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The Role of Radio in the Campaign against the Spread of HIV/AIDS among Farmers in Makurdi Local Government Area of Benue State, Nigeria

V. U. Oboh[1] and R. M. Sani[2]

1. Department of Agricultural Economics, University of Agriculture, Makurdi Nigeria
E-mail: vuoboh@yahoo.com
2. Agric Economics and Extension Programme, Abubakar Tafawa Balewa University, Bauchi, Nigeria

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ABSTRACT The study assessed the role of radio Benue in the campaign against the spread of HIV/AIDS among farmers in Makurdi Local Government Area (LGA) of Benue State, Nigeria. A total of 140 respondents were selected for interview using a simple random sampling technique. The collected data were analyzed using frequencies, percentages, Chi-square and logit regression model. Results of the study showed that HIV/AIDS radio programmes packaged in Pidgin English, local language or dramatized enhance farmers' interest, listenership and positive change in behavior. In addition, farmers' level of education, gender and ownership of radio sets were found to positively improve their level of satisfaction with HIV/AIDS radio programmes. Based on these findings, it was recommended that intervention polices aimed at combating HIV/AIDS scourge should package more radio programmes in Pidgin English, drama and local languages.

1. INTRODUCTION

Since the first case of Acquired Immune Deficiency Syndrome (AIDS) was recognized in 1981 in the United States of America, its impact has been felt most severely on the economies of the developing world. Given that AIDS kill mostly people between 15 – 49 years of age group, it is therefore uniquely devastating in terms of increasing poverty and reversing human development achievements (UNDP 2001).

Incidence and prevalence rates in Africa and most especially in Nigeria are staggering. According to Ayankogbe et al.. (2003), about 40 to 50 percent of the city dwellers in some African countries have AIDS while in Nigeria; the prevalence rate in 2001 was 5.8 percent. This translates to over 2.7 million people.

Nigeria is an agrarian economy and the negative impact of HIV/AIDS on agriculture is monumental. Several studies have suggested that AIDS can impact negatively on the rural household productive capacity through reduced quality and quantity of household's labor and depletion of household's financial resources (Evans 1992; Barnett and Blaikie 1992; Gillepsie 1989).

Health communicators have laid emphasis on the pivotal role of the media in the fast spread of scientific information related to the pandemia and viewed the vehicle of the media, especially the radio as necessary in curtailing the disease (Idu and Obinne 2003). In developing countries, radio and to some extent, televisions are the most effective tools of communication since they cut across literacy boundaries. According to Kuponiyi (2000), radio is one broadcast medium that almost all experts agree is the most appropriate for rural and urban emancipation programme. Radio beats distance and thus has immediate effect. Radio is also cheap to obtain and widely owned by people due to the advent of the battery – operated transistorized sets (Moemeka 1993).

Due to its widest outreach, the government of Benue state in North Central Nigeria has been featuring several HIV/AIDS awareness programmes through her state-owned radio station called "Radio Benue". The programmes are broadcast both in English and in the two major local languages: Tiv and Idoma. The ultimate goal of this radio campaign is to create awareness and therefore prevent the further spread of the virus.

Since the commencement of these programmes on radio, no empirical attempt has been made to examine the contribution of the station towards the campaign against the spread of HIV/AIDS. The study is therefore an attempt to examine the role of radio Benue in the campaign

against the spread of HIV/AIDS among farmers in Benue State. An empirical study of this type is necessary in order to assess the role of the radio station in its campaign against the spread of HIV/AIDS with a view to identifying areas where improvement is needed.

The general objective of this study therefore is to assess the role of radio Benue in the campaign against the spread of HIV/AIDS among farmers in Benue state. Specific objective include to

i. Determine the sources of HIV/AIDS information available to farmers in the study area
ii. Identify and determine the relative importance of HIV/AIDS programmes broadcast on radio Benue.
iii. Determine factors affecting farmers' level of satisfaction with the radio programmes and
iv. Ascertain if there is any behavioral change among farmers after their exposure to the HIV/AIDS programmes broadcast on radio Benue.

