Full Length Research Paper

Effectiveness of television in communicating HIV/AIDS control messages in rural communities of Abia State, Nigeria

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The study investigated the effectiveness of television in disseminating Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome (HIV/AIDS) messages to rural communities in Abia State. Abia State is made of three senatorial zones. From two zones, 50 respondents were randomly selected bringing the total to 100 respondents. Data were generated through the use of interview schedule. The respondents were exposed to a special television documentary on HIV/AIDS over a two-day period; there was a 'before and after' evaluation after the T.V exposure programme. To determine the effectives of television messages, the 'before and after' results were subjected to descriptive statistical analysis. The E_2 to E_1 formula was used where E_1 = before the intervention measurement and E_2 = after intervention measurement. In all, the television message caused only 10% increase in the awareness/knowledge of HIV/AIDS messages among the respondents. It was therefore concluded that the television alone was not too effective in creating awareness and increasing knowledge on HIV/AIDS in the rural communities in Abia State. The paper recommended that the television and interpersonal communication methods should be combined in reaching the rural areas effectively with HIV/AIDS messages.

Key words: Effectiveness, human immunodeficiency virus/acquired immuno deficiency syndrome television, rural communities.

INTRODUCTION

Nigeria has passed through several phases in her response to the human immunodeficiency virus/ acquired immuno deficiency syndrome (HIV/AIDS) epidemic. The stages include an initial period of denial; a largely health sector response, and now a multi-sectoral response that focuses on prevention, treatment and mitigation of impact interventions. A central body in Nigeria is dedicated to leading and conducting the response, while the various sectors including civil society organizations, 'faith based organizations' and people living with HIV/AIDS support group, focus on packaging and implementing interventions based on a national action plan. Abia state

is one of the 36 states in Nigeria. Estimates from 2005 Sero-survey in Abia State puts adults living with HIV/AIDS at 7.7% (HSS, 2005). Following this survey, it has been established that HIV/AIDS epidemics are very real in Abia State, extensive in spread, serious in magnitude and have the potential of jolting the socioeconomic strides of the State. In addition to individuals' intrinsic vulnerability, various cultural, social and economic factors significantly influences the risk of acquiring HIV/infection. Among these factors are low level of education among the ruralites, ignorance, poverty, cultural practices like polygamy, culture of shyness which prevents open discussion and education on sexuality or reproduction. These factors leave the children and adolescents at the mercy of acquiring distorted information from equally uninformed peers.

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HIV/AIDS is also a striking example of the strong synergistic relationship between disease, poverty and ignorance. AIDS poses a greater threat to development prospects in poor countries than any other disease. The impact is said to be hardest among the poor, who have the weakest social support of any group and no economic strength to cushion the impact of the disease (UNAIDS, 2002). The spread of HIV/AIDS has been attributed to poverty. In Nigeria, an estimated 3.1% of adults between ages 15 to 19 are living with HIV/AIDS (UNAIDS, 2008). Although the HIV prevalence is much lower in Nigeria than in other African countries such as South Africa and Zambia, the size of Nigeria's population which is around 150 million meant that by the end of 2007, there were an estimated 2,6000,000 people infected with HIV with approximately 170,000 deaths (UNAIDS, 2008). With this large number of recorded deaths attributed to AIDS alone, Nigeria's life expectancy has declined significantly prompting the WHO (2008) to report that average life expectancy in the country which was 53.8 years for women and 52.6 years for men in 1991 has dropped to 46 and 47 years respectively in 2007. Also, in Abia State, according to ABSCA (2006), the rural prevalence rate was 13.6% scoring the highest in the country. Current and potential impact of the epidemic in the State includes absenteeism from work, low economic productivity, depletion of the work-force, worsening poverty, more school drop-outs especially for the girl-child and low agricultural output with threatening of food security and increase in the number of AIDS orphans (ABSEEDS, 2005).

