

MEDIA USE FOR MALARIA INFORMATION DISSEMINATION TO RURAL DWELLERS IN IBARAPA EAST LOCAL GOVERNMENT AREA OYO STATE

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ABSTRACT

Media plays a crucial role in disseminating health information and increasing awareness about health education. Hence, the need to assess the media use for malaria information dissemination among rural dwellers in Ibarapa East Local Government Area of Oyo State, Nigeria. A multistage sampling procedure was used to select 125 rural dwellers, data on sources of malaria information, media use, preferred media, and challenges of media use for malaria information was collected via questionnaire. Data were analysed using both descriptive (tables, graphs) and inferential statistical (PPMC) tools. The result shows that the mean age, household size, and monthly income of the respondents were 41 years, 6 persons, and N38,000 respectively. The majority (52.4%) were female, Christians (59.5%), and educated (88.1%). A high percentage (78.6%) of the respondents sourced malaria information through radio while 89.7% preferred receiving malaria information through radio. Respondents were faced with challenges of a network failure (85.7%), lack of power supply (85.7%), and financial constraints for purchase of media tools (85.7%) used in accessing malaria information respectively. The study concluded that respondent highly utilized media for malaria information in the study area. It is therefore recommended that the government should provide infrastructural facilities such as stable power supply, good communication network and means of financial empowerment among rural people.

Keywords: Media use, Malaria information, Rural dwellers, Health communication

INTRODUCTION

Malaria affects millions of people worldwide but it's endemic to sub-Saharan Africa. In Africa, malaria costs approximately \$12 billion in terms of loss of Gross Domestic Product (GDP) each year and has slowed the pace of economic growth by 1.3% per year as a result of lost lives and low productivity. According to World malaria report 2021, there were 241 million cases of malaria in 2020 compared to 227 million cases in 2019. The estimated number of malaria deaths stood at 627 000 in 2020 – an increase of 69 000 deaths over the previous year (2019). Four African countries accounted for over half of all malaria deaths worldwide: Nigeria had the highest number of global malaria cases (27 % of global malaria cases) in 2019 and accounted for the highest number of deaths (23 % of global malaria deaths). Case numbers increased by 3.5% between 2016 and 2019, from 293 to 303 per 1000 of the population at risk. Malaria burden is most rooted among rural communities which often are deficient in adequate information about the causes, consequences, and capacity to afford treatment and adopt preventive measures. A systematic review of articles on barriers to the effective treatment and prevention of malaria in Africa over the past decade reveals that lack of understanding of the cause and transmission of malaria remains the most critical barrier to malaria prevention, followed by reports on the use of ineffective prevention measures (Nglass, 2019). The fact that the rural dwellers provide most of the food and raw materials consumed by people in the country, their general welfare and health care become essential. Likewise, rural health, education through communication, and other social aspects are not taken into consideration during policy

formulation and implementation. These rural people are exposed to the hazard of contagion and spreading of malaria disease while discharging work ignorantly, lack awareness and proper knowledge of the disease outbreak, and how to manage and adapt to precautionary measures.

Communication plays a significant role in promoting health. It is an integral aspect of interventions that strive to address individual, community, and social factors and can have a significant impact on many levels of health intervention implementation (Nwachukwu, 2019). Multi-dimensional approaches have been employed to promote the use and uptake of malaria prevention and treatment. In Nigeria, mass media campaigns, comprising print and electronic media, have been used for sensitisation, and promotion of behavioural change in many developing countries. The media have also been found to serve as important vehicles for the transmission of health knowledge and health behaviour modification (Olajide, 2021).

