



Attitudinal Changes Using Peer Education Training in the Prevention of HIV/AIDS: A Case Study of Youths in North Central Nigeria

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ABSTRACT

Purpose: HIV/AIDS is a major public health issue. Studies have shown that young people between the ages of 15 to 24 years accounts for more than 40% of new HIV infections. However, new infections could be prevented if the desired impact is made on young people through interventions such as effective peer education program to improve their knowledge, attitude and practice. Therefore, this study is aimed at assessing the impact of peer education vis-a-vis attitudinal changes and practices on issues relating to HIV/AIDS among youths in North central Nigeria. **Methods:** This classical experimental study was carried out in three stages, that is: pre-intervention, intervention and post-intervention stages among students of Government High School, Ilorin between the ages of 15 and 24 years. The sample size was 80 students each for study and control groups. Proportional gender distribution was ensured in the selection and the sampling technique was multistage sampling technique. Data collection was through semi structured self administered pre and post evaluation questionnaire. Peer education training and forth night mentoring sessions was conducted for the study group. Impact of the intervention was assessed after eight weeks. **Results:** Analysis of the result shows that out of the sixteen questions asked on respondents' attitude, only four showed statistical significance between the study and control group before the intervention which shot up to eleven after intervention. Also, the frequency of those having bad practices regarding prevention of HIV/AIDS also reduced after intervention. This reduction was much more in many instances when compared to the control group. **Conclusion:** This study has revealed that peer education training among youth can go a long way in educating them on issues relating to HIV/AIDS prevention. It can also bring about attitudinal changes and better practices that may help in reducing incidence and prevalence of HIV/AIDS in our society.

Introduction

HIV stands for Human Immunodeficiency Virus. This virus is transferred from person to person when blood of an HIV positive individual, semen, vaginal fluids or breast milk comes in contact with blood of another person (through the mouth, throat and any break in the skin).¹ According to the United Nations Program on HIV/AIDS 2007 update, about 33.2 million people are infected with HIV worldwide (which is 16% lower than 2006 estimate). So far 2.1 million people have lost their lives to AIDS. Youths are particularly at risk as young people between the ages of 15 to 24 years accounts for more than 40% of new HIV infections.²

The term "youth" does not have a rigid definition or age boundary. More often than not, the expression, youth, young person and adolescent are used interchangeably depending on the circumstance or issue at stake. However, a range does exist. The Centre for

Disease Control in a number of its studies defined youth as an individual between the ages of 13 and 24.³ World Health Organization (WHO) tried to distinguish young person as being between 10-19 years (which also correspond to the adolescent period) while a youth is an individual between the ages 15 to 24 years.⁴ There is a growing body of research that suggested that one may achieve greater improvement for youth by focusing not only on those factors that predispose to risk but also on those factors that protect young people from harm.⁴ By 2025, the number of young people aged 10 to 24 years in Nigeria is expected to reach 57 million. It is general knowledge that peers influence the sexual behaviors of teenagers.⁵

Available evidence suggests that the number of young people aged 10 to 24 years commenced pre-marital sexual relations have increased in the past few years.³

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Focusing HIV prevention intervention on youths offers the greatest hope for containing the spread of HIV especially within our environment. To be effective, such intervention should be comprehensive including treatment and care. HIV infections among young people have been on the rise causing great concern.

Peer education is a process, a strategy, a communication channel and a tool. In terms of youths, it is a process whereby well-trained and motivated young people undertake informal or organized educational activities with their peers (those similar to themselves in age, background or interest).⁶ Peer education requires time and its goal is to develop knowledge, attitudes, beliefs, and skills needed to engage in healthy behaviors.⁷ As a tool, it makes available information and skills to reach young people. It is typically used in conjunction with other means of communication and information dissemination, such as media campaigns, advocacy by celebrity spokespersons and youth friendly services.⁸

Activities in peer education programs vary widely in the type and frequency of activities, the number and intensity of contacts, and the frequency of follow ups. Settings include schools, Universities, workplaces, street settings, clubs or wherever young people gather.⁹ Effective peer education programs require intensive planning, coordination, supervision and resources. There are program costs inherent in each element of a peer education program – training, support, supervision, supplies, allowances – all of which requires realistic budgeting and careful monitoring.⁶ Increasingly program on peer education evaluation is being published documenting its impact on target audiences. Still, much stronger evidence exist on the impact of peer educators themselves in such areas as increased knowledge, adoption of safer sex behavior and improved attitude.⁶ HIV/AIDS is a major public health issue; however, new infections could be prevented if the desired impact is made on young people through interventions such as effective peer education program to improve their knowledge, attitude and practice. Therefore, this study is aimed at assessing the impact of peer education vis-a-vis attitudinal changes and practices on issues relating to HIV/AIDS among youths in North central Nigeria.

