# Full Length Research Paper

# Awareness and opinions about HIV/AIDS among secondary school teachers in Ogun State, Nigeria

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Information is vital to enable people have accurate understanding of the modes of transmission and prevention strategies of HIV/AIDS, and in this regard, teachers are expected to play a major role in the provision of information to promote awareness leading to behavioral change among students. The teachers' knowledge and perception about the disease will influence how they are able to perform this role. It is against this background that we sought to assess the knowledge and opinions of 514 secondary school teachers in Ogun State, Nigeria about HIV/AIDS using the survey questionnaire method. The overall mean knowledge scores on facts and modes of transmissions of HIV/AIDS for all the respondents were 5.7 out of 7 and 13.9 out of 17, respectively. Misunderstandings particularly on the likelihood of HIV transmission during oral sex, from donated blood, from mother to child during pregnancy and during breast-feeding were frequent among the teachers. The respondents who expressed favourable attitudes ranged from 22.2 to 50.8% for the various expressions which expressed positive and negative perception about people living with HIV/AIDS. Television (81.3%), radio ((72.2%), newspapers (64.0%) and friends (56.6%) were the major sources of information on HIV/AIDS, while least utilized sources were the library (11.3%), telephone hotlines (9.7%) and internet (8.2%). Only 16.5% of the teachers mentioned ever discussing HIV issues with students. The problems identified as obstacles to teaching of HIV/AIDS to students included lack of adequate knowledge, the fear that it might promote promiscuity among students and lack of special training on the subject. We recommend regular training workshops for the teachers to increase and update their knowledge of HIV/AIDS so that they could have the confidence of passing HIV/AIDS knowledge to students. The paper also recommends the involvement of libraries in activities that will promote easy access and retrieval of HIV/AIDS information materials.

Key words: HIV/AIDS; Knowledge, attitudes; information sources, secondary school teachers.

# INTRODUCTION

Since it was first reported among homosexuals in the United States in 1981, human immuno deficiency virus (AIDS) has had its most profound effect on people of sub Saharan Africa. The HIV/AIDS pandemic has not only been the worst tragedy in contemporary history, but has also posed serious demographic, humanitarian, economic and developmental crisis (Ogunbodede, 2004). By the end of 2005, the estimated number of people living globally with HIV/AIDS was estimated to be 40.3 million,

while newly infected persons and deaths due to HIV/-AIDS in 2005 alone were put at 4.9 million and 3.1 million, respectively (UNAIDS/WHO, 2005).

Approximately 60% (25.8 million) of HIV infected people are in subSaharan Africa, whereas the people in the region constitute just a little over 10% of the world population. Furthermore, new infections and deaths due to HIV in sub Saharan Africa were 3.2 and 2.4 million, respectively during the period.

The first round of HIV sentinel surveillance conducted in Nigeria covering nine states found an adult HIV prevalence rate of 1.8%, which has increased to 5.8% in 2001 (Federal Ministry of Health of Nigeria, 2001). The statis-

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tics of UNAIDS/WHO (2004) put the estimate of Nigerians living with HIV at 3.3 million adults or 5.4% of adult population, the third highest in the world after South Africa and India (UNAIDS/WHO, 2004). Even with these HIV figure for Nigeria, Alubo (2002) opined that the probability of underestimation of the real magnitude of HIV/AIDS in Nigeria cannot be excluded due to underreporting and inadequate facilities for HIV testing and missed diagnosis. According to the report of The National Intelligence Council, (2002), Nigeria along with four other highly populated countries in the world are anticipated to fuel the continued pandemic of HIV/AIDS, and that the adult prevalence by 2010 will be 10-15 million (18-26%) in Nigeria. However, this figure differs from that of the Nigerian National Action Committee on AIDS which projects that by 2010, the HIV infection prevalence in adult population will be 6-10% (National Action Committee on AIDS, 2003).

The factors that have contributed to the spread of HIV in Nigeria and indeed in other parts of Africa include poverty, poor health status, low literacy level, high number of young people, inadequate knowledge about the disease, cultural paradigm that encourage promiscuity such as polygamy, violence and the cultural pressure to present ones premarital relationship as moral thus preventing young girls from negotiating safer sex (Lau and Muula, 2004; Smith, 2004; Owolabi et al., 2005).

