



## IMPACT OF PEER EDUCATION TRAINING ON KNOWLEDGE OF HIV/AIDS AMONG IN-SCHOOL YOUTH IN NORTH CENTRAL NIGERIA

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### Abstract

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Around the world each year, more than half of all people newly infected with HIV are between the ages of 15 and 24. Research suggest that people are more likely to hear and personalize messages, and thus to change their attitudes and behaviors, if they believe the messenger is similar to them and faces the same concern and pressures. This study assessed the impact of peer education training in Ilorin west local government area of Nigeria using Government High School, Ilorin where previous training was absent. In-school youths of Government High School, Ilorin was randomly selected using simple balloting. Students were divided into study and control group. Each group had 80 students. This study was a classical experimental study, which was carried out in three stages that is: pre-intervention, intervention and post-intervention stages. A semi structured self-administered questionnaire was administered to participant before intervention and eight weeks after intervention to both the control and study groups. Data was analyzed and presented in form of tables. Frequency analyses were carried out using pre-determined p-value of 0.05. Result showed that the knowledge of students in the study group were better when compared with the control group after intervention. Peer education training has a positive impact on enhancing the knowledge of HIV/AIDS among students.

## *INTRODUCTION*

Around the world each year, more than half of all people newly infected with HIV are between the ages of 15 and 24. (WHO, 2006) Worldwide each day, 6,000 youth within ages 15-24 years are infected with HIV; that is 250 youths are infected during every hour of every day. (CDC, 2006)

Research suggest that people are more likely to hear and personalize messages, and thus to change their attitudes and behaviors, if they believe the messenger is similar to them and faces the same concern and pressures. (Manson, 2003)

Numerous studies have demonstrated that peers influence health behaviors of youths, not only in regards to sexuality but also in regards to violence and substance use. (ARFH, 2003) Peer education draws on the credibility that peers can provide enabling environment for meeting the needs of today's youths.(UNFPA, 2003) Peer education can also support youths in establishing positive group norms and making healthy decisions about sex. (Manson, 2003)

Peer education is an approach whereby peer representatives from a group or population actively attempt to inform and influence the majority. It is a process where young people educate and counsel their peers with a view to influencing a positive sexual and social behavior. (Manson, 2003)

A young person so trained is known as a peer educator. He/she is expected to exhibit or develop certain positive qualities that will help influence his peer into taking correct and informal decisions on issue related to their needs. (NYSC, 2003) It is a participatory approach which enhances participation of young people in programs that affect them. (Basset, 1998)

This study assessed the impact of peer education training in Ilorin west local government area of Nigeria using Government High School, Ilorin where previous training was absent. Peer education training was carried out among the study group as an intervention while another group served as control to evaluate the influence of the intervention on the control group and the impact was assessed after eight weeks.

## **METHODS**

This study was carried out in Ilorin West Local Government Area (LGA) of Nigeria. The Local Government has over eighty (80) schools across the area. There are 58 primary schools, five Home Economic centers and about 17 Government Secondary Schools. The following tertiary institutions are located in the area, University of Ilorin (temporary site), Kwara State Polytechnic (IOT), School of Nursing and Midwifery, College of Arabic and Islamic Legal Studies. There are over seventy Arabic schools in the area that pursue various foundation courses in Islamic and Arabic studies.

In-school youths within Ilorin West Local Government Area served as the study population out of which Government High School, Ilorin (G.H.S. Ilorin) was randomly selected using simple balloting from the list of 17 Government Secondary Schools within the Ilorin West LGA. Students without any previous peer education training on HIV/AIDS prevention participated. This study was a classical experimental study, which was carried out in three stages that

is: pre-intervention, intervention and post-intervention stages.

The minimum sample size was determined using the intervention formula for comparing two proportions in related sample population. Then 10% of the sample size was obtained and a total of 80 students each were used for study and control groups using multistage sampling techniques 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 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.

The study included male and female in-school youths within the ages of 15 to 24 with a control group of similar composition as the study group. They were all students of the G.H.S., Ilorin most of whom never had previous peer education training on HIV/AIDS. Other male and female in-school youths not within the ages of 15 to 24 years and not students of the Government High School, Ilorin was not part of the study.

Peer education training was conducted for the selected participants on basics of HIV/AIDS. This took place in the school premises within a period of 4 days. Forth night mentoring meetings was held with the participants.

Questionnaires were administered to the participants before the intervention and eight weeks after the intervention to both the control and study group known as pre and post training evaluation. This was used to assess the knowledge of the control and study group to observe if the intervention given to the study group will result in any change in the above mentioned variables among the control group. These were used to determine the impact of the training on the youths. Analysis of data collected was

processed using statistical package for social science (SPSS) version 11. Data was properly cleaned, sorted and coded and was presented in tables and frequency analysis was carried out using a pre-determined p-value of 0.05.