Materials and Methods

This study was carried out in Ilorin West Local Government Area (LGA) of Kwara State, Nigeria. This study was a classical experimental study, which was carried out in three stages that is: pre-intervention, intervention and post-intervention stages.

Using simple balloting, Government High School, Ilorin was selected among 17 Government Secondary School within the LGA where students without any previous peer education training on HIV/AIDS prevention participated in this study. A sample size of 80 students each for study and control groups was used.

The sample size was achieved using multistage sampling technique to select participants as follows:

1. Simple random sampling by simple balloting was used to select one of 17 secondary schools.
2. Systematic random sampling was used to select 160 participants using three (3) as the sampling interval calculated from the class register of a total of 481 students from SS1, SS2 and SS3. However, individual consent was obtained from the students to be part of the study; those that declined were replaced accordingly.
3. Stratification into males and females was made to allow for proportional gender distribution.
4. Stratification into control and study groups was effected.

Participants included male and female in-school youths within the ages of 15 to 24 whom had never had previous peer education training on HIV/AIDS with a control group of similar composition as the study group. Other youths not within the ages of 15 to 24 years and not student of Government High School, Ilorin was excluded from this study. A semi structured self administered questionnaire to assess the attitude and practices aspect of the students' behavior regarding HIV/AIDS prevention was used in collecting data from participants in the study and control groups. This questionnaire was administered before intervention and eight weeks after the peer education training.

Peer education training was conducted for the selected participants in the study group on various issues relating to HIV/AIDS. This took place in the school premises within a period of 4 days. Forth night mentoring meetings was held with the participants in the study group. Analysis of data collected was processed using statistical package for social science (SPSS) version 15. Data was properly cleaned, sorted and coded and was presented in tables and charts. Test for significance was done by using p-values and those less than 0.05 were considered statistically significant.

Results

Table 1 shows the respondents' attitude towards HIV/AIDS prevention. It also shows the statistical test for significance of various questions asked across both the study and the control group. The assessment of the respondents' practices on issues relating to HIV/AIDS prevention is as shown of Table 2.

Discussion

This study assessed the attitude and practices of the respondents using twenty five related questions in all before and after intervention. There was no significant difference before intervention when respondents in both study and control groups were asked if they thought they are at risk at contacting HIV/AIDS ($p=0.642$). The reverse was the case after intervention ($p=0.015$). Much more respondents (about 52.5%) in the study group thought that they are at risk at getting HIV/AIDS after intervention. This is in contrast with 85% achieved in a similar study which is much higher.¹⁰ As young people, the intervention may have given them a reason to see themselves as being highly

at risk of contracting HIV among other reasons like the respondents' involvement in sexual activity and frequency of condom use (Table 2). Also the respondents disclosed on Table 2 the various items they share with other people which might put them at risk at contracting the disease. That may be responsible for the reason why all the participants in the study group were willing to take the HIV test after intervention and when compared to those willing in the control group, it was found to be statistically significant (0.000). The information acquired from the PET may have given the participants ample evidence as to why they need to know their HIV status after some form of personal risk assessment. However, the study recorded only a slight

increase in the number of participants that knew their HIV status after intervention (Table 2). Perhaps if the study had made provision for HIV counseling and testing as part of the intervention, more of the participants may have had the opportunity to know their HIV status since their level of willingness was very high. A study carried out in Ibadan recorded a 64% willingness to be tested while the study conducted at Dar-es-Salam in Tanzania recorded a 66% willingness to be tested.^{11,12} They also agreed (97.5%) that HIV Counseling and Testing as well as HIV education are prevention services required to prevent the transmission.

