

Knowledge of Transmission, Malaria Belief and Health-Seeking Behaviour in Oye-Ekiti Local Government Area of Ekiti State, Nigeria

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Abstract Malaria fever appears to be one of the leading causes of mortality in Nigeria. Improper health seeking behaviour for effective treatment is still a great concern for health practitioners especially in rural areas. The study examined knowledge of causes of malaria and malaria belief as determinants of health seeking-behaviour in Oye-Ekiti, Ekiti state, Nigeria. A cross sectional survey research design was used to examine variables of interest in the study. A sample of 187 (86 males, 101 females) community members with mean age of 25.95 years participated in the study. Three hypotheses were tested in the research. Knowledge of causes of malaria has a significant influence on health-seeking behaviour ($t = 3.98$; $df = 185$; $p < .05$). Malaria belief has no significant influence on health-seeking behaviour among respondents ($t = -1.36$; $df = 185$; $p > 0.05$). Gender has no significant influence on health-seeking behaviour ($t = 0.51$; $df = 185$; $p > .05$). It is concluded that knowledge of the transmission of malaria is still vital in seeking for effective treatment measures in rural area like Oye-Ekiti, in Ekiti state. There is a need for a community-based enlightenment on transmission of malaria in this area for effective health seeking-behaviour.

Keywords: *knowledge, malaria belief, health-seeking behaviour, rural area, Nigeria*

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1. Introduction

Malaria still remains one of the major causes of morbidity and mortality in Sub-Saharan Africa (Snow, Craig, Deichmann & Marsh, 1999) with Nigeria inclusive. This may be the result of improper health-seeking behaviour; especially in rural communities. Similarly, malaria has been reported to be a major health problem in Nigeria accounting for more than 80% of the clinical cases. Globally, it has been reported that Nigeria account for over 40% of the estimated total malaria. No doubt, some rural areas in Nigeria are still malaria-endemic; hence, a coordinated malaria control programme need to be put in place by the Ministry of Health for effective health-seeking behaviour of Nigerians. However, there is always the need to understand the influence knowledge and belief in rural areas for appropriate health-seeking behaviours.

Poor health-seeking behaviour of members of rural areas in Nigeria towards effective treatment of malaria is becoming an issue of concern among health practitioners in Nigeria. Many rhetorical questions begin to arise. One begins to question the levels of knowledge of the causes, transmission and treatment of malaria as well as malaria belief among Nigerians. Oye-Ekiti is a rural community in Ekiti state with a population of 2,384,212 people (NPC,

2006). Health seeking behaviours are actions undertaken by malaria patients to get the proper treatment of malaria fever to get well after the illness. A report of the committee for the study of Malaria Prevention Control Status Review and Alternative Strategies urged that "human behaviour and social organization are vital determinants of malaria control programmes, but we do not know enough about how human respond to malaria to be able to build strong multidisciplinary control programmes", (Bradley, 1991). If this statement is true then health-seeking behaviour of people of Oye-Ekiti towards effective treatment of malaria needs to be explored.

Numerous studies in different parts of the world have indicated that generally, knowledge of the causes, symptoms and treatment of malaria is very poor in many rural communities (Yadav, Singh, Anand & Yadav, 2010; Yadav, 2010; Okonofua, Feyisetan, Davies-Adetugbo & Sanusi, 1992). In other words, many members of rural areas might not be well informed about the transmission and prevention of malaria that would help them have appropriate health-seeking behaviour towards the treatment of malaria. Understanding of local knowledge and practices that relate to malaria is important for the implementation of social, cultural, economically appropriate, sustainable and effective interventions (Ruebush, Weller & Klein, 1992). It suggests that

knowledge of causes or transmission as well as treatment of malaria is important for effective health seeking behaviours among individuals.

