

CAREGIVERS' PERCEPTION OF BROADCAST MEDIA CHILD-KILLER DISEASE CAMPAIGNS IN SOUTHEAST NIGERIA

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Abstract

The objective of this study was to determine caregivers' perception of broadcast media reportage of child-killer diseases with specific attention to South-East Nigeria. Mixed-method research design was adopted for the study and the respondents were caregivers randomly selected from health centres, which are the government's outlets for immunization and vaccination within communities in the region. Quantitative data were collected through questionnaire while qualitative data were obtained through focus group discussions. Quantitative data were analyzed using frequencies and percentages. From the study, the popular broadcast media campaigns on child-killer diseases in the region were identified while the relevance and usefulness of the messages were ascertained. The perception about scientifically unproven effects of the vaccines is a clog in the implementation of the campaign messages in the region. More vigorous sensitization is needed to change the perception in the region about the effects of vaccines and drugs against child-killer diseases.

Keywords: Broadcast media campaigns, caregivers, child-killer diseases, perception

1. Introduction

Globally, child-killer diseases remain the leading cause of death of children below five years of age. Sub-Saharan Africa has the highest number of deaths from the diseases and at-risk children in the first month of life and rank first among the regions showing the least progress (African Leadership for Child Survival, 2017). Although most governments of sub-Saharan African countries and the international community have continued to invest in the prevention and control of child-killer diseases in the region, these diseases have continued to pose major health threat to children under the age of five years in Africa, particularly in Nigeria (Ezebilo, 2014).

A report in 2017 by the Federal Ministry of Health, in conjunction with World Health Organization (WHO), United Nations International Children Emergency Fund (UNICEF) and the United States Agency for International Development (USAID), reveals that about 5.3 million children are born yearly in Nigeria, that is, about 14,500 everyday but about 1 million, which is about 2700 children per day, die before the age of 5 years. In Southeast Nigeria, the report showed that 103 out of every 1000 children die before the age of 5 years.

Different media campaigns and programmes have been developed by the broadcast media in Nigeria, in collaboration with some international agencies, in a bid to create awareness and positively influence the health behaviour of the public against these child-killer diseases. Some of these campaigns include: Saving One Million Lives for Results (SOML) and Let Them Live media campaign/programmes sponsored by UNICEF; Rural Water Supply and Sanitation (RUWASSA) campaign, Improving Mother and Child Health (IMCH) and Salt Sugar Solution (SSS) campaigns funded by Department for International Development (DFID)/Partnership for Transforming Health Systems 2 (PATHS2); and Malaria and Bed Net campaign sponsored by Support for National Malaria Programmes (SuNMaP).

Despite the presence of these broadcast media campaigns on child-killer diseases, the available empirical figures from relevant health bodies like WHO, UNICEF and USAID suggest significant success has not been achieved in the efforts to curb the devastating impact of child-killer diseases on underage children in Nigeria. Therefore, the objectives of this study borders on ascertaining the knowledge level, perception of caregivers in the region and the socio-cultural characteristics that influence the implementation of the campaign messages. The Southeast region is strategic for the study because of its location along the rainforest zone of the country with numerous forests, ponds, streams and rivers which are breeding grounds for mosquitoes and could enhance the spread of diarrhoea. In particular, the region has a well-educated population, well-grounded socio-cultural beliefs and has benefitted from different media campaigns against these child-killer diseases over the years. Therefore, this study sought to achieve the following:

1. To identify the various broadcast media campaigns on child-killer diseases.
2. To determine caregivers' perception on the relevance of broadcast messages on child-killer diseases.
3. To determine caregivers' perception of the Usefulness of Broadcast Media Campaigns in the Prevention, Treatment and Control of Child-Killer Diseases.
4. To ascertain Perception of the Cultural and socio-demographic Factors inhibiting implementation of campaign messages.