Large number of deaths in the productive population age groups can ultimately lead to large scale economic and development losses in the affected communities. This problem will create a vicious cycle leading to an almost permanent trap in the absence of effective strategic interventions. In Abia State, a lot of educational campaigns have been carried out to increase the level of awareness/knowledge of the people and to mitigate the spread of the disease (SEEDS, 2005). There are radio soap opera, television programs, discussion guides, posters and billboards. All these efforts have been conducted with useful messages and also with the intention that the information can create an environment that is conducive for safer behavioural practices. Unfortunately these communication interventions have not seemed to be very successful (Lambo, 2004; Achebe, 2004). This is because the epidemic continued to spread despite all these efforts. It is therefore concluded that something must be wrong in the communication strategy being adopted. The television has played visible roles in the human immunodeficiency virus (HIV)/acquired immuno deficiency syndrome (AIDS) epidemic in developing countries (Betrand et al., 2006). The purpose of this study was to determine the effectiveness of television in disseminating HIV/AIDS information to rural communities in Abia State. In this study, respondents

who did not have previous exposure to television messages were exposed to HIV/AIDS television messages. The objective was to measure their awareness and knowledge of HIV/AIDS before and after the exposure among the respondents.

METHODOLOGY

The study was conducted in Abia State, Nigeria. Abia State is in the South-east geo-political zone of Nigeria. The indigenous language is Igbo, while the official language is English. However, because of the entrepreneurial and migratory nature of the people, they are found everywhere in Nigeria and around the world. Apart from agriculture which is common among the ruralities, commercial activities constitute the major occupations of the State. The state is landlocked by states most of which have significantly higher than the National average of 3.6% HIV prevalence [4.0% Anambra, 3.7% Imo, 3.9% Ebonyi and 7.7% Enugu (HSS, 2005)] putting the state at a higher propensity of the spread of the HIV epidemic.

Television message intervention

A two-day special television documentary on HIV/AIDS was produced in the local igbo language. The documentary was on creating awareness of the devastation of the disease and knowledge of its prevention. The film was presented to an audience who had not seen the documentary or something similar to it before. After the exposure, there was a "before and after" evaluation of the respondents, to determine the level of increase in awareness and knowledge of the disease. Multistage sampling technique was used in collecting the data. Abia State is made up of three political zones and two zones, Abia South and North were randomly chosen for the study. From these zones, two Local Government Areas - Ohafia for Abia North and Obingwa for Abia South were chosen. A community was randomly chosen from each Local Government Area. The communities were Akanu-ukwu from Ohafia L. G. A and Mgboko Amiri from Obingwa L. G. A. From these communities 2 villages Abia village from Ohafia L. G. A. and Mgboko from Mgboko Amiri were purposively selected because of the cosmopolitan nature of the people particularly migrant labourers and truck drivers' activities. In each village, 50 respondents aged 10 to 49 for women and 15 to 65 for men were randomly selected bringing the number to 100 respondents. An interview schedule was developed to elicit - information on their socio-economic characteristics and to ascertain their level of awareness/knowledge of HIV/AIDS before and after intervention. In the pre-intervention study, the respondents were administered with a 19 - point questionnaire. Any positive response attracted 1 mark; otherwise zero (pre-intervention exercise). After two weeks, the respondents were exposed to television channel carrying the same message on HIV/AIDS. After two weeks of the television messages, the respondents were asked the same pre-intervention questions to determine the level of knowledge gain. Data were analyzed with simple descriptive statistics like frequency distribution, Likert type scale and probit model. Level of awareness/knowledge was measured by asking the respondents 19-point questions reflecting the nineteen key messages carried by the HIV/AIDS campaigns. Using Likert-scale the level of awareness/knowledge was summarized and categorized into three levels (Ekwe, 2004). These levels were obtained by dividing the nineteen spaces in the scale (0 to 19) into three parts, with a unit interval of 6.3.

