS education is effective in improving the attitudes and perception of engineering students in tertiary institutions on propagating the message of HIV and AIDS prevention and control. Special reference was paid to engineering students in two tertiary institutions in Ado-Ekiti, Ekiti State, Nigeria.

MATERIALS AND METHODS

An intervention study was carried out among selected students studying engineering in two tertiary institutions in Ekiti State, Nigeria. Proportionate sampling technique was used in selection of 300 students across the selected schools of higher learning.

Table 1. Age and sex distribution of the respondents.

Age (years)	Male	Female	Total
16–40	160	130	290

p-value = 0.078.

Population of the study

The population of this study was made up of engineering students from two tertiary institutions in Ekiti state.

Study sample

One hundred and fifty students were randomly drawn from each of the tertiary institutions. The selected students include 150 students from School of Engineering, Federal Polytechnic, Ado-Ekiti, and 150 students from Faculty of Engineering, Ekiti State University.

Instrumentation

Structured questionnaire was designed to gather information on the views and opinions of the selected students on their willingness to propagate the message of HIV and AIDS prevention and control. The selected students were later tutored for two weeks what HIV and AIDS is, mode of its infection/transmission, general impacts, possible methods of preventing and controlling the spread of HIV and AIDS. Post-test questionnaire was designed to determine whether or not the tutored students have accepted and are willing to participate in propagating the message of HIV and AIDS prevention and control. Self-administered pre-test and post-test questionnaires were administered to the selected students in their respective schools. All returned questionnaires were validated, 290 out of 300 questionnaires distributed were returned. The data collected both for pre-test and post-test were analysed using WINKS SDA Statistical software. The relationships were analyzed by performing cross-tabulation and chi-square test. A five percent level of p-value was used as a guideline for determining the significance of the relationships, when the value of $p > 0.05$, there is no significant relationship and when $p \leq 0.05$, there is some significant relationship between a particular variable and willingness to participate in the propagation of the message of HIV and AIDS prevention.

RESULTS

There is no significant relationship between age and sex. Table 1 shows the value of $p > 0.05$.

DISCUSSION OF RESULTS

It was observed from Table 1 that males constitute 55.2% of the respondents, while the rest 44.8% are females. The chi-square test ($p < 0.001$) shows that there is a statistically significant positive relationship between the respondents' age group and willingness to participate in the propagation of the message of HIV and AIDS

prevention.

The effect of sex on the opinion of the respondents' comparison with the necessity for propagating the message of HIV and AIDS prevention and control were tested before and after the education programme. It was revealed in Table 2 that before the teaching on HIV and AIDS, 34.8% of male and 28.6% of female respondents did not believe in the necessity for propagating the message of HIV and AIDS prevention, while 15.5% of male and 14.8% of female respondents cherished the necessity for propagating the message. Interestingly, 0.3% of male and 1.7% of female respondents remain indifferent to the propagating activity. In Table 3 the chi-square test ($p = 0$) indicates that there is no significant relationship between the genders' opinion and willingness to participate in the propagation of the message of HIV and AIDS prevention. But, the result of the test carried out after the teaching on HIV and AIDS revealed that 96.8% of male and 87.1% of female respondents believed in the necessity for propagation of the message, while 2.5% of male and 9.1% of female respondents claimed that it is not necessary to propagate the HIV and AIDS message, and 0.6% of male and 3.8% of female respondents seemed to be unconcerned about the activity at all. The chi-square test ($p = 0.008$) indicates that there is a significant relationship between the genders' opinion and willingness to participate in the propagation of the message.

It was discovered that before the HIV and AIDS education programme, 69.7% of respondents did not agree that propagating the message of HIV and AIDS prevention is necessary while about 30.3% of respondents agreed that propagating the message of HIV and AIDS prevention is necessary. But it was revealed after the HIV and AIDS education programmes in the selected schools that 95.9% of the respondents agreed and 4.1% of the respondents did not agree that propagating the message of HIV and AIDS prevention is necessary. The values of the chi-square tests before and after the education programme were both equal to $p < 0.001$ which indicates that there is a significant relationship between the respondents' opinion on the necessity for propagating the message and willingness to participate in the propagation of the message.