Through proper broadcast of health information to community members, the media can promote health for all. With the rising rate of malaria sickness in Nigeria (Sokey, Adjei, and Ankrah, 2018), the necessity for a conscious continual sensitisation campaign of health information to both rural and urban areas has become paramount. The mass media has greatly increased awareness of the malaria-related health problem using SMS, radio, and television ads, as well as jingles on radio and television; For instance, Ahmed *et al* (2014) examine the role of different communication media in bringing about changes in knowledge and awareness which facilitate informed decision-making for managing malaria-like illnesses. Another study by Yaya *et al* (2018) indicate a



potentially important role of malaria information received through mass media on utilisation of insecticide treated nets (ITN) among women in Sub-Saharan Africa. However, despite the commendable achievement recorded for the dissemination of health information, Nigeria remains the most malaria-endemic country in the world due to information channels deteriorating in rural communities.

Information is an important tool used in the realisation of any objective or goal set by an individual or organisation. It is a valuable resource required in any society; thus, acquiring and using information is a critical and important activity (Oleribe, 2019). Health communication is essential for building knowledge and awareness, reducing stigma and other barriers that promote behaviour change which motivates societies to take up already available interventions and informed actions for prevention and treatment. However, information is delivered in a multitude of manners and the challenge is to determine which method is most appropriate to the audience attempting to be reached.

However, the evidence is sporadic for developed communities, but in rural areas among rural dwellers where health information is most needed and knowledge about the killer disease is required, it is neither readily available nor accessible (Okedo-Alex *et al.*, 2022). It is against this background that the research work determined the media use for accessing malaria information among the rural dwellers of Ibarapa East Local Government Area of Oyo State.

The specific objectives of the study were to:

- i. describe the socio-economic characteristics of respondents in the study area,
- ii. identify the sources of malaria information in the study area;
- iii. ascertain the use of media for accessing malaria information in the study area;
- iv. identify the preferred media for malaria information dissemination;
- v. ascertain the challenges to the use of media for malaria information dissemination.

The study hypothesized that:

H₀1: There is no significant relationship between the selected socio-economic characteristics of the respondents and the use of media,

H₀2: There is no significant relationship between the challenges to media use, and their use of media.

METHODOLOGY

The study was conducted in Ibarapa East Local Government (LGA) Area of Oyo State. Ibarapa East covers an area of 832km and has its headquarters located in Eruwa. It has a population of

118,226 (NPC, 2006). It has an annual rainfall of about 900mm – 111200mm per annum.

The geographical coordinate of the local government is within the rainforest and stable malaria transmission belt of Oyo State. Temperature is high throughout the year with a daytime range of 23 °C – 35 °. These are Malaria endemic regions where transmission occurs throughout the year with peaks during rainy season (Oloyede *et al.*, 2018). The major crops grown in the study area are Yam, Cassava, Maize, and Watermelon. The local government has ten (10) wards including Aborerin, Anko, Isaba, Isale-togun, Itabo, New Eruwa, Oke-oba, Oke-otun, Oke-imale, and Sango. The major occupation in the study area is farming. The rural communities are situated in an area where water collections, either temporary or semi-permanent (ponds used for agricultural purposes); are potential breeding sites for Anopheles mosquito larvae that causes malaria (Oloyede *et al.*, 2018). This results in a high level of malaria risk and infections in the community. It has been reported in past studies that rural dwellers in Ibarapa East LGA access health information using radio, television, daily papers, and magazines (Lasisi, 2018). The choice of the study area was based on a previous study that shows that there exists a broadcast on awareness of information and there is a need to use appropriate media (Ajala and Onyima, 2021).

A multistage sampling procedure was used to select 125 rural dwellers as sample size for the study. At stage 1, 50% of five wards were selected randomly from the 10 wards in the study. Stage 2 involves proportionate selection of twenty-five (25) households from each from of the five wards to make up a total number of 125 rural households sampled for the study. Respondents' socioeconomic characteristics like age, sex, religion, educational level, farming experience, farm size, and household size were measured on both nominal and interval levels as the case dictates. Eight possible sources of information were measured using the scale of yes and no with the scores 1 and 0 respectively. Eight media used for malaria information were measured using the scale of always, occasionally, rarely, and never with the scores of 3, 2, 1, and 0 respectively. Seven preferred modes of malaria information was measured on the scale of preferred and not preferred with scores of 1 and 0. Ten benefits of media used for malaria information were measured using the scale of to a large extent, to a lesser extent, and never with scores of 2, 1, and 0. Challenges to accessing malaria information were measured on a scale of serious challenge, mild challenge, and not a challenge with scores of 2, 1, and 0. The weighted mean score was calculated and was used to rank the sources of each variable stated above in ascending order respectively.

