



The Views of Traditional Healers on Health-seeking Behaviour for Malaria Treatment: A Qualitative Study in Makurdi, Nigeria

Peter Ochepo^{1*}, Nasreen Ali², Anthony Farrant³

¹Institute for Health Research, University of Bedfordshire

²Institute for Health Research, University of Bedfordshire

³Faculty of Health and Social Science, University of Bedfordshire

ABSTRACT

Background: There is a dearth of evidence reporting the role of traditional healers in health-seeking behaviours for Malaria treatment in Nigeria. The existing evidence base presents empirical research from the viewpoint of healthcare providers such as doctors, nurses and pharmacists on factors influencing delays to treatment-seeking for Malaria. Understanding the perspectives of traditional healers is also essential in formulating appropriate treatment policies that capture the health needs of the communities they serve and promote prompt and effective health-seeking behaviours for Malaria treatment in Nigeria. Therefore, this study aimed to explore the views of traditional healers on their perceptions and attitudes towards delays in health-seeking behaviours for Malaria treatment in Makurdi, Nigeria.

Methods: A qualitative interpretative research design was used. Seven semi-structured interviews were conducted with traditional healers. Four traditional healers were based in the Northern bank region of Makurdi, and three were in the Southern bank. Data were analysed using a framework analysis approach.

Results: The main themes that emerged from the interviews were: perceptions of the effectiveness and safety of traditional vs. allopathic treatments; views about malaria risk factors, severity and treatment; access to hospitals and cost of allopathic treatment; and competition between traditional healers and healthcare providers.

Conclusion: Traditional healers are important Malaria treatment providers in Nigeria, and they contribute significantly to influencing the health-seeking behaviours, choices and decisions of people towards non-use and/or delay of biomedical treatment services for Malaria treatment in Nigeria. Malaria policy should recognise the important role that traditional healers play in health-seeking behaviour and develop and deliver community based targeted interventions to prevent delays in health-seeking for Malaria.

Keywords: Traditional healers; Delay in health-seeking; Malaria treatment; Makurdi (North-Central); Nigeria

INTRODUCTION

Why is this Research Needed?

- Traditional healers are important malaria treatment providers in Nigeria, and they contribute significantly to influencing the health-seeking behaviours, choices and decisions of people towards non-use and/or delay of allopathic treatment services for malaria treatment in Nigeria.
- There is a dearth of evidence from the perspectives of traditional healers. Previous studies in Nigeria show essen-

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Corresponding author Peter Ochepo, Institute for Health Research, University of Bedfordshire Putteridge Bury, Bedfordshire LU2 8LE, UK, Tel: 07969062428; E-mail: nasreen.ali@beds.ac.uk

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tially scarce evidence that has explored the perspectives of informal care providers such as traditional healer's which are key in addressing and formulating treatment policies for the overall wellbeing of different population subgroups. Hence, understanding this role can help prompt effective help-seeking behaviour.

Background

Globally, approximately 3.4 billion people are at risk of malaria, with tropical and sub-tropical regions of the world bearing the greatest brunt of the infection; representing a combined morbidity and mortality rate of approximately 90% and 91% respectively [1,2]. Malaria is preventable and treatable, yet these regions of the world still struggle to eliminate this febrile infection [3,4]. Nigeria contributes an estimated 27% and 55% of the total mortality and morbidity burden in Sub-Saharan Africa (SSA) and this represents over a quarter of the approximate global rates [5-7]. Compared to other regions of Nigeria, the malaria prevalence rate in the North-Central region where Makurdi is located is high, and an explanation for this is the favourable climatic condition supporting the transmission intensity of the vector in this region [8]. The explanations given for high rates of morbidity and mortality in the literature can be grouped together as structural and cultural factors. Structural explanations include access to healthcare. The evidence base in this area focuses on the affordability of allopathic (pharmacological drugs to treat symptoms and diseases administered by medical professionals) treatments, knowledge of services, location of services and the purchase of antimalarial medications over the counter from untrained and unlicensed private medicine vendors (PPMVs) [9-13]. Approximately 46% of Nigerians seek treatment first by purchasing over-the-counter medications from unlicensed PPMVs/chemist shops for the treatment of various illnesses including malaria [14].