At the current time, no cure has been found for HIV/AIDS, and until a vaccine is found, provision of correct information will remain one of the key prevention strategies recommended against HIV/AIDS. Prevention strategies will need to continue even when vaccines are found because a vaccine will not replace other preventive methods but will be an additional tool. Consequently, school going children are expected to be educated on HIV and other sexually transmitted diseases. The Nigerian Education Research and Development Council produced a National Sexuality Education Curriculum, which has since been introduced into all the nations' pri-mary and secondary schools (Federal Ministry of Educa-tion of Nigeria, 2002). The school teachers' knowledge about HIV/AIDS is very important so that they can impart accurate knowledge about the disease to the school children who ultimately serve as catalytic agent to propa-gate accurate information about the disease in the com-munity in long run. It is easy to establish protective behaviour that will last into adulthood at young age.

Worldwide, young people have been identified to be at special risk of HIV infection, with majority of the infection due to unprotected sexual intercourse, and several studies have established among Nigerian youths early sexual debut, multiple sexual partners, low rate and inconsistent condom use (Olayinka and Osho, 1997) as risk factors. The report of the National HIV/AIDS and Reproductive Health Surveys indicated that only 34% among the sexually active youths of age 15 - 19 years used condom at their last sexual encounter (Federal Ministry of Health of Nigeria, 2003). The survey of Slap et al. (2003) on stu-

dents in Plateau State in Nigeria shows that about one third of them have had sexual intercourse with over 50% reporting multiple sexual partners. Orji and Esima (2005) found that among secondary schools students, age 13 – 19 years surveyed in a part of south west Nigeria, 50% of them were sexually active, with 68.7% of these sexually active students having multiple sexual partners, while 87.7% of them did not use condoms at sexual debut. Due to the long incubation period of HIV, it is likely that many older adolescents and young adults living with HIV/AIDS were infected as teenagers. It is thus evident that effective strategies have to be put in place to educate Nigerian youths on sexuality matters.

Several studies carried out to evaluate the knowledge of adolescents mostly under school-based settings in Nigeria have identified gaps in awareness, thus recommending the involvement of school based programmes in the HIV awareness campaign (Harding et al., 1999; Nwokocha and Nwakoby, 2002; Odusanya and Bankole, 2006). However, the literature on evaluation of the knowledge of the teachers who are the ones to be at the vanguard of the implementation of these school based HIV enlightment activities are quite limited. Thus to fill the gap, the present study evaluated the awareness, perception and sources of information about HIV/AIDS among secondary school teachers in Ogun State, Nigeria. The evaluation of teachers' knowledge is necessary because of its implications on the accuracy of information about HIVAIDS, which they deliver to students, and also for them to know how to protect their own health.

### **METHODS**

This study was carried out in January and February, 2005 among secondary school teachers in Abeokuta, the capital city of Ogun State, and Ijebu Ode, the second largest town in Ogun State, Nigeria. Twelve schools were randomly selected out of 35 public schools in the towns. The data were gathered by a self-administered questionnaire consisting of a combination of open and closed ended questions. The questionnaire was drafted based on review of literature (Brooks, 1999; Ungan and Yaman, 2003); it was reviewed by a psychologist, a health educator and one secondary school principal, and was pretested on 20 secondary school teachers in Ago-lwoye, Ogun State to detect questions that are unclear and those that will not yield reliable answers. Before administering the questionnaires, the school administrations of the selected schools were contacted to solicit their permission to conduct the survey.

The teachers that were found on the day of survey in each school constituted the study participants. The purpose of the study was described to the teachers; they were told that their participation is voluntary, that they were free to return the questionnaire blank, and the anonymity of their responses was also emphasized. Out of the 638 questionnaires distributed to the teachers, 514 were duly completed and returned, given a response rate of 80.6%.