The level of knowledge was considered to be high if the mean number of responses were within 12.7 to 19; moderate if the mean number was 6.4 to 12.6 and low if the mean number of responses

Variables	Frequency	Percentage
Sex		
Male	62	62
Female	38	38
Age		
10 – 15	6	6
20 – 25	18	18
30 – 35	32	32
40 – 45	24	24
50 – 55	15	15
60+	5	5
Occupation		
Farming	31	31
Artisans	29	29
Civil Servant	23	23
Students	17	17
Income (N , 000)		10
20	16	16
40	-	-
60	24	24
80	20	20
100	24	24
120	16	16
140+	-	-
Educational level	10	40
INON TORMAI	48	48
Primary	22	22
Secondary	28	28
lertiary	2	2

 Table 1. Distribution of the respondents according to their selected socio-economic characteristics.

was within 0 to 6.3. The effectiveness of the medium was determined as follows:

 E_1 = measurement before intervention (pre-interventions).

 E_2 = measurement after intervention (intervention proper).

Effectiveness = $E_2 - E_1$.

Probit regression was used to determine the factors that influenced the awareness/knowledge of the television messages. The explicit form is stated as follows:

 $Y = f (X_1, X_2, X_3, X_4, X_5, X_6 + e)$

Where Y = Dependent variable.

 $X_1 = Age$ measured in years.

 $X_2 = Sex = Dummy variable; Male 1; Female.$

 X_3 = Education (measured in number of years of formal schooling). X_4 = Income measured in Naira; from major occupation (cost of acquisition of medium) dummy; affordable 1; not affordable 0). $X_5 = Cosmopoliteness \ (degree \ of \ outside \ orientation) \ measured \ in the number of times an individual travelled outside his environment.$ Dummy variable 1 to 3 not regular, 4 to 8 times regular.

 X_6 = Technical skill (ability to use; dummy variable skilled 1; unskilled 0).

 X_7 = Time (time to spare on income generating activities in order to attend meetings. Dummy variable have time 1; no time 0).

 X_8 = Occupation (income generating activities in which one engages in (dummy variable) farming activities 1; otherwise 0.

 X_9 = Permission consent from spouse or religious leader (dummy variable, consented 1; otherwise 0).

e = error term.

RESULTS AND DISCUSSION

Description of selected personal characteristics

Table 1 revealed that 62% of the respondents were

Total awareness score	Abia S	outh	Abia North	
	Frequency	Percentage	Frequency	Percentage
High awareness	16	32	13	26
Low awareness	34	68	37	74
Total	50	100	50	100

Table 2. Distribution of respondents on their level of awareness before intervention.

Source: Field survey (2008).

males while 38% were females. The implication of male dominated community especially in the African traditional context is that most of the time, the female becomes a prev because according to Claudia et al. (2000), women are often prevented from effectively taking decisions of their own lives including choices about when with whom and under what conditions to have sex. He further explained that in another study (1995), 95% of the women surveyed reported that their first sexual encounter was forced. Data on Table 1 also revealed that a guarter of the respondents were below the ages of 25 years while 54% were between 30 and 45 years of age. This shows that the majority of the respondents were in their active economical and reproductive age. According to ABSCA (2006) these age groups are badly affected by the epidemic in the rural Abia State. Results from the same table indicated that higher percentage of the respondents (31%) engaged in farming activities, while the rest were civil servants (23%) and artisans (29%); 17% were students. Farming activities generated about 80% of the population's livelihood. Further, results in Table 1 revealed that the majority of the respondents earned less than N100.000 per annum. One of the important factors in the spread of HIV/AIDS is poverty and economic insecurity. According to Staineki (2000), poverty limits people's options for protecting themselves and forces them into a situation of heightened risk, their ability to make sound choices about sex practices. The results further revealed also that most of the respondents had no formal education. Though the lack of education does not impair watching television, however, it enhances comprehension of messages.