Two hypotheses were stated. The first was to test if age, education, gender, ownership of radio, social participation and language of communication of farmers has any significant effect on their level of satisfaction with HIV/AIDS programmes broadcast on the radio. Secondly, a hypothesis was stated to test for a significant relationship between farmers' behavioral change after exposure to HIV/AIDS radio programmes and farmers' selected socio-demographic characteristics.

2. METHODOLOGY

Makurdi local Government Area (LGA) is one of the 23 local government areas of Benue state of Nigeria. It lies between longitude 8^0 and 9^0E and latitude 6^0 and 8^0N. The state has an estimated population of 226, 192 (based on 1991 National population census figure) and a land area of 804Km. It is made up of 10 council wards namely Nyiev/North Bank, Mbalagh, Fiidi, Bar, Agan, Madikpo, Clerk/ Central Mission, Ankpa/ Wadata, Wailomayo and Modern Market.. The inhabitants of Makurdi local Government Area are mainly farmers, fishermen, and civil servants. The rich alluvial soil due to the activities of river Benue (the second largest river in Nigeria) forms the basis for agricultural activities in the area. However, Benue State has one of the highest state – level HIV infection rates and this has put farming, which employs 89% of the working population, under stress.

A total of 140 respondents were selected for the study through simple random sampling techniques. This sample is made of 14 farmers each from the 10 council wards. The selection was done through the help of village agricultural extension agents within Makurdi local Government Area. Primary data were collected from the respondents using structured questionnaires. Information obtained included socio – demographic characteristics of farmers, their level of knowledge, opinion and satisfaction about HIV/AIDS programmes broadcast through radio Benue. Secondary data from literature as well as baseline information from radio Benue on her HIV/AIDS programmes were also obtained.

Data analysis was done using descriptive statistic, chi-square and the logit regression model.. Chi-square was employed to determine the relationship between farmers' behavioural change with regards to HIV/AIDS and some selected characteristics of respondents. The logit model estimated the determinants of farmers' level of satisfaction with HIV/AIDS radio programmes. The analysis requires a definition of "Satisfaction" with HIV/AIDS radio programmes. Farmers were asked to indicate whether they were satisfied with each of the 5 identified HIV/AIDS programmes on the radio using 'yes' or 'no'. Each answer in the affirmative scored one point with a maximum of 5 points and a minimum of zero point. In this scale, respondents with mean score of 2.5 and above were treated as 'satisfied', while those with mean less than 2.5 were treated as " not satisfied". This method was earlier adopted by Ekumankama (2000)

The parameter of the logit model was estimated using the maximum likelihood estimators' method. The logit specification is suited to models where the dependent variable is dichotomous, which in this case are the "satisfied" and the "Not satisfied". The dependent variable takes the value of one and zero where one represents being satisfied and zero otherwise. The logit model is given as

$$E(Y_i) = I/X_i = \frac{1}{1+e^{-(\beta+\beta_{xi})}} =$$

$$= e\,\frac{\beta+\beta_{xi}}{1+e^{\beta+\beta_{xi}}}$$

Where Y_i is the dichotomous dependent

variable, X_i represents the explanatory variable for the ith farmer and i is the unknown parameter to be estimated. The empirical form of the model is specified ass

$Y_i = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$ where

Y_i = Satisfaction status (1 if satisfied; 0 otherwise)
X_1 - Age (years)
X_2 = Educational level (number of years spent in formal school)
X_3 = Gender (1 if male; zero otherwise)
X_4 = Ownership of radio (1 if owned a radio; zero otherwise)
X_5 = Social participation (1 if belonged to any socio – religious organization; zero otherwise)
X_6 = Preferred language of communication (1 if non-English, zero otherwise).
e = Error term

The study could not be extended to cover the entire state due to financial constraints as no external financial assistance could be obtained to fund the research.