The knowledge of facts and modes of transmission of HIV was assessed by requesting participants to indicate 'Yes', 'No' or 'Do not know' to seven and 17 statements, respectively. Attitudes were determined by asking respondents to agree, disagree or be undecided to each of eight statements which expressed both positive and negative perception about people living with HIV/AIDS.

The channels through which the respondents have obtained their knowledge about HIV/AIDS were determined by requesting them to

**Table 1.** Demographic information of teachers that participated in the HIV/AIDS knowledge survey (N = 514).

Variable	Frequency	Percentage
Gender		
Male	315	61.3
Female	199	38.7
Age group		
20-29	86	16.7
30-39	168	32.7
40-49	188	36.6
≥50	72	14.0
Marital Status		
Single	102	19.8
Married	390	75.9
Divorced/Widowed	22	4.3
Level of Education		
National Certificate of Education	140	27.2
Bachelors/HND/Postgraduate	374	72.8
Religion		
Christianity	389	75.7
Muslim	114	22.2
Traditional	2	0.4
Not indicated	9	1.8
Year in Service		
1-5	98	19.1
6-10	58	11.3
11-15	193	37.5
>15	165	32.1

tick the applicable ones from the list provided, while four more spaces were provided for them to list sources relevant to them not indicated in our questionnaire. The respondents were further asked to give their opinion on the appropriateness of various methodschannels for the delivery of HIV/AIDS education information to secondary school students in Nigeria. They were to classify the channels on a Likert scale from 1, much inappropriate to 5 much appropriate (Tawilah et al., 2002).

The participants were asked if they had discussed HIV/AIDS related issues with students in the past. Lastly, the respondents were requested to list various factors, which in their opinion may act as barrier(s) to the teaching of HIV/AIDS in secondary schools.

# Data analysis

Data were analyzed quantitatively by using the EPI Info software in which frequency and cross tables were generated

# **RESULTS**

# Demographic profiles of respondents

The respondents comprised 315 males (61.3%) and 199 females (38.7); their mean age was 39.7 years with a standard deviation of 9.15, and ranged from 21 to 58 years (Table 1). The majority were in age bracket of 40-

49 years (36.6%). Approximately 76% (n = 390) of the respondents were married, while majority were Christians (n = 389, 75.7%). The respondents' years in teaching profession ranged from 1 to 32 years with a mean of 14.8 years.

# Knowledge of facts about HIV/AIDS

The respondents' knowledge of fact about HIV/AIDS is shown in Table 2 with 63.4 - 94.0% giving correct answers to each of the seven questions. All questions on general knowledge scale were answered correctly by 195 (37.9%) of the respondents, another 215 (41.8%) respondents correctly answered six out of the seven questions. while the mean score for the remaining 104 participants was 4.92 out of 7. The overall mean know-ledge scores for all the participants were 5.73. The majority (n=428, 83.3%) knew that HIV is a viral infection, that HIV positive individuals usually look healthy (n = 441, 85.8%) and that HIV/AIDS cannot be cured (n = 398, 77.4%). However, only 326 respondents (63.4%) were aware that infection with other sexually transmitted diseases could increase the risk of contracting HIV infection. Eighty four respondents (16.3%) believed that that there is a cure for HIV/AIDS, while 32 respondents (6.2%) expressed ignorance about whether or not there is a cure for the disease. Furthermore, 78 respondents (15.2%) thought that there is a vaccine for HIV with 17(3.3%) respondents expressing ignorance.

# Knowledge of modes of transmission of HIV/AIDS

Table 3 shows that except for the statement on oral sex, the proportion of respondents with correct responses on modes of transmission of HIV ranged from 67.3 to 100%. All the respondents were aware that HIV could be transmitted by heterosexual contact and 91.2% mentioned having multiple sexual partners as a risk factor for HIV spread while 84.0% of the respondents were also able to identify transmission by homosexuals i.e. men having sex with men.