Apart from knowledge of the transmission of malaria, individuals' belief about malaria itself may have influence on their health seeking behaviours in rural communities. The belief that individuals have towards malaria fever could determine the extent to which they might want to seek help in treating malaria whenever they have it. For instance, it was asserted by the World Health Organization (WHO) in 2000 that socio-cultural beliefs about the causation of disease and its curability have direct correlation with the treatment seeking behaviour of the people. Perhaps, self-treatment, use of traditional medicines or delays in diagnosis and treatment; traditional belief towards malaria are perceived to be common; and this, no doubt could have some influences on individuals' health seeking behaviours in rural areas. More importantly, it has been reported from different parts of the world that there is a need to improve malaria control measures by incorporating the knowledge, beliefs and practices of the communities (Heggenhougen, Hackenthal & Vivek, 2003). Interestingly, it suggests that people, especially those living in rural area like Oye-Ekiti, often hold indigenous health beliefs.

Looking at gender difference in health-seeking behaviour in treatment of malaria, studies have consistently shown that the choice of treatment source was found to be influenced by accessibility, disease type and severity, patient's gender and parents' educational level (Muller, Traore, Becher & Kouyate, 2003; Ahmed, 2001). In other words, male and female individuals may be different in their health seeking behaviours towards the treatment of malaria in rural areas. The main aim of the study was to investigate the influence of knowledge of transmission of malaria and malaria belief on health-seeking behaviours among people of Oye-Ekiti, Ekiti state, southern part of Nigeria.

1.1. Statement of Hypotheses

1. Respondents who are high in knowledge of causes of malaria will significantly report higher health-seeking

behaviour than those who are low in knowledge of causes of malaria.

2. Respondents who have conventional beliefs about malaria will significantly report higher health-seeking-behaviour than those who have traditional belief about malaria.

3. Female respondents will significantly report higher health-seeking behaviour than male respondents.

2. Materials and Methods

This section discusses the methodological approaches adopted in the study. This covers the research design, description of the setting, population of study, measures, and procedure of data collection in the study.

2.1. Research Design

A survey research design was employed in selecting participants in the study. The research design was found appropriate in the study because the researchers needed to assess individuals' knowledge of causes of malaria, beliefs about malaria and their health-seeking behaviours.

2.2. Description of Setting and Population of Study

Ekiti State is situated entirely within the tropics. It lies south of Kwara and Kogi State, East of Osun State and bounded by Ondo State in the East and in the south, with a total land Area of 5887.890 sq km. Ekiti State has 16 Local Government Councils. The 2006 population census by the National Population Commission put the population of Ekiti State at 2,384,212 people with the capital located at Ado-Ekiti. Oye Local Government is bounded by some other local government to the North, South, East and West. It comprises of some small towns and villages. Malaria fever has been reported to affect both old and young ones in Nigeria; especially in the Southwest areas of the country. It was based on this reason that the researchers used the people of Oye-Ekiti; a rural community in Ekiti state as population in the study.

Table 1. Demographical Distribution of Respondents

Demographics	Frequency	Percentage (%)
Sex:		
Male	86	46.0
Female	101	54.0
Places of Treatment:		
Government Health Unit	35	18.7
Private Health Unit	65	34.8
Drug Shops	40	21.4
Self-treatment	18	9.6
Traditional Medicine	15	8.0
No Treatment Yet	14	7.5
Religion:		
Christianity	112	59.9
Islam	74	39.6
Others	1	0.5
Family Structure:		
Monogamy	158	68.4
Polygamy	59	31.6
Total	187	100

2.3. Descriptive Analysis of History of Malaria in Respondents

One hundred (53.48) of the respondents sampled in the study were young ones and 87 (46.52%) were older ones;

with a mean age of 25.95 years and standard deviation of 6.67 years. One hundred and two of the respondents (54.5%) indicated that they had ever been admitted in the hospital because of malaria, while 85 (45.5%) indicated that they had never been admitted in the hospital because

of malaria. This result implies that more than half of the number of people of the community sampled in this study had been admitted in the hospital for malaria treatment. Also, the same result indicates that close to the half of the sample perhaps had malaria but did not go to the hospital for treatment or were treatment as outpatients due to severity of the illness. Many of the respondents 104 (55.6%) had someone from their household suffered from malaria in the previous two weeks to the period of collection of data for the current study, while 83 (44.4%) had none from their household suffered from malaria in the previous two weeks. Majority of them 65 (34.8%) sourced for their malaria treatment from private health unit, 35 (18.7%) were treated in the government health unit, 40 (21.4%) went to drug shops for medications; perhaps with or without referral from a physician or pharmacist, 18 (9.6%) had self-treatment, 15 (8.0%) went for traditional medicine and 14 (7.5%) had not treated malaria; even though they had the feelings as at the time of collecting the data for this study. This, no doubt indicates how Nigerian people take the issue of malaria fever with levity.

