
EFFECTIVENESS OF MEDIA IN COMMUNICATING HIGH-BLOOD PRESSURE MESSAGES AMONG RURAL HOUSEHOLDS IN ABIA STATE, NIGERIA

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ABSTRACT

The study assessed the effectiveness of media in communicating high blood pressure messages among rural households in Abia State. A multi-stage random sampling technique was adopted in selecting 150 rural households for the study. Data for the study was collected using questionnaire. Data were analyzed using both descriptive and inferential statistics such as simple regression analysis. Results showed that seminar workshop ($\bar{x} = 3.38$), social network ($\bar{x} = 3.37$), campaign ads ($\bar{x} = 3.34$) government policy ($\bar{x} = 3.35$), health programs ($\bar{x} = 3.12$) and religious gathering ($\bar{x} = 3.08$) were the sources of information of High Blood Pressure Messages. A grand mean of ($\bar{x} = 2.78$) showed low effect of media in communicating High Blood Messages to the rural households in the study area. Result on the effectiveness of media in communicating High Blood Pressure Messages among the rural household showed a grand mean of 3.0 indicating that media was effective in communicating high blood messages to rural households. The result on the simple regression analysis showed that the coefficient of the behaviour of the rural people was significant at 1% and directly related to media. The study concludes that media was effective in communicating High Blood Pressure messages to the rural households in Abia State. The study therefore recommends among others that ministry of health through the help of extension agents should do more awareness on high blood pressure.

INTRODUCTION

High blood pressure is a common and major global public health problem that is prevalent among rural farmers (Wolf-Maier *et al.*, 2003). The prevalence is on the increase worldwide, and there are strong evidences to suggest that High blood pressure and its associated complications are major health challenges of the 21st century (Kearney *et al.*, 2004). As at the year 2000, more than 900 million people were living with High blood pressure worldwide, and it has been predicted that this number could rise to more than 1.5 billion in 2025 if drastic measures are not taken to control it (Kearney *et al.*, 2005). High blood pressure has also become a significant health problem in many developing countries affecting the rural farmer and their farming activities (Cuspidi *et al.*, 2000).

The emergence of High Blood Pressure and other cardiovascular diseases as public health problems in Nigeria is strongly related to the aging of the populations, urbanization, and the socioeconomic changes favouring sedentary habits, obesity, alcohol consumption and high salt intake among others (Billinghurst, 2002). Although High blood pressure is one of the most common modifiable risk factors for cardiovascular diseases, its prevention and control has not received sufficient attention in Nigeria especially in the rural areas. It is estimated that by 2030,

mortality due to cardiovascular diseases in the adult population will reach 23 million with about 85% of such deaths occurring in low- and middle-income populace in Nigeria (Mathers and Loncar, 2006).

The level of awareness, treatment and control of High blood pressure is extremely low in Nigeria particularly among rural farmers (Adediran *et al.*, 2013). In Nigeria, High blood pressure is the commonest non-communicable disease with over 4.3 million Nigerians above the age of fifteen years classified as being hypertensive (Kadiri *et al.*, 2000). It is believed that with an increasing adult population, and rising prevalence of High blood pressure, Nigeria could experience economic and health challenges due to the disease if the tide is not arrested (Ogah *et al.*, 2012).

Over the past few decades, media campaigns have been used in an attempt to affect various health behaviors in mass populations. Such campaigns have most notably been aimed at tobacco use and heart disease prevention, but have also addressed alcohol and illicit drug use, cancer screening and prevention, sex-related behaviours, child survival, and many other health-related issues. Typical campaigns have placed messages in media that reach large audiences, most frequently via television or radio, but also outdoor media, such as billboards and posters, and print media, such as magazines and newspapers. The inability to adequately prevent or manage High blood pressure in Nigeria has been attributed to inadequate knowledge of High blood pressure especially to the rural dwellers. Abia State is experiencing an increasing burden of non-communicable diseases (NCDs) such as high blood pressure, cardiovascular diseases (CVDs), diabetes, chronic respiratory diseases, and cancer. Assessing the effectiveness of media in communicating high blood pressure messages among rural households in Abia becomes very important.