Data were obtained using well-structured questionnaire with the aid of interview guide. Both

descriptive statistics such as frequency, tables, percentage, and mean and inferential statistical tools such as Chi-square and Pearson Product Moment Correlation (PPMC) were used to achieve the objectives.

RESULTS AND DISCUSSIONS

Socioeconomic characteristics

The distribution from Table 1 below shows the socioeconomic characteristics of rural dwellers. A few of or less than half (39.7%) of the respondents fall within the age range of 34-50 years. The mean age was 48±17 years which suggests that most of the respondents were in their active and reproductive years. This is in line with Adekola *et al* (2020) that rural dwellers were at their active age. About half (52.4%) of the respondents were female. This shows

female predominance among the rural dwellers sampled who are expected to be more available at home and could seek access to information. The majority (65.1%) were married while (18.3%) of the respondents were single. The result in the table below shows the highest proportion of the respondents that had tertiary education was 39.7%. The distribution reveals that some or less than half (40.5%) of respondents had household size between the range of 5-6. The primary occupation of the respondents (31.0%) was mainly teaching followed by farming (21.4%). The result in the table shows that a few of the respondents (32.5%) receive 30,001-50,000 as their average monthly income. This is an implication of low-income level among the rural dwellers which indirectly might influence media use for malaria information.

Table 1: Socio- Economic Characteristics of the Respondents

Variables	Frequency	Percentage
Age		
17-33	26	20.6
34-50	50	39.7
51-67	29	23.0
68-89	21	16.7
Marital status		
Single	23	18.3
Married	82	65.1
Separated	6	4.8
Divorced	3	2.4
Widow	8	6.3
Widower	4	3.2
Religion		
Christianity	75	59.5
Islam	49	38.9
Traditional	2	1.6
Educational level		
No formal education	15	11.9
Adult education	7	5.6
Primary education	21	16.7
Secondary education	33	26.2
Tertiary education	50	39.7
Household size		
Less than 3	11	8.7
3-4	49	38.7
5-6	51	40.5
7-8	12	9.5
9-10	3	2.4
Primary occupation		
Farmer	27	21.4
Teacher	39	31.0
Trader	27	21.4
Casual worker	16	12.7
Marketer	6	4.8
Student	11	8.7



Variables	Frequency	Percentage
Secondary occupation		
Civil servant	11	8.7
Self-employment	46	36.5
Farmer	36	28.6
Trader	16	12.7
Teacher	17	14.4
Average monthly income		
Less than 10,000	14	11.1
10,000-20,000	35	27.8
20,001-30,000	41	32.5
Above 40,000	36	28.6

Source: Field survey, 2022

Source of malaria information

Table 2 below describes the source of malaria information to the respondents in the study area. A larger percentage (78.6%) of the respondents in the study area state radio as their source of malaria information. Also (67.5%) responded they get malaria information from their friends and family, few (23.0%) of the respondents stated they receive malaria information from newspapers. The result implies that the main source through which the rural

dwellers receive malaria information is through radio, not all have the time to visit health workers for malaria information as reported by some of the respondents. They gave easy accessibility and timeliness of the information as the main reasons for their preference. For instance, a patient who sits in the comfort of his or her house and listens to the radio advertising a product related partly to his or her health condition would get up and acquire it (Wiafe *et al.*, 2022).