3. RESULTS AND DISCUSSION

3.1 Some Selected Socio – Demographic Features of the Respondents

Table 1 contains data on selected socio-demographic features of the sampled farmers. Most of the farmers were male (68.6%) and married (52.1%). In addition, majority of them (82.9%) were young and aged between 20 – 39 years with a mean age of 33 years. Most respondents (88.6%) also received formal education while about 70% possessed functional radio sets. Thus, the farmers' youthful age, high literacy level coupled with high possession of radio sets tend to place them in good position to enhance their listernership and understanding of HIV/AIDS programmes, broadcast through the radio station.

3.2 Sources of HIV/AIDS Information to Respondents

According to Table 2, radio Benue, Makurdi served as the main source of HIV/AIDS information to about 75% of the respondents. This is followed by friends/Neighbors (62.1%) and Churches/Mosques (59.3%).. This corroborates the findings of Olaleye (2003) in Ondo state, Nigeria, where radio was also the most useful source of creating HIV/AIDS awareness to farmers. The relatively low patronage of media channels such as newspapers, Magazines, seminars and Television in this study may be attributed to poor coverage, poor reading habits and weak purchasing power of Nigerian farmers as earlier observed by Ayankogbe et al. (2003). Agricultural extension agents provided HIV/AIDS information for only 37.9% of the farmers. This is low in view of the redefined role of extension agents. In addition to the dissemination of proven farm technologies, extension agents are expected to disseminate HIV/AIDS awareness information to farmers (Egbule and Njoku 2001).

Table 1: Some socio – demographic characteristics of respondents

Variable	*Categories*	*Frequency*	*Percentage*
Gender			
	Male	96	68.6
	Female	44	31.4
Marital Status			
	Single	58	41.4
	Married	73	52.1
	Divorced	5	3.6
	Widow	4	2.9
Age (Years)			
	20 – 29	53	37.9
	30 – 39	63	45.0
	40 – 49	15	10.7
	50 – 59	6	4.3
	60 and above	3	2.1
	Educational Level		
No formal Education		16	11.4
	Primary Education	30	21.4
	Secondary Education	50	35.7
	Post- Sec. Ed.	44	31.5
Ownership of Radio Set			
	Yes	98	70
	No	42	30

Source: Field Survey, 2006.

Table 2: Distribution of respondents by sources of HIV/AIDS information

Sources	*Frequency*	*Percentage*
Radio Benue	105	75.0
Friends/Neighbors	87	62.1
Churches/Mosques	83	59.3
Posters/Handbills/Bulletins	76	54.3
Newspapers/Magazines	69	49.3
Television	59	42.1
Extension Agents	53	37.9
Other radio Stations	22	15.7
Seminar/Workshop/Symposia	15	10.7

Note: Total Observations > 100% due to multiple responses
Source: Field Survey 2006

3.3 HIV/AIDS Programmes in Radio Benue and Farmers' Level of Satisfaction

Table 3 showed the five main HIV/AIDS programmes that are broadcast through radio Benue. These include – "One thing at a time", Heal the World', and "Your Health". The other two are broadcast in the two major indigenous languages, which are Tiv and Idoma. These are "Mkpe Iyol Wase" (Your Health) in Tiv and "Ololi Iye" (Your Health) in Idoma. It is clear from the table that 'one thing at a time' was most popular (81.4%) followed by "Mkpe Iyol Wase' (Your Health in Tiv) (61.4%). Farmers also indicated more satisfaction with "One thing at a time" (72.9%) followed by "Your Health in Tiv" (60%). "One thing at a time" attracts more listenership and interest probably because it is a drama programme that is broadcast in "pidgin" English. The second most popular programme – your Health in Tiv, on the other hand, was introduced on the radio longer than others. It is also broadcast in 'Tiv' language, which is the mother tongue of majority of the farmers in the study area. This result confirms the findings of Idu and Obinne (2003) that majority of rural dwellers prefer HIV/AIDS messages to be communicated to them in 'pidgin' or in their vernacular languages. The result also suggests that, despite the high literacy level of farmers in the study area, the use of 'pidgin' English, drama and local language in communicating HIV/AIDS message enhances listenership and interest.