2. Literature Review

Mitiku and Adane (2017, p. 10) stated that the ability of caregivers to recognize and seek appropriate care for common childhood illnesses like malaria is instrumental in reducing child deaths in low and middle income countries. Studies have revealed that high level of knowledge and awareness of child-killer diseases does not translate to actual practice of the relevant recommendations towards the treatment, control and prevention of the child-killer diseases (see Oku, Oyo-Ita, Glenton, Fretheim, Ames, Muloliwa and et al., 2017, Enwonwu, Ilika, Ifeadike, Aniemena and Egeonu, 2018, Ekubagewargies, Mekonnen and Siyoum, 2019). Onianwa (2014) conducted a study on public perception of radio Nigeria programme, "About *HIV/AIDS*" in some South Eastern states of Nigeria showed that majority of the respondents' perceived the programme as very useful. Usefulness was in the areas of influencing the adoption of new behaviour towards HIV/AIDS, positive attitude and awareness with regard to HIV/AIDS.

About factors affecting implementation of child health services among caregivers, Adewole (2014) discovered that laid-back attitude by mothers, fear of side effects of the vaccines, religious beliefs and mothers' education level as the major factors that influenced the use of immunization services. Aigbiremolen, Abejegah, Ike, Momoh, Lawal-Luka and et al. (2015) reported higher under-five mortality risks for children whose mothers had cultural barriers and children whose mothers had resource-related barriers to health care and those whose mothers had physical barriers.

Bedford and Sharkey (2014) in their study on local barriers and solutions to improve care-seeking for childhood pneumonia, diarrhoea and malaria in Kenya, Nigeria and Niger identified financial barriers; distance/location of health facilities; socio-cultural barriers and gender dynamics; knowledge and information barriers; and health facility deterrents.

As regards social factors influencing child health in Ghana, Quansah, Ohene, Norman, Mireku and Karikari (2016) observed maternal education, rural urban disparities, that is, place of residence, family income and high dependency as the major social factors. Abdullahi (2018) looked into factors affecting completion of childhood immunization in North West Nigeria. He identified education of parents or caregivers, income level of the family, religion and cost of health care services that is, vaccination as the major factors.

From the foregoing, caregivers' perception of broadcast media child-killer disease campaigns is important in ascertaining the relevance of these campaigns in combating under five diseases. There is still dearth of previous studies that have focused on caregivers' perception on child hood diseases. Hence, this study explored this gap.

3. Methods

A descriptive survey design was adopted for the study. Researchers (Ale, 2020; Kari, 2020; Obasi *et al.*, 2021; Ogbonne, 2019; Odii *et al.*, 2020; Gever, & Nwabuzor, 2014; Gever, 2016; Gever *et al.*, 2021) postulate that

the decision to apply a research design is based on the study aim. From the hospital registries of the ten General Hospitals in the five Southeast states of Abia, Anambra, Ebonyi, Enugu and Imo, there is an average of 329 caregivers who visit for child immunization in each of the 2110 health centers in the five states. The General Hospitals are headquarters and information hubs for other health centers. Therefore, the population of the study is the estimated 694,190 caregivers attending immunization in the health centres across the five states. Single stage cluster sampling was used in sample selection where each health centre was considered as cluster of caregivers and for each selected health centre, all the registered caregivers were automatically selected for data collection. The Cochran (1977) formula for sample size determination was used to estimate 4 out of 2110 health centres for investigation and the 4 health centres were identified through systematic sampling. Hence, a total of 1316 caregivers made up the study sample. The four health centres are Emede Primary Health Centre in Umuahia, Abia State, Akwuke Health Centre in Enugu South, Enugu State, Primary Health Centre Ogwa in Mbaitolu, Imo State and Model Health Centre Oshiri in Ohaozara, Ebonyi State.

To maintain ethical standard, written requests for permission to source data directly from the caregivers were made to the managements of each of the four selected health centres. The major request was to permit the researchers to distribute the research questionnaires to the caregivers who visit their facilities on a specified day of immunization. The permissions were granted before data collection commenced. Data collection lasted for a period of four weeks, from September to October, 2019. Three well-trained research assistants who are acquainted with the dialect, geographic and socio-cultural characteristics of most parts of the study area were mobilized for the data collection. The medical personnel at each of the four health centres conducted brief sensitization of the caregivers who visited the health facility for immunization on the importance and aim of the study and the need to be honest in providing the required information. The sensitization made the data collection exercise easy for the researchers and research assistants and enforced trust on the information obtained.