Table 2: Source of Malaria Information

Source	(%)
Radio	78.6
Television	44.4
Internet	35.7
Mobile phone	57.9
Newspapers	23.0
Friends and family	67.5
Posters	30.2
Health workers	33.3

Use of media

Table 3 shows that majority (74.6%) of the respondents use radio always to seek information on malaria, followed by mobile phone (44.4%). This result denotes that the main and fastest medium for malaria information among the rural dwellers in the

study area was through the radio. This observation is in line with previous studies that radio is among the commonly used medium for seeking information among rural dwellers because of the easy accessibility of information at an affordable cost (Chen *et al.*, 2019)

Table 3: Use of media

Media	Always	Occasionally	Rarely	Never
Radio	74.6	12.6	8.7	4.0
Television	24.6	36.5	23.8	15.1
Internet	34.9	12.7	29.4	28.6
Mobile phone	44.4	31.7	13.5	10.3
Newspapers	9.5	29.4	28.6	32.5
Posters	19.8	28.6	36.5	15.1

Preferred mode for malaria information

In Table 4, majority (89.7%) preferred receiving malaria information through radio, while (86.5%) of the respondents prefers the reception of malaria information through phone, voice, and text

communication. The result implies higher percentage of the respondents prefer receiving malaria information through radio, and this is affected by choice and likeness as stated by some of the respondents (Sokey, Adjei, and Ankrah, 2018).

Table 4: Preferred mode for malaria information

Mode	Preferred
Video	70.6
Newspapers	46.0
Internet	56.3
Phone, voice and text communication	86.5
Radio	89.7
Posters	60.3

Challenges to accessing malaria information

Table 5 below shows the constraints to accessing malaria information in the study area. Majority (85.7%) stated that network failure, lack of power supply, and financial constraints are serious challenges. Since most of the rural dwellers in the

study area have financial constraints and lack facilities, hence they may not be able to access and utilize malaria information passed to them. Also, 65.1% stated language barrier was a serious challenge in the study area.

Table 5: Challenges to accessing malaria information

Challenges	Serious challenge	Mild challenge	Not a challenge
Lack of understanding	45.2	42.9	11.9
No power supply	85.7	19.5	4.8
Network failure	85.7	10.3	4.0
Financial constraint	85.7	11.1	3.2
Illiteracy	53.2	28.6	18.3
Reliability of information	50.0	40.5	9.5
Inappropriate timing of message	54.0	39.7	6.3
Language barrier	65.1	24.4	9.5

Test of hypotheses

Relationship between the selected socioeconomic characteristics and the use of media

The results in Table 6 revealed that significant relationships exist among monthly

income ($r=8.555, p=0.036$), age ($r=0.187, p=0.036$), and use of media. This shows that age and monthly income significantly influenced the use of media in the study area.

Table 6: Pearson product correlation moment analysis result for test of the relationship between the selected socio-economic characteristics and use of media

Variables	r-value	p-value
Age	0.187	0.036
Household size	0.061	0.500
Monthly income	8.555	0.036

Correlation test of relationship between preferred media and use of media

The result shown in Table 7 revealed that there exists a significant relationship between the

preferred media and the use of media ($r=0.722, p=0.000$). This implies that respondents use more of the preferred media in the study area.

Table 7: Pearson product correlation moment analysis result for test of relationship between the preferred media and use of media

Variables	r-value	p-value
Preferred media vs use of media	0.722	0.000

CONCLUSION AND RECOMMENDATION

The research work was able to identify the source of malaria information, media use, and their preferred mode of receiving malaria information in the study area. Finally, the result of this research stated that despite different mediums of getting malaria information most of the people in the study area prefer information from radio, family, and friends. The study therefore concluded that majority

of the respondents had high usage of media in the study area. The study therefore recommends that, in addition to the use of radio, rural dwellers should be encouraged to use more new information and communication technologies, particularly the Internet and video. Also, there is a need for the provision of good infrastructural facilities for rural people to receive and utilize health information.



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