Approximately 80.9% of the respondents cited the transmission of HIV by receiving blood, and 67.3% recognized that donating blood carries no risk of being infected with HIV, while 77.2% mentioned unsterilized needles as potential sources of HIV spread. Ninety nine (19.3%) and 108 (21.0%) wrongly believed that HIV cannot be transmitted by mother to child during pregnancy and during breast-feeding by an infected mother, with further 22 (4.3%) and 35 (6.8%) respondents, respectively claim-ing ignorance. Two hundred and ninety seven respondents (57.8%) mentioned that oral sex is highly unlikely to transmit HIV, while 176 (34.2%) respondents wrongly had the notion that oral sex is highly likely to spread HIV, and 41 (8.0%) expressed ignorance.

Twenty three respondents (4.5%) answered all the 17 questions on routes of HIV transmission correctly. 55 res-

Table 2. Knowledge of facts about HIV/AIDS among secondary school teachers in Ogun State (N = 514).

Facts	Correct answer	Frequency of correct answers	Percentage
HIV/AIDS is a virus infection	Yes	428	83.3
HIV/AIDS is caused by witchcraft/sorcery	No	483	94.0
HIV/AIDS is a punishment from God	No	452	87.9
HIV positive individuals usually look healthy	Yes	441	85.8
Infection with other sexually transmitted infections increases the chances of HIV transmission	Yes	326	63.4
HIV/AIDS can be cured	No	398	77.4
There is a vaccine for HIV/AIDS	No	419	81.5

Table 3. Knowledge of methods of transmission of HIV/AIDS among secondary school teachers in Ogun State (N = 514).

Which of the Following modes can transmit HIV?	Correct Answer	Frequency of correct answers	Percentage
Sexual relationship between male and female	Yes	514	100
Sexual relationship between men	Yes	432	84.0
Sharing food utensils/food	No	431	83.8
Multiple sexual partners	Yes	469	91.2
Mosquito/insect bites	No	428	83.3
Swimming pools	No	446	86.8
Toilets	No	459	89.3
Sneeze, coughs or spits	No	432	84.0
Unsterilized needles	Yes	397	77.2
Tribal marks/tattooing/skin piecing	Yes	368	71.6
Oral sex is highly likely to transit HIV	No	297	57.8
Sharing cloth	No	441	85.8
Blood donation	No	346	67.3
Receiving blood	Yes	416	80.9
Unsterilized needles	Yes	463	90.1
Mother to child during birth	Yes	413	80.4
Breast-feeding	Yes	388	75.5

respondents (10.7%) scored 16 out of 17, 92 (17.9%), 126 (24.5%) and 113 (22.0%) had 15, 14 and 13 correct answers respectively, while 105 (4.5%) (20.4%) had  $\leq$ 12 correct responses. The overall mean scores for all the respondents were 13.9 out of 17.

# Attitudes towards people with HIV/AIDS

Table 4 shows that the respondents who expressed positive attitudes towards persons with HIV/AIDS ranged from 80.7 to 95.3%, while those with negative attitudes varied from 2.7 to 8.9% and those that were undecided on the various attitude statements ranged from 3.1 to 10.3%.

# Sources of HIV/AIDS information

The sources of information about HIV/AIDS reported by

the teachers are presented in Table 5. Television is the most important (81.3%), followed by radio (72.2%) and newspapers (64.0%) ranked third, while friends (56.6%) was fourth. The lowest ranked means of obtaining HIV/AIDS information by the teachers were the library (11.3%), telephone hotlines (9.7%) and Internet (8.2%).

# **Preferred information sources**

Table 6 shows the ranked order of respondents' preferences of channels for the delivery of HIV/AIDS messages to secondary school students. Teachers were rated as the most appropriate channel for getting across HIV information (4.3), followed by health workers (4.2), while family members ranked third (3.8), and friends/peers fourth (3.7). The library/librarians were placed in the fifth position (3.5), while the television and radio occupied the sixth and seventh position, respectively.

Statement	Positive			
	attitude	Agree (%)	Disagree (%)	Undecided (%)
HIV +ve peoples' name should be disclosed publicly	Disagree	31(6.0)	464(90.3)	19(3.7)
HIV +ve people should have the right to study or work	Agree	489(95.1)	18(3.5)	07(1.4)
HIV +ve people should be quarantined	Disagree	20(3.9)	483(94.0)	11(2.1)
People living with HIV/AIDS needs to be supported	Agree	490(95.3)	14(2.7)	10(1.9)
I'll discontinue friendship with an HIV+ve friend	Disagree	24(4.7)	473(92.0)	17(3.3)
I could share meal/ drink with HIV +ve person	Agree	415(80.7)	46(8.9)	53(10.3)
I could share cloth/sweater with an HIV +ve person	Agree	473(92.0)	25(4.9)	16(3.1)

Table 4. Attitudes related to persons with HIV/AIDS among secondary school teachers in Ogun State.