Table 3: Distribution of respondents based on listener ship to and level of satisfaction with HIV/AIDS programmes on Radio Benue

HIV/AIDS programmes	*Listenership*		*Satisfaction*	
	Freq.	*%*	*Freq.*	*%*
One thing at a time	114	81.4	102	72.9
Heal the World	75	53.6	53	37.9
Your Health	74	52.9	49	35.0
Your Health (Tiv)	86	61.4	84	60.0
Your Health (Idoma)	27	19.3	19	13.6

Note: Total observations > 100 due to multiple responses
Source: Field Survey 2006

3.4 Logit Result Showing the Determinants of Farmers' Level of Satisfaction with HIV/AIDS Programmes

The results of the logit analysis are summarized in Table 4. The model is significant based on the overall chi-square statistics. Educational level, gender, ownership of radio and preferred language of communication were found to be significant determinants of farmers' level of satisfaction with HIV/AIDS programmes. The variable-farmers' level of education was positive and significant at 1% probability level, implying that an increase in farmers' level of education increases the probability of farmers' satisfaction with HIV/AIDS radio programmes.

Gender of respondents, as a variable, was also significant and positive. This implied that male farmers were more likely to be satisfied with HIV/AIDS programmes on radio than their female counterpart. This finding may be explained by the tight time schedule of an average working Nigerian woman.

Farmers' ownership of radio sets increases their likelihood of getting satisfied with HIV/AIDS radio programmes. This may be because ownership of radio guarantees farmers' relative access to HIV/AIDS programmes on the radio. The result also showed that farmers who preferred local languages as a medium of communication were more likely to be satisfied with HIV/AIDS programmes broadcast through the radio. Farmers seemed to understand HIV/AIDS messages better when broadcast in their local languages. Age of farmers and their level of social participation were found to be insignificant.

Table 4: Logit results for the determinants of farmers' level of satisfaction with radio HIV/AIDS programmes

Explanatory variables	*Coefficients*	*Standard Errors*
Age (X_1)	0.157	0.086^{NS}
Education level (X_2)	0.522	0.202**
Gender (X_3)	0.595	1.175**
Ownership of radio set (X_4)	3.811	1.375**
Social participation (X_5)	1.854	1.175^{NS}
Preferred language of Communication (x_6)	-1.343	-0.293*
Intercept	8.990	8.079
-2 Log Likelihood ratio	29.075	
Chi-square	98.218**	
R^2	0.937	

*Note:** = Significant at 5%; ** = Significant at 1%.
NS = Not significant at 5%
Source: Field Survey, 2006.

3.5 Change in behavior of Respondents after exposure to Radio Messages.

Table 5 reported that majority of the respondents (66.4%) responded positively to radio programmes by changing their behavior, while

Table 5: Respondents' level of behavioral change due to Radio Benue HIV/AIDS awareness programmes

Behavioral change	*Frequency*	*Percentage*
Yes	93	66.4
No	47	33.6
Total	140	100.0

Source: Field Survey, 2006

the rest (33.6%) did not. This suggests that, about one third of the respondents were yet to accept and adopt HIV/AIDS programmes broadcast through the radio.

The test of significant relationship between behavioral change of farmers and some socio – economic factors using chi-square is shown on Table 6.

The result revealed that educational level, income and social participation status of respondents were significantly related to their change of behavior as a result of HIV/AIDS radio programmes. Education has been found to enhance farmers' understanding and acceptance of new ideas on HIV/AIDS (DFID 2004) hence its significant relationship with behavioral change of respondents. In addition, farmers' income and participation in social activities enable them to easily access recent developments concerning HIV/AIDS. This result suggests that farmers' change of behavior resulting from HIV/AIDS radio awareness campaign may be improved significantly if their level of education, income and social participation improve. This result in supported by Egbule and Njoku (2001).