2.4. Measures

Questionnaire was used as an instrument for data collection in the study. The questionnaires consisted of demographic characteristics, perceived causes of malaria, belief about the causes of malaria and healthcare seeking behaviour for malaria scales.

2.4.1. Demographics

These included age, sex, religion, family type, frequency of malaria attacks, and frequency of hospital admission because of malaria, any recent malaria experienced by a member of the household in the previous two weeks and place or type of treatment. Most of these variables have been implicated as determining factors for health-seeking behaviour in the literature on malaria in general.

2.4.2. Knowledge of Causes of Malaria Scale

This is a 5-item scale adapted from the work of Nuwaha (2002). The scale assesses the level of knowledge of causes of malaria of a respondent. The scale has 5-point Likert response format ranging from strongly disagree (scored, 1) to strongly agree (scored, 5). Negative items such as "witchcraft causes malaria fever" were reversed. High score indicates higher knowledge of causes of malaria. The researchers reported Cronbach's alpha coefficient of 0.57.

2.4.3. Beliefs About Malaria Scale

This is an 8-item scale adapted from the work of Nuwaha (2002). The scale assesses the belief about malaria fever by respondents. The scale has 5-point Likert response format that range from strongly disagree (scored, 1) to strongly agree (scored, 5). High score indicates conventional belief about malaria. Low score indicates traditional belief about malaria fever. Negative items such as "malaria cannot be cure by modern medicine" were reversed in the study. The researchers reported a Cronbach's alpha coefficient of 0.60 in the study.

2.4.4. Health-Seeking Behaviour Scale

This is an 8-item scale developed by the researcher for the purpose of the study. Items from the health-seeking behaviour scale used include "It is only lack of money that can make me patronize traditional healers for malaria treatment", "I will never seek medical care for malaria from public health officers because of their attitudes to patients" etc. The scale has 5-point Likert response format with responses ranging from strongly disagree (scored, 1) to strongly agree (scored 5). High score indicates higher health seeking behaviour in a respondent. The researchers reported a Cronbach's alpha coefficient of 0.68 in the study.

2.5. Data Collection Procedure

The sampling method used in the study was accidental in nature; whereby respondents were approached to complete the questionnaires one-on-one. Informed consent was verbally sought from the respondents and the purpose of the study was explained to them. Confidentiality of responses provided was assured. The study was conducted in two weeks Data collected were coded, entered, cleaned and analysed using Statistical Package for Social Sciences software. In all, a total of two hundred questionnaires were distributed; out of which only 192 were retrieved from the respondents. However, 187 questionnaires that were properly completed were used for data analyses in the study.

3. Results

3.1. Knowledge and Health-Seeking Behaviour

The first hypothesis states that respondents who are high in knowledge of causes of malaria will significantly report higher health-seeking behaviour than those who are low in knowledge of causes of malaria. The hypothesis was tested with the use of t-test for independent samples. The result is presented in [Table 2](#).

Table 2. Shows Influence of Knowledge of Transmission of Malaria on Health-seeking Behaviour among Respondents

Knowledge of causes of Malaria	N	Mean	SD	df	T	P
Health-seeking Behaviour High	73	25.51	6.06	185	3.98	<.05
Low	114	22.09	5.52			

[Table 2](#), shows that level of knowledge of transmission of malaria has a significant influence on health-seeking behaviour among respondents ($t = 3.98$; $df = 185$; $p < 0.05$). This significance result implies that community members with high knowledge of causes of malaria ($X = 25.51$) reported higher health-seeking behaviour than

those with low knowledge of causes of malaria ($X = 22.09$). The stated hypothesis was accepted.

3.2. Malaria Belief and Health-Seeking Behaviour

The second hypothesis states that respondents who have conventional beliefs about malaria will significantly report higher health-seeking-behaviour than those who have

traditional belief about malaria. The hypothesis was tested using t-test for independent samples. The result is presented in Table 3.