**Table 5.** Sources of information on HIV/AIDS among secondary school teachers in Ogun state, Nigeria.

Source	Frequency	Percentage
Radio	371	72.2
Posters/pamphlets	275	53.5
Television	418	81.3
Newspapers	329	64.0
Friends	291	56.6
Health workers	265	51.6
Hospitals/Health centres	231	44.9
Family members	220	42.8
Tertiary institution education	123	23.9
Workshops/Lectures	139	27.0
Telephone hotlines	50	9.7
Churches/Mosques	128	24.9
Libraries/librarians	58	11.3
Internet	42	8.2

# Barriers to HIV/AIDS education

When the teachers were asked whether they have discussed the issue of HIV/AIDS with their students, only 85 (16.5%) of them indicated having done so. The respondents gave various reasons that constituted hindrance to teachers passing on information on HIV/AIDS to students, which we have attempted to summarise under 10 items (Table 7). The most important reason cited is that they do not feel that they have adequate knowledge (35.8%), and few of the respondents further elaborated that attempting such could cause them embarrassment when students ask questions that they could not satisfactorily answer. Secondly, 28.2% of the teachers felt it might have a negative consequence of promoting sexual activity within the students, since they would have been well exposed to the various precautionary measures against HIV, and school children for their youthful exuberance will want to experiment the teachings that teachers have been exposing them to repeatedly. The third reason given by the 24.9% of teachers which is related to the first is that they have not been given special training on HIV/AIDS issues, and as such may not have the competence to handle its teaching effectively to a satisfactory level that could bring behavioral change in students.

Other reasons adduced by the respondents were cultural/societal norms prohibiting open discussions on sex, the possibility of parents raising strong opposition should they attempt to teach students sex related matters, that HIV/AIDS issues do not fall within the curricula of their subjects, and some further said that teachers handling subjects such as Biology and Health Education should be saddled with the responsibility of teaching the subject and that they do not have teaching aids such as special books written on the subject, audiovisual aids and other materials that could make the teachings to be more practical to the students, Poor motivation and religious constraints

# **DISCUSSION**

Secondary school students are in the adolescent age, which is the time that they begin to take interest in sexual relationships. The youths are at a stage when they may want to experiment with sex without giving much consideration to the implications of their present behaviour. It is also at this stage that many of them develop lifelong habit habits, which could easily be influenced through proper guidance.

The teachers as a group had clear understanding that HIV could be transmitted through heterosexual intercourse, homosexuals and blood transfusion. Most of them also understood that social contact such as hugging, kissing, sharing food with HIV infected person will not lead to transmission of infection. Transmission of HIV by mother to child during pregnancy and breast feeding by an HIV infected mother were less well known by respondents as routes through which HIV could be transmitted. The teachers demonstrated the least understanding on the question on risk of oral sex. About 58% of the respondents incorrectly gave a positive answer to the statement that oral sex is highly likely to transmit HIV. It has been documented based on biological and epidemio-

**Table 6.** Respondents' opinion as to the appropriateness of different channels for delivering HIV messages to school going children.

Sources	Mean (S.D)	Percentage agreed	Rank
Radio	3.2 (1.35)	55	7
Posters/pamphlets	2.4 (0.86)	46	9
Television	3.4 (1.18)	52	6
Friends/Peers	3.7 (1.32)	63	4
Health workers	4.2 (0.64)	86	2
Family members	3.8 (1.06)	74	3
Teachers	4.3 (0.45)	92	1
Telephone hotlines	2.3 (1.33)	38	10
Health/AIDS Clubs	2.9 (1.26)	45	8
Churches/Mosques	2.1 (1.08)	36	11
Libraries/librarians	3.5 (1.25)	38	5
Internet	2.1 (1.21)	34	12

Items were scored on a likert scale 1 = much inappropriate, 2 = inappropriate, 3 = undecided, 4 = appropriate, to 5 = much appropriate.