## *RESULTS AND DISCUSSION*

### **RESULTS**

A total of 41males and 39 females were used for the study group and a total of 38 males and 42 females were used for the control group. The mean age of study group and control group were  $16.55\pm 1.57$  and  $16.35\pm 1.30$ . The 2 groups had 16 and 15 as their median and modal ages respectively. The age generally ranges between 15 and 20 years. Both study and control groups composed of the same number of Muslims, Christians and traditionalist; 56 (70%), 20 (25%), 4 (5%) respectively.

The study group contained 35 (43.8%) SSS 1, 25 (31.3%) SSS 2 and 20 (25%) SSS 3 students while the control group had 34 (42.5%) SSS 1, 34 (42.5%) SSS 2 and 12 (15%) SSS 3 students. Table 1 summarizes responses to all the questions asked from the students relating to their knowledge on HIV/AIDS. After intervention, all

respondents in the study group gave the meaning of HIV as Human Immunodeficiency Virus (Table 1A), AIDS as Acquired Immune Deficiency Syndrome (Table 1B), agreed that HIV causes AIDS

(Table 1C) and HIV is a sexually transmitted infection (Table 1D). Almost all of them (97.5%) also agreed after intervention that HIV/AIDS has no cure (Table 1G).

**TABLE 1**  
**KNOWLEDGE OF RESPONDENTS' ON HIV/AIDS**

	STUDY GROUP		CONTROL GROUP	
	PRE (%)	POST (%)	PRE (%)	POST (%)
<b>A, MEANING OF HIV</b>				
Human Infectious Virus	16 (20)	0	24 (30)	22 (27.5)
Human Immunodeficiency Virus	32 (40)	80 (100)	36 (45)	40 (50)
Human Immunity Virus	32 (40)	0	20 (25)	18 (22.5)
<b>Total</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>
	<b>P= 0.003</b>		<b>P= 0.264</b>	
<b>B. MEANING OF AIDS</b>				
Acquired Immune Deficiency Syndrome	41 (51.3)	80 (100)	55 (68.8)	69 (86.3)
Action Infectious Disease Syndrome	12 (15)	0	5 (6.2)	4 (5)
Acquired Immunity Disease Syndrome	27 (33.8)	0	20 (25)	7 (8.7)
<b>Total</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>
	<b>P= 0.000</b>		<b>P= 0.122</b>	
<b>C. HIV CAUSES AIDS</b>				
Yes	46 (57.5)	80 (100)	36 (45)	64 (80)
No	34 (42.5)	0	44 (55)	16 (20)
<b>Total</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>
	<b>P= 0.000</b>		<b>P= 0.044</b>	

**D. HIV IS A SEXUALLY TRANSMITTED INFECTION**

Yes	30 (37.5)	80 (100)	12 (15)	13 (16.3)
No	50 (62.5)	0	68 (85)	67 (83.7)
<b>Total</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>
	<b>P= 0.000</b>		<b>P= 0.812</b>	

**E. MODE OF HIV TRANSMISSION**

Unprotected sex	69 (86.3)	80 (100)	60 (75)	72 (90)
Sharing of sharp objects	57 (71.3)	76 (95)	57 (71.3)	71 (88.8)
Transfusion of infected blood	69 (86.3)	74 (92.5)	59 (73.8)	72 (90)
Mother to child transmission	62 (77.5)	74 (92.5)	48 (60)	57 (71.3)
Mosquito bite	54 (67.5)	4 (5)	31 (38.8)	24 (30)
Sneezing	16 (20)	2 (2.5)	17 (21.3)	11 (13.8)
Touching	19 (23.8)	2 (2.5)	6 (7.5)	4 (5)
Holding hands	9 (11.3)	2 (2.5)	2 (2.5)	2 (2.5)
Sharing clothes, bath etc	40 (50)	4 (5)	24 (30)	29 (36.3)
Dancing	8 (10)	4 (5)	2 (2.5)	0
Kissing	53 (66.3)	6 (7.5)	29 (36.3)	35 (43.8)
Sharing drinking glass	18 (22.5)	2 (2.5)	19 (23.8)	17 (21.3)
Touching a toilet seat	16 (20)	4 (5)	16 (20)	16 (20)

**F. HIV/AIDS PREVENTIVE METHODS**

Abstinence	69 (86.3)	80 (100)	54 (67.5)	61 (76.3)
Faithfulness to one's sex partner	53 (66.3)	78 (97.5)	53 (66.3)	59 (73.8)
Not sharing sharp objects	57 (71.3)	79 (98.8)	68 (93.8)	79 (98.8)
Avoid transfusion of unscreened blood	61 (76.3)	76 (95)	75 (93.8)	79 (98.8)
Correct and consistent use of condom	60 (75)	77 (96.3)	69 (86.3)	70 (87.5)
Avoiding mosquito bite	36 (45)	2 (2.5)	30 (37.5)	15 (18.8)