Table 1. Respondents' attitude towards hiv/aids prevention

Questions and responses on respondents' attitude		Before intervention			After intervention		
		Study	Control	p-value	Study	Control	p-value
Respondents think they are at risk at getting HIV/AIDS	Yes	25	28	0.642	42	28	0.015
	No	55	52		38	52	
Respondents think healthy looking people could be HIV positive	Yes	45	48	0.642	64	46	0.003
	No	35	32		16	32	
Respondents think total abstinence from sex can protect you from HIV infection	Yes	43	35	0.184	62	35	0.000
	No	37	45		18	45	
Respondents think washing of vagina or penis immediately after sex can prevent HIV infection	Yes	27	8	0.001	18	8	0.032
	No	53	72		62	72	
Respondents wish to remain a virgin till they get married	Yes	74	72	0.596	78	72	0.620
	No	6	8		2	8	
Respondents think AIDS has a cure	Yes	34	24	0.068	14	24	0.068
	No	46	56		66	56	
Respondents think having more than one sexual partner can result in HIV infection	Yes	62	61	0.849	58	61	0.718
	No	18	19		22	19	
Respondents think mosquito bite can infect you with HIV infection	Yes	25	23	0.859	8	23	0.001
	No	55	57		72	57	
Respondents think putting prostitutes in prison will stop HIV spread	Yes	22	8	0.004	18	8	0.017
	No	58	72		62	72	
Respondents think risky behaviours like drinking alcohol and drugs abuse can prevent HIV infection	Yes	20	6	0.004	24	6	0.001
	No	60	74		56	74	
Respondents think HIV positive people survive	Yes	57	49	0.184	64	47	0.000
	No	23	31		16	33	
Respondents think people who engage in oral or anal sexual intercourse can be infected with HIV infection	Yes	70	34	0.000	60	34	0.000
	No	10	46		20	46	
Respondents think HIV infection can be contacted by sitting in the same class with a HIV positive person?	Yes	10	17	0.145	14	17	0.552
	No	70	63		66	63	
Respondents will hug their best friend if they discover he/she is infected with HIV	Yes	47	50	0.625	58	50	0.129
	No	33	30		22	30	
Respondents insist on sterilizing the clipper when they visit the barbing saloon Or insist on using a new, unused needle when they visit the hair dressing saloon	Yes	53	52	0.874	64	52	0.049
	No	27	26		16	26	
Respondents will like to have a HIV test	Yes	62	51	0.151	80	51	0.000
	No	18	27		0	27	

Table 2. Respondents' practices to hiv/aids prevention

Questions and responses on respondents' practices		Study group		Control group	
		Pre intervention (%) n= 80	Post intervention (%) n= 80	Pre intervention (%) n=80	Post intervention (%) n=80
Respondents engaged in sex	Yes	17 (21.3)	16 (20)	2 (2.5)	2 (2.5)
	No	63 (78.8)	64 (80)	78 (97.5)	78 (97.5)
Respondents' patronage of sex workers	Yes	0	0	0	0
	No	80 (100)	80 (100)	80 (100)	80 (100)
Respondents' frequency of condom use	Always	5 (6.3)	12 (15)	2 (2.5)	2 (2.5)
	Often	4 (5)	2 (2.5)	0	0
	Sometimes	8 (10)	2 (2.5)	0	0
	Never	0	0	0	0
	Not applicable	63 (78.8)	64 (80)	78 (97.5)	78 (97.5)
Respondents' number of past sexual partners	One	2 (2.5)	2 (2.5)	2 (2.5)	2 (2.5)
	Two	15 (18.8)	15 (18.8)	0	0
	More than two	1 (1.3)	1 (1.3)	0	0
	Abstaining	63 (78.8)	63 (78.8)	78 (97.5)	78 (97.5)
Items shared by respondents with other people	Needle	26 (32.5)	12 (15)	2 (2.5)	2 (2.5)
	Syringes	13 (16.3)	10 (12.5)	5 (6.3)	5 (6.3)
	Razors	28 (35)	22 (27.5)	14 (17.5)	14 (17.5)
	Hair clippers	34 (42.5)	20 (25)	12 (15)	12 (15)
Watching of pornographic movies by respondents	Yes	42 (52.5)	30 (37.5)	26 (32.5)	29 (36.2)
	No	38 (47.6)	50 (62.5)	54 (67.5)	51 (63.8)
Respondents awareness of their HIV status	Yes	21 (26.3)	27 (33.8)	14 (17.5)	15 (18.7)
	No	59 (73.8)	53 (63.8)	66 (82.5)	65 (81.3)
Respondents' willing to abstain from sex	Yes	39 (48.8)	52 (65)	62 (77.5)	60 (75)
	No	41 (51.3)	28 (35)	18 (22.5)	20 (25)
Number of peer(s) respondents have discussed HIV with	1-3	8 (10)	9 (11.3)	9 (11.3)	33 (41.3)
	4-6	0	59 (73.8)	0	3 (3.8)
	7-9	0	7 (8.8)	0	0
	10 and above	0	2 (2.5)	0	0
	None	72 (90)	3 (3.8)	71 (88.7)	44 (55)