The higher the mean value, the more appropriate the channel was rated.

Percentage agreed was calculated as the proportion of those that choose points 4 and 5 on the likert scale.

Table 7. Barriers to the teaching of HIV/AIDS in secondary schools identified by respondents.

Statement	Frequency of respondents	Percentage
It will promote sexual activity	184	35.8
Teachers inadequate knowledge	145	28.2
No formal training received	128	24.9
Cultural/Societal inhibitions	106	20.6
Parents opposition	96	18.7
Not in curricula of their subjects	95	18.5
Lack of teaching aids	92	17.9
Poor motivation	84	16.3
Religious constraints	65	12.6

logical evidence that oral sex is unlikely to result in transmission of HIV (Page-Shafer et al., 2002), though this route has been well established to be suitable for the transmission of a wide variety of non viral sexually transmitted infections such as syphilis, gonorrhea (Edwards and Came, 1998; MMMR, 2004).

This study identified television, newspapers and radio as the foremost channels by which the teachers obtained their knowledge on HIV. Other researchers have identified these channels as the leading sources of HIV information (Brook, 1999; Ungan and Yaman, 2003; Montazeri, 2005). Chapin (2000) noted that television has become so influential that it serves as a teacher to young adults. In Tanzania, increased condom use was found to be associated with exposure to a radio soap opera that aimed to increase knowledge of AIDS, change attitude and encourage HIV prevention behaviours (Vaughan et al., 2000). The evaluation of a television drama exposure

in Côte d'Ivoire found that men and women with heavy exposure were more likely to have used preventive measures at last sexual contact than those with no exposure (Shapiro et al., 2000).

However, the credibility of media to give detailed and accurate information is questionable because a recent survey among journalist in Ibadan, the second largest city in Nigeria, found that only 25.5% of them had received training on HIV, with a significant proportion of them having misperceptions on transmission and preventive methods, and also believing that HIV patient should be detained in hospitals (Isibor and Ajuwon, 2004). Furthermore, the study of Strouse et al. (1995) on adolescents considered television to be their greatest source of pressure to become sexually active. Television has also been found to provide young adults with models whose sexual attitudes and behaviours are learned and replicated (Chapin, 2000).

Teachers are next to family members as those whom youths interact with daily, which they also rely on for provision of accurate information. Thus, in this AIDS era, it has become expedient for teachers to play the role of information providers to students as well as providing a source with which students could discuss very sensitive and confidential issues. The major factors listed by the teachers to be acting as roadblocks to the teaching of HIV/AIDS education to students are the fear that it will promote sexual activity, teachers' inadequate knowledge, lack of formal training on the matter and lack of teaching aids. The minor factors the teachers listed as roadblocks for the teaching of HIV/AIDS were poor motivation and the claim by some teachers that it is not in the curricular of their teaching subjects. Oshi and Nakalema (2005) and Oshi et al. (2005) also found out that factors such as lack of adequate training, as well as poor motivation on information, education and communication for HIV/AIDS sex education are responsible for teachers' reluctance to teach the students the topic. The fear that teaching certain parts of HIV/AIDS information to students encourages sexual activity has also been identified by previous researchers (Klepp et al., 1997; Kinsman et al., 2001). Contrary to the fear, however are the reviews of Grunseit et al. (1997) and Kirby (2001) that demonstrated that the teaching of reproductive health education in schools had a positive impact of school children in that it led to delayed time of first sexual intercourse and in increased use of contraceptives among those that were sexually experienced.

It is also well documented that having correct knowledge of HIV does not easily result in behavioural change (Betts e al., 2003). However, if the curriculum and strategies of delivery of HIV information is of high quality, intensive and long term, which could be achieved in school setting with repeated talks by teachers, it should result in behavioural change in young adolescents. For the teachers to be able to carry out these roles, they should be knowledgeable and should be able to research and up date their information constantly.