Objectives of the study

The broad objective of the study is to determine the effectiveness of media in communicating high blood pressure messages among rural households. The specific objectives are to:

- i. determine the sources of information on high blood pressure messages among rural households in the study area;
- ii. determine the level of awareness of media in disseminating high blood pressure messages among rural households in the study area;
- iii. determine the effect of media in disseminating high blood pressure messages on the behavior of rural dwellers in the study area;
- iv. determine the effectiveness of media in communicating high blood pressure in the study area.

METHODOLOGY

Study Area

Abia State is one of the thirty-six states in Nigeria, located in the Southeastern zone of Nigeria. It has a population of about 4 million people disaggregated into 1,430,298 males and 1,451,082 females in 2006 (ADP, 2006). Agriculture is the predominant occupation of the people, for almost all the farm families either as primary or secondary occupation. The ecological zone favors the growing of tree crops, roots and tubers, cereals, vegetables and nuts. These crops are grown in smallholder plots usually in mixtures of at least two simultaneous crops (Abia ADP, 2006).

A multi-stage random sampling technique was adopted in selecting rural households for the study. First, five (5) Local Governments were randomly selected from the 17 local governments in the State. Second, one community was selected from each of the L.G.A. Third, three (3) villages were randomly selected from each of the community. Fourthly, 10 rural households were randomly selected from each village making the total respondents 150 households for the study. Out of the 150 questionnaires distributed, 125 questionnaires were returned and analyzed.

Data analysis and model specification

Data for this study were analyzed using both descriptive and inferential statistics. Objectives (i) and (ii) were realized using descriptive statistics such as frequency distributions, percentages and tables. Objective (iii) and (iv) were realized using a five point Likert rating scale of very high (5), high (4), moderate (3), low (2), and very low (1). The cut-off mean was determined thus:

$$\frac{5+4+3+2+1}{5} = 3.0$$

The decision rule was such that any mean score ≥ 3.0 was regarded positive effect or effective and should be accepted but any mean score below 3.0 was considered negative effect.

RESULTS AND DISCUSSION

Sources of Information on High Blood Pressure

The table 1 presents the distribution of respondents based on sources of information on high blood pressure in the study area.

Table 1: Distribution of Respondents Based on Sources of High Blood Pressure Messages

Sources of High Blood Pressure	Always	Often	Sometimes	Rarely	Never	Total	Mean	Remark
Campaign Adverts	30	192	168	26	2	418	3.34	High
Mass Media	190	32	258	24	41	545	2.92	Low
Seminar/Workshop	205	20	138	54	6	423	3.38	High
Internet	10	16	255	42	13	336	2.69	Low
Social Network	145	108	105	60	4	422	3.38	High
Govt Policy	135	128	108	26	12	409	3.35	High
Health Programs	10	280	24	86	2	402	3.22	High
Religious gathering	145	80	54	96	10	385	3.08	High
Grand mean							3.17	

Source: Field Survey, 2018; A = Always, O = Often, S = Sometimes, R = Rarely, N = Never

Table 1 showed the frequency count and mean response on the sources of high blood pressure messages of rural households in Abia State. Seminar workshop ($\bar{x} = 3.38$) is ranked as the most viable option for communicating high blood pressure messages, seconded by social network ($\bar{x} = 3.37$), campaign ads was high with a mean score of ($\bar{x} = 3.34$) followed by government policy ($\bar{x} = 3.35$), health programs ($\bar{x} = 3.12$) and religious gathering ($\bar{x} = 3.08$) which means that the high sources are the main source through which rural households in Abia State receive high blood pressure messages. Mass media ($\bar{x} = 2.92$) and internet ($\bar{x} = 2.69$) were below the cut-off mean of 3.0. The result showed that 6 out of 8 of the mean score values were above the benchmark of 3.0 which implies that sources for high blood pressure messages were above average. The rural dwellers were actually been informed of high blood pressure through these means. This finding contradicts the findings of Jacqueline (2016) who stated that mass media campaigns with community based supportive activities were found to be effective intervention in increasing public awareness of high blood pressure.