Cultural factors discussed by previous studies focus on the use of traditional medicine (health practices and beliefs of incorporating plant, animal, minerals and spiritual therapies) which are either self-prepared from different plant extracts or obtained from traditional healers [15]. Approximately, over 86% of Nigerians utilise traditional healers for treatment [16,17]. The over reliance on traditional medicine is one of the main causes delaying help-seeking for allopathic treatment and contributing to poor malaria outcomes [12,13,18,19]. Other cultural factor includes beliefs about the efficacy of traditional medicine over allopathic medicine [17,19] and gender dynamics, for example women needing to seek permission from male members of the family to go outside the home to seek medical help [20,21].

Traditional healers are thus key to understanding the health-seeking behaviours for malaria treatment but there is a scarcity of evidence capturing their views on the reasons for delays in health-seeking behaviours for malaria treatment. This research study focused on Makurdi because despite the continued high malaria-related morbidity and mortality rates in the community there is limited evidence explaining the contribution of delays in health-seeking on malaria outcomes. To the best of our knowledge this is the first in-depth qualitative research study focusing on the traditional healer's perceptions and attitudes to delays in health-seeking behaviours for malaria

treatment in Makurdi, Nigeria.

METHODS

The study used a qualitative interpretative research design using semi-structured interviews for understanding the views of traditional healers. The interviews generated in-depth detailed discussions from the perspectives of traditional healers.

Sample

Traditional healer participants (n=7) (age range 33-68) who were treating malaria patients using herbs, and resident in Makurdi were recruited purposively using the snowballing approach [22]. This research study is part of a wider project that involved a sample of adult Nigerians, healthcare professionals and policymakers. Adult Nigerians who took part in the research study were asked to signpost Peter Ochepo (PO) to traditional healers that had treated them. Traditional healers were contacted by telephone and a study information sheet read out to them. They were given opportunity to discuss their involvement in the research. A mutually convenient date and time was arranged for when an interview will take place.

Data Collection

A semi-structured interview guide was developed by PO following an in-depth review of existing literature on health-seeking behaviours for malaria treatment and reviewed by Nasreen Ali (NA) and Anthony Farrant (AF). The interview guide covered broad questions on perceptions about malaria (including severity and susceptibility) and how it influences health-seeking behaviours and choices, views on care pathways (formal and informal) for malaria treatment in Nigeria, perceptions about the biomedical treatment of malaria, views on barriers influencing delay to seeking biomedical treatment for malaria, and their opinions on recommendations (if any) to improving prompt health-seeking behaviours for malaria treatment. A total of seven interviews were held between November 27th 2020 – 14th January 2021. Four traditional healers were recruited from the Northern Bank of Makurdi and three from the Southern Bank. Data saturation was achieved at this point with this number of interviews, and this meant that no new or additional information or themes were evolving [23]. All interviews were conducted in English using the interview guide. Written consent was taken at the beginning of the interviews and the confidentiality of the interviews reaffirmed. Each interview lasted approximately 60 minutes. All interviews were audio-recorded with participant's consent and transcribed verbatim and anonymised using participant codes. NA and AF checked the transcripts against the audio recordings to confirm accuracy [24]. Transcripts were securely stored in a password-protected file and USB storage device.

Analysis

The Framework Analysis Approach was used to analyse the transcripts [25]. This involved a detailed familiarisation with the data which involved a reading and re-reading of all transcripts to understand similarities and differences between participant's views, identifying key themes emerging from the transcripts

and assigning them a code and creating a coding framework, indexing the material according to the coding framework and interpreting the findings in the context of the existing evidence base in the area. The coding frame was developed by PO and was discussed with NA and AF until an agreement was reached on the themes and sub-themes. The number of interviews conducted was adequate to generate rich in-depth findings on health-seeking delays for malaria treatment in Makurdi from the perspectives of traditional healers [23,26,27]. The consolidated criteria for reporting qualitative studies (COREQ) were followed by this [28].

Findings

The characteristics of the participants presented in **table 1** and **table 2** show the codes used to identify participant narrative extracts. The main themes emerging from the interviews with traditional healers were: perceptions of the effectiveness and safety of traditional vs. allopathic treatments, views about malaria risk factors, severity and treatment, access to hospital and cost of allopathic treatment, competition between traditional healers and healthcare providers and suggestions for improving health-seeking for malaria treatment.

Table 1: Biographic characteristics of participants.