In Table 4 the effect of sex on the opinion of the respondents' comparison with the willingness to participate in the propagating of the message of HIV and AIDS prevention and control were also gauged before and after the education programme. It was found before the education programme that, 77.8% of male and 75.0% of female respondents showed their unwillingness to participate in the propagation, while 8.9% of male and 4.5% of female declared their willingness to participate in the propagation, and only about 13.3% of male and 20.5% of female respondent remained neutral. The chi-

Table 2. Cross tabulation to determine the effect of sex on the opinion of the respondents for necessity for propagating the message of HIV prevention and control before and after HIV and AIDS education programme.

Sex	Pre-test result				Post-test result			
	No	Yes	Don't know	Total	No	Yes	Don't know	Total
Male	101	45	10	156	04	153	01	154
Female	83	43	08	134	12	115	05	136

Pre test result p-value = 0.196; post test result p-value = 0.291

Table 3. Respondents' opinion on the necessity for propagating the message of HIV prevention in relation to their willingness to participate in the propagation of the message before and after HIV and AIDS education programme.

Agreed that propagating the message of HIV and AIDS prevention is necessary	Willingness to participate in the propagation of the message of HIV and AIDS prevention					
	Pre-test result			Post-test result		
	No	Yes	Total	No	Yes	Total
No	175	27	202	09	02	11
Yes	53	35	88	21	235	256

Pre test result p-value ≈ 0; Pre test result p-value ≈ 0

Table 4. Cross tabulation to determine the effect of sex on the opinion of the respondents for their willingness to participate in propagating the message of HIV prevention and control before and after HIV and AIDS education programme.

Sex	Pre-test result				Post-test result			
	No	Yes	Don't know	Total	No	Yes	Don't know	Total
Male	123	14	21	158	34	127	6	167
Female	99	06	27	132	42	55	26	123

Pre test result p-value = 0.127; Pre test result p-value = 0.01.

The chi-square test ($p = 0.127$) shows there is no significant relationship between the genders' opinion and willingness to participate in the propagation of the message. But after the education programme in the selected schools, it was discovered that 76.0% of male and 44.7% of female respondents showed their willingness to participate in the propagation of the message. The chi-square ($p < 0.001$) indicates that there is a significant relationship between the genders' opinion and willingness to participate in the propagation of the message of HIV and AIDS prevention and control.

CONCLUSION AND RECOMMENDATIONS

HIV and AIDS related information should be simplified for the benefit of all students in the tertiary institutions. Propagation of the message of HIV and AIDS prevention needs to be brought to the corridor of the students. This

programme can be done frequently in form of symposium, workshops, debates, seminars, etc to create more awareness and enlighten the students more about the dreaded disease, and more emphasis should always be laid on adverse effects (moral, economic and social effects) of HIV and AIDS in any of the aforementioned recommended gathering and people should always be made to realise that "prevention is better and less costly than cure".

Teaching of HIV and AIDS should be incorporated into the school curriculum, even in all human activities, to create more awareness about the infection among the students. More so, this will assist in making the students to realise the importance of the infection better and the need for integration of HIV prevention into all human activities. Counselling unit on HIV and AIDS needs to be established in all tertiary institutions. This „unit will assist greatly to enhance students' acceptance of HIV and AIDS and their willingness to participate in propagating the

message of HIV prevention. Governments, philanthropists and international communities need to assist financially in alleviating poverty in Nigeria to avoid students being pushed to compulsory professional prostitution, and other form of immoral activities that can cause HIV infection. Also, governments, philanthropists, NGOs and international communities also need to assist in making available necessary materials for effective propagation of the message of HIV prevention.

The statistics of HIV and AIDS infection in the country should always be analysed and made public to convince people against the misconception that HIV and AIDS is a taboo or western propaganda. Instilling fear about HIV and AIDS should be discouraged as it could only be effective for a short time (that is, counterproductive) and should be replaced with the message of hope that something could still be done to eliminate the virus in our society through propagation of the message of prevention. People need to challenge the myths and misconceptions about human sexuality that translate into dangerous sexual practices.

Work and legislation is needed to reduce prejudice felt by HIV+ people around the world and the discrimination that prevents people from "coming out" as being HIV positive. HIV prevention initiatives need to be increased, people across the world need to be made aware of the dangers, the risks, and the ways they can protect themselves.

HIV and AIDS education plays significant role in influencing the decision of people, especially students positively towards acceptance of HIV and AIDS as real necessity for elimination of the virus in society and their active involvement in propagating the message of HIV prevention. Young women and men, especially the students are at high risk of getting infected with HIV. Therefore, it is essential that this class of people, need to be fully involved whether in training as a group or individual, or through any other significant means in propagating the message of HIV prevention.

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