Table 6: Relationship between behavioral change of farmers with respect to HIV/AIDS and selected socio – economic variables

Variables	*Degree of freedom*	*Chi-square value* χ^2	*Contingency coefficient*
Sex	1	0.094^{NS}	0.026
Education	3	42.555*	0.483
Income	3	38.559*	0.465
Social participation	1	35.875*	0.452

N = 140; * = Significant at 5%;
NS = Not Significant at 5%
Source: Field Survey, 2006.

4. CONCLUSION AND RECOMMENDATION

This study shows that farmers' sources of HIV/AIDS awareness information are diverse but radio remains the major source. Despite farmers' high literacy level, they still showed high preference for radio programmes that are packaged in Pidgin English, drama and local languages.

In addition, educational level and ownership of radio significantly improve farmers' level of satisfaction with the radio HIV/AIDS awareness programmes. On the other hand, gender and preferred language of communication significantly affected farmers' satisfaction negatively. It was further established that income, level of education and social participation status of respondents had significant relationships with their behavioral change.

Intervention polices in HIV/AIDS scourge should package more radio programmes in Pidgin English, drama and local language of respondents. These may enhance listernership, interest and positive change of behavior.

REFERENCES

Ayankogbe OO, Omotola BD, Inem VA, Ahmed OA, Manafa OU 2003. Knowledge, Attitude, Beliefs and Behavioural practices for creating awareness about HIV/AIDS in Lagos State, Nigeria. *Nigerian Medical Practitioners*, 44(1): 7 – 10.

Barnett T, Blaikie P 1992. *AIDS in Africa: It's Present And Future*. Rome, Belhaven Press, P. 193

DFID 2004. *Report of a Collaborative Studies on HIV/AIDS: Impact of AIDS on Rural Livelihoods in Benue State, Nigeria: Implications for Policy Makers*. Department for International Development (DFID), Nigeria; Royal Tropical Institute (KIT), The Netherlands and the Benue State Agricultural and Rural Development Authority (BNARDA), Makurdi. April, 108p.

Egbule PE, Njoku EC 2001. Mass Media support for Adult Education Agriculture in southern Nigeria. *Adult Education and Development*, 56**:** 16 – 24.

Ekumankama OE 2000. Farmers' level of Satisfaction with formal Agricultural Information sources in Umuahia, Abia State, Nigeria. *Journal of Sustainable Agriculture and the Environment*, 2(2): 257 – 263.

Evans A 1992. A Review of the Rural Labor market in Uganda. School of African and Asian Studies, University of Sussex, *World Bank Project Working Paper,* (Mimeograph) Washington DC: World Bank.

Gillepsie S 1989. Potential Impact of AIDS on farming systems: A case study from Rwanda. *Land use Policy,* 6: 301 – 312.

Idu EE, Obinne ADE 2003. Anti – AIDS Media campaign and Impact on Rural Youths in Apir Community, Benue state, Nigeria. *International Journal of Gender and Health Studies*, 1(1): 92 – 98.

Kuponiyi FA 2000. Mass Media in Agricultural Development: the use of Radio by farmers of Akinyele Local Government Area of Oyo State, Nigeria. *Nigerian Agricultural Development Studies*, 1(1): 26 – 32

Moemeka AA 1993. The Mass Media, Communication

and Rural Dwellers: towards the effectiveness of Development Messages. In: C Oso, L Adebayo (Eds.): *Communications and Rural Development in Nigeria*. Abeokuta: Ogun State press, Nigeria.

Olaleye RS 2003. Level of HIV/AIDS Awareness among Rural farmers and its Implications for food security in Ondo state, Nigeria. *International Journal of Gender and Health Studies*, 1(1): 92 – 98.

Official Home Page of The United Nations Development Programme 2001. Corporate Strategy on HIV/AIDS. Retrieved November 11, 2006, from http:/www.undp.org/hiv/docs/alldocs