Respondents' level of awareness before television intervention

Before the intervention exercise, the respondents from both zones were asked the following questions in order to determine their level of knowledge. Are you aware of the HIV/AIDS epidemics? Do you know the meaning? Have you seen somebody suffering from the epidemic? Results on Table 2 revealed that 32% of the respondents from Abia South had high awareness level while 68% had low awareness level. From the same table, 26% of the respondents from the Abia North had high awareness level. From the results, it could be seen that there were generally low levels of awareness in the study areas.

Respondents level of awareness after television intervention

During the intervention exercise, the respondents were exposed to the television programme over a two - night period. After that, they were administered with the same pre interview questionnaire. Table 3 presents the total awareness level of the respondents after intervention. The respondents level of awareness from Abia South increased from 32 to 48% after intervention, while that of the North increased from 26 to 44%. The intervention exercise of the respondents showed that there was 16% level of effectiveness in Abia South while that of Abia North was 18%. This result shows an improvement on the awareness level. Leeuwis (2006) indicated that "even if people pay attention, they may not understand the message in the way indicated because the audience is not familiar with the language and terminology that is used or do not have the pre-existing knowledge that is assumed". That is the reason why some of the respondents still had low awareness level after exposure to television intervention.

Respondents level of knowledge of HIV/AIDS before intervention

After determining the level of awareness of the respondents, further questions were asked in order to ascertain the level of knowledge of the respondents concerning the epidemic. Table 4 indicated the respondents' level of knowledge before the intervention exercise. The respondents from Abia South had 42% level of knowledge before intervention while that of Abia North had 54% level of knowledge before intervention. From the results, there were some differences in the level of knowledge of the respondents between the zones. This could be due to the different context and environment.

Respondents level of knowledge of HIV/AIDS after intervention

After the pre-intervention exercise, the respondents from

Table 3. Distribution of respondents on their level of awareness after intervention.

	Abia	Abia South		Abia North	
Total awareness score	Frequency	Percentage	Frequency	Percentage	
High awareness	24	48	22	44	
Low awareness	26	52	28	56	
Total	50	100	50	100	

Source: Field survey (2008).

Table 4. Distribution of respondents on their level of knowledge before intervention.

Total knowledge ecore	Abia S	South	Abia North	
Total knowledge score	Frequency	Percentage	Frequency	Percentage
High knowledge	21	42	27	54
Low knowledge	29	58	23	46
Total	50	100	50	100

Source: Field survey (2008).

Table 5. Distribution of respondents on their level of knowledge after intervention.

	Abia	South	Abia North	
lotal knowledge score	Frequency	Percentage	Frequency	Percentage
High knowledge	24	48	32	64
Low knowledge	26	52	18	36
Total	50	100	50	100

Source: Field survey (2008).

the two zones – Abia South and North were exposed to television channel of communication carrying the same messages on HIV/AIDS before exposure to intervention. Results on Table 5 show the respondents' level of knowledge after the intervention exercise. The respondents' level of knowledge from Abia South increased from 42 to 48% while that of Abia North increased from 54 to 64%. One might have expected higher increase in knowledge after exposure to the television channel. The reason might be that the respondents needed more exposure to messages before there would be significant knowledge gain.

Effectiveness of the television channel

The main objective of the paper was to determine the effectiveness of 'television' as a channel in disseminating HIV/AIDS messages in rural communities of the Abia State. After exposing the respondents to the intervention exercise, the effectiveness of the television channel was determined by comparing the level of knowledge before and after intervention. Table 6 indicates that the level of knowledge of the respondents before exposure (E_1) was

42% for Abia South and 54% for Abia North. The table further revealed the respondents level of knowledge after intervention (E_2) for Abia South was 48% and that of Abia North 64% respectively. The effectiveness of the channel was determined by finding the difference before and after exposure to intervention (E_2 to E_1). Effectiveness of the message was 6% for Abia South and 10% for Abia North.