Apart from the use of well-structured questionnaire in the collection of quantitative data, focus group discussion was also used to collect qualitative data which were used to supplement the findings from the analysis of quantitative data. The focus group comprised of three participants, two females and one man, selected from Abia, Enugu and Anambra States. The discussion was conducted through conference phone calls aided with already prepared discussion guide. The data collected for this study were evaluated with the use of quantitative methods of data analysis. With the aid of SPSS version 26, the data were analyzed using frequencies and percentages for the descriptive results.

4. Results of Data Analysis

After screening out irregularly completed questionnaires, a total of 1307 copies of the questionnaire were used for the analysis. The analysis of the socio-demographic distribution of the respondents are displayed in Table 1. The results showed that most of the respondents are females, married, had formal education, and engaged in trading or are civil servants. Almost all the respondents are affiliated to Christianity while many reside mainly in the urban areas of the Southeast province of Nigeria.

Table 1: Percentage Distribution of Caregivers' Socio-Demographic Attributes

Attribute		Frequency	Percent
Sex	Male	89	6.8
	Female	1216	93.2
Age	18 – 22 years	185	14.2
	23 – 26 years	148	11.4
	27 – 30 years	159	12.2
	31 years and above	807	62.1
Marital Status	Single	207	15.9
	Married	1020	78.3
	Widowed	73	5.6
	Divorced	3	0.2

Level of Education	FSLC	45	3.5
	SSCE	490	38.0
	ND/NCE/OND	199	15.4
	First Degree/HND	336	26.0
	Masters/PhD	202	15.6
	No formal education	19	1.5
Occupation	Farming	57	4.4
	Civil servant	433	33.5
	Trading	486	37.6
	Unemployed	101	7.8
	Others	214	16.7
Religious Affiliation	Christianity	1286	98.6
	Islam	12	0.9
	Traditional worshipper	7	0.5
Location	Rural	610	46.7
	Urban	697	53.3

The caregivers identified the popular broadcast media campaigns against child-killer diseases in the Southeast province through a multiple response questionnaire item which enabled each respondent to select as many broadcast media campaigns as applicable. The popularity of these media campaigns among caregivers are summarized in Table 2. From the table, the most popular broadcast media campaign against child-killer diseases is the Malaria and Bed Net media campaign, identified by 81.9% of the caregivers. The second most popular broadcast media campaign is Improving Mother and Child Health, which was identified by 58.5 % of the caregivers. The other media campaigns, in their order of popularity among the caregivers, are Salt Sugar Solution (SSS), identified by 57.3%; Rural Water Supply and Sanitation (RUWASSA) campaign, identified by 43.4%; Saving One Million Lives for Results (SOML) identified by 19.1 % and Let Them Leave, identified by only 11.1 % of the caregivers.

The percent of cases, column 4 of Table 2, was specifically used in determining the popularity of the broadcast media campaigns in the region. Each percent of cases is the percentage response for each particular media campaign out of the 1307 responses. That is, the percent of number of caregivers (frequency) out of the 1307 that selected a particular media campaign. These results indicate that most of the broadcast media campaigns against child-killer diseases are popular among the caregivers in the region.

Table 2: Percentage Multiple Responses on Types of Broadcast Media Campaigns

Broadcast Media Campaigns	Responses		
	N	Percent	Percent of Cases
Saving One Million Lives for Results (SOML)	249	7.0%	19.1%
Kaha Nyia Ndu (Let Them Live)Media Campaign	145	4.1%	11.1%
Rural Water Supply and Sanitation (RUWASSA) campaign	567	16.0%	43.4%
Improving Mother and Child Health campaign	764	21.6%	58.5%
Salt Sugar Solution (SSS) campaign	749	21.1%	57.3%
Malaria and Bed Net campaign	1070	30.2%	81.9%
Total	3544	100.0%	271.3%

Information was sought from the caregivers on the perceived relevance of the media campaigns to the control and prevention of child-killer diseases in the region. Only 1278 of the caregivers responded to the question while 29 respondents did not respond. The results revealed that 94.4 % of the respondents acceded to broadcast media campaigns being relevant to the prevention of child-killer diseases and the general wellbeing of children. Only 1.7 % of the respondents thought otherwise while 3.9 % are not sure the campaign messages are relevant towards the control and prevention of child-killer diseases and the general wellbeing of children in the region.