This study shows 52.5% of participants in the study group having previous exposure to pornography which dropped to 37.5% after intervention. This habit may be responsible for 21.3% of the study group being involved in sexual activity and about 20.1% being involved in two or multiple sexual partners. Pornography portrays all manners of sexual activities which these youths may want to emulate. This result is comparable to what was reflected in a similar study where having multiple sexual partner was 32.7%.¹⁰ In a survey, almost all youth reported exposure to pornography with more than 98% reporting such exposure in the last six months.¹³ Figures relating to this are much lower among respondents in this study. Results from this study equally show that the intervention improved their response on attitude towards hugging an HIV positive friend in their class from 58.8% to 72.5%. Although, there was no

statistical significance between the study and the control group both before and after intervention ($p=0.625$ and 0.129 respectively). The increased percentage however may still be traced to the PET given to them. The non statistical significance among the study and control group goes to show the possibility that the control group may have obtained their information elsewhere aside the PET. This finding can be compared to that in a study carried out in Beijing where there was an increase from 45.3% to 74.7% ($p>0.01$) in those who would like to hug their friends if they get infected with HIV.¹⁴ Also, more participants in the study group agreed after intervention that one can get HIV infection sitting in the same class with an HIV positive person (from 12.5% to 17.5%, $p=0.552$ when compared to the control group). This is in contrast with the result recorded in Mieres where a study conducted show 89.6% of respondents said they would accept

someone with AIDS in their class.¹⁵ Apprehension may be responsible for this increase since it has been stated that no cure has been found yet. It may also mean that they may hug their HIV positive friend because he/she is known to them but are apprehensive when an unfamiliar person is involved.

Interestingly, it was observed that the intervention led to only an increase in the number that 'always' make use of the condom (6.3% to 15%) and led to a slight increase (78.8% to 80%) among those that do not use it at all. This may be as a result of improvement in attitude of most of them to abstain completely from sexual intercourse and of those that decided to remain virgins until marriage (97.5%). Although when this was compared with the control group, p-value was greater than 0.05 as almost all participants in the control group as well wish to remain a virgin till they get married. This may be as a result of prior counseling on the disadvantages and danger of pre marital sex by other means like parents, relatives and teachers. However, the discussion above is in contrast with the Malawi study where use of condom increased from 66.5% to 100%.¹⁶

The study revealed that none of the participants patronize sex workers (both study and control groups). This is a very good attitude among respondents as sex workers may be a source of transmission of the disease in question. Another positive change in the practices of the respondents in the study group was that before intervention, only 10% of the respondents had discussed HIV with at least one peer. This figure rose up to 96.2% after intervention. This singular change can lead to many other peers to be well educated on HIV/AIDS prevention issues which can help reduce the incidence and prevalence of the disease in our society. Although there was also an increase among the control group, the frequency was not as enormous as that obtained in the study group. The increase observed among the control group may be as a result of their curiosity after filling the questionnaire before intervention. They may wish to discuss the topic with their peer some of who may belong to the study group in order to get more knowledge about the disease.

In general, out of the sixteen questions asked on respondents' attitude, only four showed statistical significance between the study and control group before the intervention which shot up to eleven after intervention (Table 1). This goes to show that within the short period of peer education training, there was significant attitudinal change among the study group which shows the importance of PET. Also Table 2 revealed that the frequency of those having bad practices regarding prevention of HIV/AIDS also reduced after intervention. This reduction was much more in many instances when compared to the control group. Some level of information has been passed from the participants in the study group which is the fundamental objective of peer education training as an approach to empowering young people with

information to protect themselves especially against HIV infection. Behavioural change is a gradual process and the duration of this study may not be sufficient to observe any appreciable change in risky sexual behaviour among the study group.

Conclusion

This study has revealed that peer education training among youth can go a long way in educating them on issues relating to HIV/AIDS prevention. It can also bring about attitudinal changes and practices that may help in reducing incidence and prevalence of HIV/AIDS in our society.

Conflict of interest

There is no conflict of interest in this work.

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