Table 3. Shows Influence of Malaria Beliefs on Health-seeking Behaviour among Respondents

Malaria Belief	N	Mean	SD	df	t	P
Health-seeking Behr Conventional	108	22.92	5.73	185	-1.36	> .05
Traditional	79	24.11	6.23			

Table 3 shows that malaria belief has no significant influence on health-seeking behaviour among respondents ($t = -1.36$; $df = 185$; $p > 0.05$). This non-significance result indicates that respondents with conventional belief about malaria ($X = 22.92$) were not significantly different in health-seeking behaviour from those with traditional belief ($X = 24.11$). The stated hypothesis was rejected.

3.3. Gender and Health-Seeking Behaviour

The third hypothesis states that female respondents will significantly report higher health-seeking behaviour than male respondents. The hypothesis was tested using t-test for independent samples. The result is presented in Table 4.

Table 4. Shows Influence of Gender on Health-Seeking Behaviour among Respondents

Gender	N	Mean	SD	df	t	P
Health seeking behaviour Male	86	23.66	6.40	185	0.51	> .05
Female	101	23.22	5.58			

Table 4 shows that gender has no significant influence on health-seeking behaviour among respondents ($t = 0.51$; $df = 185$; $p > .05$). This non-significance result indicates that male respondents ($X = 23.66$) were not significantly different in health-seeking behaviour from female respondents ($X = 23.22$). The stated hypothesis is rejected.

among people of Oye-Ekiti. In other words, health-seeking behaviour towards malaria in this community is not the function of the belief system of the people about malaria fever. This finding supports Comoro, *et al*, (2003) that have found no relationship between beliefs and health seeking behaviour by disconfirming a theoretically plausible mediation of beliefs in health seeking for malaria. This finding may be attributed to the idea that whatever an individual believes to be the causes of malaria will not stop him or her from trying to get well once he or she is tied down by the illness.

The third hypothesis stated that female respondents would significantly report higher health-seeking behaviour than male respondents. The hypothesis was not confirmed in the study. The finding does not support the reports of Muller, *et al*, (2003) that gender is one of the demographic factors that have influences on health-seeking behaviour of individuals to the treatment of malaria. The finding indicated that there was no gender difference in health-seeking behaviour among people of Oye-Ekiti Local government area of Ekiti state, Nigeria. In other words, the finding revealed that the extent at which both male and female individuals of the community seek for malaria treatment appeared to be similar. This means that both male and female individuals in Oye-Ekiti local government area of Ekiti state seek for treatment whenever they are down with malaria fever.

4. Discussion

The main aim of the study was to investigate knowledge of transmission of malaria and malaria beliefs as determinants of health-seeking behaviour among people of Oye-Ekiti Local Government Area of Ekiti state, Nigeria. Three hypotheses were tested in the study; out of which one of them was accepted. The first hypothesis stated that respondents who are high in knowledge of causes of malaria would significantly report higher health-seeking behaviour than those who are low in knowledge of causes of malaria. The hypothesis was confirmed. The finding revealed that knowledge of transmission of malaria significantly determined health-seeking behaviours of people in Oye-Ekiti, Ekiti state of Nigeria. This finding is supports the work of Yadav, *et al*, (2010) and Okonofua, *et al*, (1992) who reported the relationship between knowledge of causes of malaria and health-seeking behaviour to be positively correlated. That is, the higher the knowledge of transmission of malaria, the higher the health-seeking behaviour among individuals. Similarly, the finding concurs with other prior studies that have reported that people with high level of knowledge about malaria will seek more health care than those with low level of knowledge (Yadav, 2010; Yadav, *et al*, 2010). The reasons for this trend may be that the more knowledgeable people of Oye-Ekiti are about the causes, severity, transmission, morbidity and mortality of malaria, the more fearful they will be about these outcomes, and the more they will be willing to look for ways to live a satisfying and healthy live.

The second hypothesis stated that respondents who have conventional beliefs about malaria would significantly report higher health-seeking behaviour than those who have traditional belief about malaria. The hypothesis was not confirmed. This finding showed that malaria belief; whether the belief is conventional or traditional; does not determine health-seeking behaviour

5. Conclusion

The findings of this study clearly showed that knowledge of causes of malaria is vital to effective health-seeking behaviour among people of Oye-Ekiti; being a rural area in Ekiti state, Nigeria. With this finding, it is concluded that increasing knowledge of the people of the community in the area of transmission and preventive measures of malaria fever is necessary for effective treatment of the disease in the community. In other words, the more knowledge of causes of malaria people have, the better equipped they are, and thus the more committed they will be to seek healthcare against malaria attacks.