Table 3: Percentage Relevance of Broadcast Media Campaigns to Prevention of Child-Killer Diseases

Relevant	Frequency	Percent	Cumulative Percent
Yes	1206	94.4	94.4
No	22	1.7	96.1
Not sure	50	3.9	100.0
Total	1278	100.0	

Information on the level of usefulness of the broadcast media campaigns to the prevention, treatment and control of child-killer diseases was also obtained and summarized in Table 4. From the table, 99.4 % of the caregivers indicated that the broadcast media campaigns are at least moderately useful towards the prevention, treatment and control of child-killer diseases in the Southeast region of Nigeria. Only 0.6 %, a negligible percent, of the caregivers indicated that the broadcast media campaigns are not useful. In general, there are obvious indications that the caregivers are of the opinion that the broadcast media campaigns are relevant in the prevention, control and treatment of child-killer diseases. Hence, there is general understanding among the caregivers of the relevance and usefulness of the media campaigns in the control of prevention of child-killer diseases.

Table 4: Usefulness of Broadcast Media Campaigns in the Prevention, Treatment and Control of Child-Killer Diseases

Usefulness	Frequency	Percent	Cumulative Percent
Very useful	1021	80.8	80.8
Useful	107	8.5	89.3
Moderately useful	128	10.1	99.4
Not useful	7	0.6	100.0
Total	1263	100.0	

Perception as well as cultural and socio-demographic factors that are inhibiting implementation of the media campaign messages in the Southeast region were evaluated to understand the sluggish implementation of the campaign messages in the region despite admitting to the relevance and usefulness of the messages. The results, shown in Table 5, reveal that the drugs given during immunization are suspected to have increased impotence among the male folks and could increase infertility among the recipient children in the future. Also, the spouses of the caregivers prefer alternative (traditional) medicine. Child rearing practices, cultural beliefs and income level of the people of the region also influence, but not to large extent, the implementation of the campaign messages against child-killer diseases. These findings are indications of remote beliefs in the region that the drugs used for immunization could cause infertility.

Table 5: Perception, Cultural and Socio-Demographic Factors Inhibiting Implementation of Campaign Messages

Cultural and Socio-Demographic inhibitions	Responses		Percent of Cases
	N	Percent	
Some child rearing practices and cultural beliefs do not support child immunization	503	7.90	38.5
My spouse believes that local alternative medicines are safer than the vaccines against child-killer diseases	1123	17.8	85.9
My religious beliefs are against child immunization	266	4.20	20.4
My spouse thinks that the drugs used against child-killer diseases have increased impotence among men in the region	1093	17.3	83.6
Our income level makes it difficult to go for child immunization when due	636	10.1	48.7

Location, distance from the health centre and bad roads make it difficult to keep immunization appointments	225	3.60	19.5
Language barrier affects my commitment to the immunization of my child	101	1.60	7.70
My spouse believes the drugs used for immunization against child-killer diseases could infertility among the children in the future	1212	19.2	92.7
Misconception by caregiver's spouse on the importance of immunization against child-killer diseases	614	9.70	47.0
Wide spread belief that the vaccines are meant to reduce the population of male children in the region	551	8.70	42.2
Total	6324	100.0	486.2