Determinants of the awareness/knowledge level of the television messages

From the results on Table 7, gender had a positive significant relationship with awareness/knowledge in Abia North but inverse relationship in Abia South. The implication of this result is that gender did not affect awareness of HIV/AIDS in Abia North communities while it did in Abia South. This result agreed with UNICEF (2001) which stated that, there are still gaps in the level of knowledge with women less informed than men. The table further revealed that age had no association with level of awareness/knowledge in Abia North while in Abia South age had a positive and statistical significant relationship with Y, which meant that the level of

Table	6.	Levels	of	knowledge.
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Variable	Abia South (%)	Abia North (%)
Before (E ₁)	42	54
After (E ₂)	48	64
Effectiveness (E ₂ to E ₁)	6	10

Source: Field survey (2008).

Table 7. Determinants of level of a	awareness/knowledge	of the re	espondents
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ABIA North				
Variables	Coefficient	T-ratio		
Intercept	-4.699	-21.205***		
Sex	O.554	5.316***		
Age	5.70E-03	0.297		
Education	0.360	4.965***		
Marital status	0.667	4.139***		
Income	0.006	4.367***		
Cosmopoliteness	-0.170	-1.627*		
Abia South				
Variables	Coefficient	T-ratio		
Intercept	-3.730	-17.571***		
Sex	0.016	0.190		
Age	0.018	3.495***		
Education	0.038	5.630**		
Marital status	0.087	0.909		
Income	-0.003	-3.144***		
Cosmopoliteness	0.245	2.385		

Pearson goodness of fit chi-square for Abia North = 64454.838***. Pearson goodness of fit chi-square for Abia South = 392.613. Note: ***Significant at 1%. **Significant at 5% and *significant at 10%. Source: Field data (2008).

awareness/knowledge increased with age and this confirms the statement by UNICEF (2001) that awareness/knowledge of AIDS is slightly lower in the 15 to 19 age group - highlighting the importance of informing this group that is beginning sexual relations. Education had a positive and statistical significant relation with Y in both zones. The implication is that the more educated an individual is, the more his/her knowledge of events around him/her increases. This is because education increases or widens information horizon of an individual (Nwachukwu, 2003). The result also revealed that income had a positive and statistical significant relationship with Y in Abia North and inverse relationship with Y in Abia South. This meant that the higher the level of income of the respondents in Abia North, the higher their level of awareness/knowledge on HIV/AIDS because they could afford to carry out extra expenses like buying radio, newspaper, television which will lead to increase in awareness/knowledge of current issues including HIV/AIDS epidemic. However, in case of Abia South, their level of income did not affect their level of awareness/knowledge of HIV/AIDS. In Abia North, marital status had a positive and statistical significant relationship with Y; the implication is that married people can interact freely on sexual matters; thereby increasing their knowledge on HIV/AIDS while unmarried people may shy away from such discussion especially in Abia South and marital status had no association.

Cosmopoliteness had inverse relationship with Y in Abia North which implied that their degree of interaction/visit to urban areas did not increase their level of awareness/knowledge on HIV/AIDS. In Abia South, cosmopoliteness had a positive and significant relationship with Y. This meant that, their degree of outside orientation increased their level of awareness/knowledge through interaction with other networks.

Conclusion

The results of this study showed that the use of television

in disseminating HIV/AIDS messages in rural communities of Abia State resulted in increasing HIV/AIDS knowledge by 6% in Abia South and 10% in Abia North respectively. The low level of effectiveness meant that the television cannot be the best medium for the transfer of HIV/AIDS messages to the rural audiences. It meant that other media channels should be used in a mixture to complement the advantages of television as a channel of diffusion in rural areas.

RECOMMENDATIONS

1) In order to scale up the level of effectiveness, communication planners should be careful in designing the messages (making it brief and straight to the points) and avoid the use of complex technical words. The result shows that rural audiences where the greater percentage of the population resides take time to internalize television messages.

2) Broadcasting facilities were not available in those communities and television signals were very poor. Establishment of telecentres becomes necessary as this will provide local centres where individuals can utilize the channel. This will help those who do not have such facilities in their own homes or work place to ensure that they are not excluded from accessing information especially on HIV/AIDS messages.

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