**G. AVAILABILITY OF CURE FOR HIV/AIDS**

Yes	35 (43.8)	2 (2.5)	20 (25)	16 (20)
No	33 (43.8)	78 (97.5)	36 (45)	43 (53.8)
Don't know	12 (15)	0	24 (30)	21 (26.2)
<b>Total</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>	<b>80 (100)</b>
	<b>p= 0.000</b>		<b>p= 0.334</b>	

## DISCUSSION

The study group was made up of 41 males and 39 females while the control group was made up of 38 males and 42 females. This shows that proportional gender distribution was allowed. Results also showed that all the respondents were adolescents. . The selection of the participants cuts across the 3 senior classes i.e. SS1 (69), SS2 (59) and SS3 (32). The study also revealed that most participants were Muslim probably because Ilorin is a predominantly Islamic town.

The result showed that only 40 percent of the study group knew the correct meaning of HIV. This figure rose to 100 percent after the peer education indicating its good impact ( $p= 0.003$ ). The control group however did not show any significant difference between the pre and post peer education training ( $p= 0.264$ ). Similar observation was made when respondents

were asked the meaning of AIDS. All respondents in the study group gave correct meaning after training while only about half of them could give the correct meaning before the training. The p value was 0.000 showing that there was impact of the training. The number of people in the control group only increased marginally at the post intervention stage. The p value of 0.264 also showed that there was no statistical significance. Similar observation was made when respondents were asked whether HIV is a sexually transmitted infection or not and when respondents were asked if there is a cure for HIV/AIDS or not

Both study group and control group showed significant increase of number of people who knew that HIV causes AIDS ( $p= 0.000$  and 0.044 respectively). Students in control

group may have gotten their information through other means.

Generally, more of the respondents under the study group could identify the correct mode of transmission of HIV and less of them identified wrong modes post intervention. The reverse was the case for the control group (Table 1). Similar observation was made on HIV preventive methods.

In general the result obtained from this study is in agreement with results achieved in a similar study carried out at Ikerre Ekiti, Nigeria where knowledge increased from 70.7% to 100% (Ajewole and Osagbemi, 2007). Similar observation made in this study was made in a study conducted in Ibadan where 72% and 66% was recorded for transmission through unprotected sex and mother to child transmission (Ajuwon et al, 2000). Also 97.5% of respondents also knew that there was no cure for HIV infection in Malawi which was exactly the same with the result obtained in this study (Walden et al, 1999).

Result obtained in this study was however, in contrast with that obtained when respondents were asked if HIV/AIDS is a

sexually transmitted infection. In that study only 64.8% respondent positively post intervention at Malawi, this was however among sex workers (Walden et al, 1999).

### *CONCLUSION*

The results obtained from this study shows that peer education training had a positive impact on improving the knowledge of students towards HIV/AIDS generally. Students in the study group were better educated post intervention compared to the control group.

### *REFERENCES*

1. Ajewole IC and Osagbemi GK: Effect of health education intervention on knowledge, attitude and practice of youth concerning HIV/AIDS in rural Nigerian community. African journal of clinical and experimental microbiology. 2007; 8: 89-93.
2. Ajuwon AJ, Fawole F and Osungbade K: Knowledge of AIDS and sexual practices of young female hawkers in truck and bus stations in Ibadan, Nigeria, International Quarterly of Community Health Education. 200; 20: 133-143.



3. ARFH: A hand book on Adolescent reproductive health and HIV /AIDS for peer educators, Association for reproductive and family Health, supported by the vision project. 2003:1 – 4, 77 – 86.
4. Bassett M: Impact of Peer education on HIV infection in Zimbabwe, Sexual Health exchange, Royal tropical institute. 1998.
5. Centre for Disease Control and Prevention (CDC): HIV / AIDS Surveillance Report, Atlanta: US dept of health and human services. 2006; 16: 1 – 46.
6. Mason H: Peer Education: Promoting Healthy Behaviors, Advocates for Youth, Fact Sheets. 2003: 4 – 8.
7. NYSC Reproductive Health & HIV /AID Prevention project, 2003, Manuals for peer educators, UNICEF, ARFH, SFH: 8 -10, 42 – 46.
8. United Nation Population Fund (UNFPA): Promoting Healthier behavior – peer education and peer counseling, State of World Population. New York, UNFPA. **2003**.
9. Walden VM, Mwangulube K, Makhumula Nkhoma P: Measuring the impact of a behavior changes their potential clients in Malawi, Health Education Research, 1999; 14: 545 -554.
10. World Health Organization (WHO) Report: Risk and protective factors affecting adolescents reproductive health in developing countries, Internal Citation by Blum R.W, Mmari, Nelson K., WHO Department of Child Adolescent Health and development 2006: 2 – 145.