5. Discussion and Conclusion

From the findings of the study, the popular broadcast media campaigns against child-killer diseases in Southeast region, in their order of popularity, are Malaria and Bed Net campaign; Improving Mother and Child Health campaign and Salt Sugar Solution (SSS) campaign. Let Them Leave media campaign (Ka ha Nyia Ndu); Saving One Million Lives for Results (SOML); and Rural Water Supply and Sanitation (RUWASSA) campaign, arranged in their order of lack of popularity, are not popular among the caregivers as broadcast media campaigns against child-killer diseases. With 45.3 %, RUWASSA seems to be fairly known among the caregivers but not as popular as the other three with higher percent popularity. Focus group discussions affirmed the popularity of Malaria and Bed Net campaign, improving Mother and Child Health campaign and Salt Sugar Solution campaign among the people of Southeast region. In corroboration with the findings of the study, only two of the discussants stated their awareness of RUWASSA while the discussants related the slogans of each media campaign by which they are known among the people.

From the findings of the study, there is general acceptance among the caregivers in Southeast Nigeria that the broadcast media campaigns are relevant to the treatment, control and prevention of child-killer diseases in the region. In fact, 99.4 % of the caregivers admitted that the media campaigns are useful to the treatment, prevention and control of the child-killer diseases. The perceived usefulness of the broadcast media campaigns on child-killer diseases is supported by the findings of Onianwa (2014) who observed high level of awareness and positive perception of the Radio Nigeria campaign programme, "About HIV/AIDS", in some Southeast states of Nigeria. The findings of this study were also reflected in the findings of Oku *et al.* (2017) in their evaluation of perceptions and experiences of childhood vaccination communication strategies among caregivers and health workers in Nigeria. The discussants agreed that the media campaigns are very useful and should be sustained.

Cultural barriers, social barriers, gender barriers, resource-related barriers and physical barriers have been reported to be responsible for high mortality rate of infants below the age of five whose mothers are affected by any of these barriers (Aigbiremolen *et al.*, 2015 and Bedford and Sharkey, 2014). This study revealed that the inhabitants of the Southeast region nurse the notion that the drugs administered during immunization against child-killer diseases could be responsible for increase in impotence among the men in the region and could lead to infertility in the children in future. Data from focus group discussion reflects these remote beliefs. The discussants identified income level and fear of possible negative effect of the vaccines as the factors that mainly influence their decisions to submit their children for immunization against child-killer diseases. One of the discussants submitted that if she does not have adequate knowledge of the vaccine or if the health worker did not give proper explanation about the vaccine and its side effects, she will not allow her child to receive such vaccine. Another discussant added that because of the distance from the health facility, if there is no means of taking the child to the facility to seek medical help, she will resort to herbal/traditional alternatives to get her child treated which has already recommended by her husband.

The focus group discussions data revealed that poor financial resources and inability to access hospitals because of distance/bad roads has made many caregivers to seek alternative solutions to the treatment of child-killer diseases. Unfortunately, most of these alternative sources are not regulated and in some instances do not possess the appropriate treatments to such problems, leading to unnecessary loss of life and deformation. For instance, there are eyewitness accounts by the researcher of some individuals who had measles during childhood which affected their sights or caused eye deformations because appropriate medical attention was not sought at the onset of the sickness or because inappropriate local solution was adopted in attempt to treat the measles.

In conclusion, the messages of the broadcast media campaigns on child-killer diseases are accepted among the caregivers and perceived to be very useful in the prevention, treatment and control of child-killer diseases. The general opinion is that the media campaigns on child-killer diseases should be sustained. The findings of the study revealed that child rearing practices, cultural and religious beliefs, location, language barrier and misconception of caregiver's spouse about immunization against child-killer diseases do not necessarily hinder the implementation of the campaign messages in the Southeast region. Rather, substantial information from the results, focus group discussion, the researcher's personal observations and experiences indicate that cultural practices, personal convictions about the vaccines, unsubstantiated rise in impotence among the men, misconception about the immunization programme, fear of side effects especially related to fertility problems, etc. substantially influence the implementation of the broadcast media campaign messages on child-killer diseases in the Southeast region. It is recommended that these impediments are not ignored but aggressive sensitization should be employed to correct these impressions to achieve the target of the campaign messages.

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