Training can be accomplished by organizing workshops, in service training and group discussions for teachers on HIV/AIDS. The Ministry of Education must also commit their efforts to the provision of training to teachers, curriculum development and the provision of adequate teaching aids. There are numerous examples in literature of programmes that trained teachers on skills of how to use a selection of lectures, role playing, group exercises, audio-visual aids, essay writing, discussion sessions, drama and development of artistic activities such as poems, songs, plays, games, and posters in various subjects and co- or extra-curricular activities ( Klepp et al., 1997; Shuey et al., 1999; Chifunyise et al., 2002). Kits that contained materials and guidelines on various participatory strategies on provision of basic information and other techniques that young people can use to escape risky situations that teachers could use and adapt

as they felt were appropriate to teach students have also been developed (Visser, 1996; WHO, 2001).

Another avenue of getting HIV/AIDS messages across to students and the community in general that has not been widely explored in Nigeria is the library. The Libraries/librarians are specialists in the collection, organization and distribution of information and agents. Thus they have vital function to contribute to the war against the spread of HIV/AIDS. Library/librarians as information professionals owe it a duty to make a difference in the lives of individuals, their families, neighborhood and the larger community (Durance and Fisher, 2003). Hart (2000) highlighted different roles that library could play in the communities to bring about awareness about HIV. and was of the opinion that the library provides a much more ideal setting than clinics to obtain HIV information, because there is no stigma attached to library consu-Itation. At the 24th Annual conference of the Nigerian library Association, it was emphasized that that even medical doctors hold the view that professionals such as librarians ought to be actively involved in the propagation of information on HIV/AIDS to increase awareness and help to control the disease (Badawi, 2005). In highlighting the role that libraries could play in controlling the spread of HIV. Dube (2005) found that journals and books constitute important sources of HIV/AIDS information in South Africa but that the libraries need to repackage the information to suit the levels and needs of the users and further recommended that libraries should play the role of promoting easy access and retrieval of these HIV/AIDS resources.

It will be worthwhile for librarians to establish Resource Centers on HIV/AIDS where people can get factual information on the disease. Libraries as information professionals should liaise with health professionals and media organizations to obtain information on HIV/AIDS, which they can, then organize, repackage and display in special sections of the libraries.

The internet which has become powerful source of information for knowledge and as a teaching tool and delivery medium among teachers (Wiesenmayer and Koul, 1999; Luan et al., 2005) was among the least used resources for information by respondents in this study. There are various factors which researchers have identified as hindrances to internet penetration in developing countries some of which are its inaccessibility in many areas due to its high cost. Telephone hotlines were also not considered an appropriate channel for getting information on HIV despite the fact that some developing countries such as Egypt have effectively utilized this means to educate their people on HIV (Tawilah et al., 2002).

# Conclusion

Our study found that the teachers who participated in the survey had good knowledge of HIV/AIDS. However, effort

are still needed on the parts of those concerned to increase the knowledge of these teachers as they had few misperceptions about facts, modes of transmission and the right attitudes towards people with HIV/AIDS. There is need to train teachers for them to be able to deliver information of sufficient quality and intensity that could have positive behavioural impact on the students. Teachers identified perceived inadequate knowledge on the subject, negative consequence of such messages promoting sexual activities among the students, and that no formal training on HIV/AIDS issues as the major limitations against the delivery of HIV messages to students. There is an adage that says you can not give what you do not have, thus the teachers are not too sure of their own knowledge about the issue and it is expected that there knowledge must be very high for them to be able to deliver high quality messages that will impact positively on the behaviour of school going children. Government should regularly organize and sponsor teachers to attend in training workshops, where clarifications could be sought from experts on areas of misunderstandings. In addition to teachers teaching youths about HIV, other appropriate sources identified by the respondents are health workers, newspapers, friends, family members and libraries. The internet which is now a very powerful source of information occupied the last place among sources of information for HIV information by teachers, and also placed last when the respondents were asked to assess the appropriateness of various channels for presenting HIV information to school children. It shows that a lot still need to be done to educate these people on the usefulness of this medium for getting information on all areas of human endeavors.

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