In same study, it was found that malaria belief did not determine health-seeking behaviour of people in Oye-Ekiti. The conclusion one can infer from this finding is that beliefs of people in this community are not the reason;

why most of them do not seek for effective treatment of malaria; rather they need to be more knowledgeable about the causes, preventions and various outcomes of malaria fever. Male and female individuals in the rural area did not differ in their health-seeking behaviour towards malaria. It can be concluded that everybody in the community; irrespective of gender is ready to seek for effective measures towards treating of malaria fever in the community.

5.1. Implications and Recommendations

This study has contributed to the existing theory of health-seeking behaviour towards malaria treatment in rural areas in Nigeria. The findings are also very informative in the area of increasing people's knowledge on transmission, prevention and understanding the various outcomes of malaria fever in rural areas in Nigeria. In other words, knowledge is a crucial element in health improvement and the education of a disease-burdened group on the ways of disease prevention is important to the attainment of self-reliance in disease endemic rural areas like Oye-Ekiti. The findings therefore imply that health education in the community may be a more effective way to disseminate information on how people will be more knowledgeable about the causes of malaria and how prevent and treat it if they are attacked. Based on these findings, it can be recommended that health education materials oriented towards increasing the knowledge and practice to prevent and control malaria infection should be distributed in Oye-Ekiti and other rural areas in Ekiti state and Nigeria at large.

References

- [1] Ahmed, S. M. Differing health and health seeking behaviour: ethnic minorities of the Chittagong hill tracts, Bangladesh. *Asia Pacific J Public Health*; 13: (2001), 100-108.
- [2] Comoro C, Nsimba SE, Warsame M, & Tomson G., Local understanding, perceptions and reported practices of mothers/guardians and health workers on childhood malaria in a Tanzanian district-implications for malaria control. *Acta Tropicana*; 87: (2003), 305-13.
- [3] Heggenhougen H.K, Hackenthal V, Vivek P. *The behavioural and social aspects of malaria and its control: an introduction and annotated bibliography*. World Health Organization on behalf of the Special Programme for Research and Training in Tropical Diseases. (2003).
- [4] Muller O, Traore C, Becher H and Kouyate B. Malaria morbidity, treatment-seeking behaviour and mortality in a cohort of young children in rural Burkina Faso. *Tropical Medicine and international Health*; 8(4): (2003), 290-296.
- [5] National Population Commission (NPC) [Nigeria] *2006 Census*.
- [6] Nuwaha F. People's perception of malaria in Mbarara, Uganda. *Tropical Medicine International Health*; 7: (2002), 462-70.
- [7] Okonofua F.E., Feyisetan B.J., Davies-Adetugbo A, Sanusi Y.O. Influence of socioeconomic factors on the treatment and prevention of malaria in pregnant and non-pregnant adolescent girls in Nigeria. *Journal of Tropical Medicine Hygiene*. 95 (5): 1992: 309-315.
- [8] Ruebush T.K, Weller S.C, Klein R.E. Knowledge and beliefs about malaria on the Pacific coastal plain of Guatemala. *American Journal Tropical Medicine Hyg*. 46 (4): (1992), 451-459.
- [9] Snow R. W, Craig M., Deichmann U., & Marsh K. Estimating mortality, morbidity and disability due to malaria among Africa's non-pregnant population. *Bulletin of the World Health Organisation*; 77 (8): (1999), 624-40.
- [10] Yadav S. P, Singh H., Anand P.K., & Yadav S. *Changing scenario of malaria in the Thar Desert, India. Proc. Golden Jubilee on impact of climate change on biodiversity and challenges in Thar Desert*. Desert Regional Centre, Zoological Survey of India; (2010), 351-361.
- [11] Yadav S.P. A study of treatment seeking behaviour for malaria and its management in febrile children in rural part of desert, Rajasthan, India. *Journal of Vector Borne Diseases*. 47 (4): (2010).