Awareness of High Blood Pressure Messages by Rural Households

The table 2 presents the distribution of respondents based on level of awareness in the study area. Table 2 showed the distribution of respondents based on level of awareness of high blood pressure messages by rural households. Majority (52%) of the rural households get messages on high blood pressure from electronic media, 40.8% indicated that print media keeps them informed about high blood pressure, 68.8% of the respondents said community media help them know more about high blood pressure, 41.6% agreed that community view center keeps them informed about high blood pressure, 31.2% said that their rural community newspaper helps them know more about high blood pressure and about 48% said that rural radio stations educates them on high blood pressure topics. This implies that most of the rural dwellers are not aware of high blood pressure messages through media, maybe because the above listed means of awareness is not functioning or do not relay messages on high blood pressure.

Table 2: Distribution of Respondents Based on Awareness of High Blood Pressure Messages by Rural Households in Abia State

Mass Media	Yes (%)	No (%)
Electronic Media (Radio and Television)	59 (52)	65 (47)
Print Media	51 (40.8)	67 (53.6)
Community Media	86 (68.8)	32 (25.6)
Community view Center	52 (41.6)	66 (52.8)
Rural Community newspaper	39 (31.2)	79 (63.2)
Rural Radio	48 (38.4)	70 (56)

Source: Field Survey, 2018; * Multiple responses recorded

Perceived Effect of Media in Communicating High Blood Pressure Messages On Health-Related Behaviour of Rural Household

Table 3 showed the frequency count and mean response, on the sources of high blood pressure of rural households in Abia State. The result shows that a paltry 3 out of 7 of the mean score values were above the bench mark of 3.0.

Table 3: Distribution of Respondents Based on their Perceived Effect of Media in Communicating High Blood Pressure Messages on the behaviour of Rural Households in Abia State

Perceived effect	SA	A	U	D	SD	Total	Mean	Remark
Individual Exposure	50	216	171		4	44	3.5	Positive Effect
Emotional response	20	48	66	34	70	238	1.9	Negative Effect
Join a support group	10	56	264	38	2	370	2.9	Negative Effect
Public discussion of health issues	60	3	225	30	15	362	2.8	Negative Effect
Improved access to medical care	30	164	150	52	2	398	3.1	Positive Effect
Change of lifestyle	10	172	189	30	2	403	3.2	Positive Effect
Routine blood pressure screening	50	24	105	36	56	271	2.1	Negative Effect
Grand mean							2.78	Negative Effect

Source: Field Survey, 2018; SA = Strongly Agreed, A = Agreed, U = Undecided, D = Disagreed and SD = Strongly Disagreed

Individual exposure ($\bar{x} = 3.5$), improved access to medical care ($\bar{x} = 3.1$) and change of life style ($\bar{x} = 3.2$) are above the criteria of 3.0 and therefore high. This means that individual exposure, improved access to medical care and life style of the rural households are the positive effects of media on the behaviour of the respondents. This implies that the effects of media on the

behaviour of the rural households in the study area were below average with a grand mean of $\bar{x} = 2.78$.

Effectiveness of Media in Communicating High Blood Pressure Messages on the Behaviour of Rural Households

Table 4 showed the distribution of respondents based on how effective is media in communicating high blood pressure messages on the behaviour of rural households in the study area. The result showed that 2 out of the three mean values were below the bench mark of 3.0, electronic media (which include radio and television) was effective ($\bar{x} = 3.9$). The grand mean of 3.0 means that the above listed items were effective in communicating high blood messages to rural households. This implies that the rural households get most of their information form electronic media.

Table 4: Distribution of Respondents Based on how Effective the Media is in Communicating High Blood Pressure Messages on the behaviour of Rural Households in Abia State

Media	SA	A	U	D	SD	Total	Mean	Remark
Electronic media	170	204	114		2	490	3.9	Effective
Print media	145	24	72	40	46	327	2.6	Not Effective
Community Media	20	44	165	32	39	300	2.4	Not Effective
Grand Mean							3.0	Effective

Source: Field Survey, 2018;

Influence of Mass Media Campaigns on Behaviour of Rural Households

Table 5 above indicated the regression analysis of no significant influence of mass media campaign in health-related behaviours of rural households in Abia State. The coefficient of the behaviour of the rural people was significant at 1% and directly related to media. This implies that an increase in the use of media in communicating HBM to the rural people would lead to a positive change in the health-related behaviour of the rural households. Hence, the null hypothesis was rejected at 1%. However, the R^2 of 0.940 implies that 94.4% of the variables explained the relationship between the behaviour of the rural people and the type of media used while 6% of the relationship was unexplained due to error. The F-statistics value of 1939.519 was significant at 0.01 levels suggesting the general fitness of the model.

Table 5: Regression analysis showing significant influence of mass media campaigns on behaviours of rural households

Variable	Coefficients	Std. Error	T-value
Constant	-1.253	0.508	-2.469
Behaviour of rural people	0.970	0.37	44.040***
Adjusted R	0.940		
R^2	0.940		
F-statistics	1939.519***		

Source: Field Survey, 2018. *** 1% Level of Significance

CONCLUSION

It is evident that there was a significant influence of media in communicating High Blood Pressure Messages on health-related behaviour of rural people in the study area. It was also noted that the influence of mass media on the rural household could be positive depending on source of the message. The study concludes that media is effective in relating high blood pressure

message to rural households and recommends that more awareness on high blood pressure should be done by ministry of health through the help of extension agents.

REFERENCES

- Adediran O. S., Okpara I.C., Adeniyi O. S. and Jimoh A. K., (2013). Hypertension prevalence in an urban and rural area of Nigeria, department of internal medicine, P.M.B 102119 Benue state university of makurdi, Nigeria. Department of physiology P.M.B 102119 Benue state university makurdi. Department of chemical pathology federal medical centre ido-ekiti, Nigerian. *Journal of medicine and medical sciences vol 4(4) pp 149-154.*
- Billinghamurst, S. Laverty, S.O Kouneff, M. Lonescu, A Reiner, I. Pidoux, C. Webber, Y. Rossier, Poole, A.R (2002); Excessive degradation of type 2 collagen in articular cartilage in equine osteochondrosis. Faculte de medicine veterinaire department de sciences Clinique's, universite de Montréal, CP 5000, Saint Hyacinthe. Division of surgical research, department of surgery and medicines, joint diseases laboratory, shrines' hospitals for children. Mc gill university Montréal que, Canada. *Journal of orthopedics research 20(2002) 1282-1289.*
- Cuspidi Cesare, Lonati Laura, Sampieri Lorena, Michev Lassen, Macca Giuseppe, Rocanova Jose, Salerno Maurizio, Fusi Veronica, Leonetti Gastone, Zanchetti Alberto (2000); Prevalence of target organ damage in treated hypertensive patients; Different impact of clinic and ambulatory blood pressure control. *Journal of hypertension 18(6), 803-809, 2000.*
- Kadiri, S., B.O Olutade, .O. Osobamiro, (2000); factors influencing the development of malignant hypertension in Nigeria. *Journal of human hypertension 14(3) 171-174, 2000.*
- Kearney Patricia M, Whelton Megan, Reynolds Kristi, Whelton Paul K, He Jiang (2004); Worldwide prevalence of hypertension, systematic review. *Journal of hypertension 22(1) 11-19, 2004.*
- Kearney Patricia M, Megan Whelton, Kristi Reynolds, Paul Muntner, Paul. K Whelton, Jiang He, (2005); Global burden of hypertension: analysis of worldwide data. *The lancet 365(9455) 217-223, 2005.*
- Maher D., Smeeth L. & Sekajugo J. 2010. Health transition in Africa: practical policy proposals for primary care. Available: <http://www.who.int/bulletin/volumes/>.
- Mathers Colins .D.and Dejan Loncar 2006, Projections of global mortality and burden of disease from 2002 to 2030. *Plos medicine 3(11): e442, 10.1371/journal.pmed.0030442.*
- Ogah, Okechukwu S, Ikechi Okpechi, Innocent .I. Chukwuonye, Joshua .O. Akinyemi, Basden JC; 2012; Blood pressure, prevalence of hypertension and hypertension related complications in Nigeria Africans: A Review. *world journal of cardiology 4(12) 327, 2012*
- Wolf-Maier Katharina, MD Richard S. Cooper, MD Jose. R. Banegas, 2003; Hypertension prevalence and blood pressure levels in six European countries, Canada and the united states. *Jama 289(18) 2363-2369, 2003.*