Participant Identification Codes	Age	Gender	Marital Status	Duration of Practice/Experience
TH1MT	68	Male	Married	35 years
TH2EO	49	Female	Married	21 years
TH3TO	46	Male	Married	15 years
TH4TA	33	Male	Married	14 years
TH5MA	60	Female	Married	32 years
TH6SY	57	Male	Married	25-30 years
TH7PO	42	Male	Married	11 years

Table 2: Example of a code used to represent a traditional healer (TH1MT).

Participant identification code	Traditional Healer	Participant identification no.	Participant's initials
TH1MT	TH	1	MT

Perceptions of the Effectiveness and Safety of Traditional vs. Allopathic Treatments

The majority of traditional healers argued that traditional herbal medicines are more effective and safe when compared to allopathic medicines because they are developed from natural herbal materials while the latter are developed from chemical substances which they consider as unsafe for human consumption.

People have been using this our [traditional] treatment, and why they want it more is because it is a natural treatment, we only use the plants products like roots, leaves, and the bark of the medicinal tree, and nothing more,

but in the hospitals, we know that they use different chemicals to treat people, so people know that they are safer with using what we use to treat them (TH1MT).

The traditional healers continued to explain that allopathic medicines were ineffective in the treatment of malaria because patients that visited them for traditional treatments complained that they had only experienced short term relief from allopathic treatments.

Plenty of people here in Makurdi have tested the traditional treatment and have witnessed that it is very effective and because in traditional medicine we use what is all-natural that they all know rather the hospital treatment where they use a chemical that is unknown to them (TH3TO).

Views about Malaria Risk Factors, Severity and Treatment

The traditional healers argued that their views about the use of allopathic medicine vs traditional medicines was influenced by parents, family, friends and personal experiences.

A lot of people their thoughts have been already shaped to agree that a particular treatment is what works best for them as it has always been working for their families, for example, most of us who are born into homes that practised traditional/herbal medicines and we watched our parents treat people, so we learnt from it and received blessing with the healing power to help people, and this is what I have been practising (TH6SY).

A minority of traditional healers said that the role of community perceptions and treatment patterns influences people's health-seeking decisions and choices. One explanation given was that communities perceive herbal treatment and recognise it as the safest and oldest treatment practiced before the introduction of allopathic treatment.

Before the existence of the hospital medicine, one of the oldest forms of treatment is the herbal form of treatment and so people in our community have long been using this before any other (TH5MA).

The majority of traditional healers discussed that the use of herbal treatment and its preference over the allopathic forms of treatment is important for preserving African heritage and traditions and was part generational inheritance.

We will still use our herbal treatment because it is a blessing from our fathers and it is the surest and best treatment that has no harm to the body whenever you take it because is a pure plant (TH1MT).

This (traditional herbs) is our forefather's treatment practice, and so we need to make sure we protect our culture (TH3TO).

The majority of traditional healers said that allopathic treatments are unsafe because drugs are manufactured from a combination of chemicals, and so, the fear of developing side effects as a result of prolonged and continual consumption is

an important reason for people preferring the traditional herbal treatment.

I don't know all this kind of medicines (allopathic medications) that they are giving people in the hospital because we don't even know how these drugs are produced, and sometimes maybe they are using bad chemicals to make them and then people will be taking it, but you see this our medicines (herbal concoction) it is very good for the body because it is from plants, we do not add and mix anything inside this thing (TH3TO).

There were two distinct views about the causes of malaria which in turn determined perception of severity and treatment options. The first is that malaria caused by mosquito bites and is not severe.

The ones (malaria) that are caused by mosquito bites are not severe I can treat it one hand in just a few hours and they will be fine but you see that one that is caused by the spirits, it is very dangerous and can kill quickly if they person doesn't do something about it quickly (TH1MT).

The second view is that malaria caused by witchcraft and evil spirits and this 'variety' was perceived to be more serious and required exorcisms to be treated.

People come here to receive treatment and spiritual help for different kinds of sickness and conditions, like for malaria, I know that there is the kind of malaria that mosquito cause the one that when a person has done something like a taboo or evil to another person in this community, the gods can make them sick until they confess that taboo and then some rituals and sacrifices will need to be done to remove the curse from the person, so the kind of malaria that is caused by an evil spirit is more dangerous and needs serious and quick spiritual cleansing help (TH3TO).

Some traditional healers said that women and children experience higher severity of malaria compared to men because men have a stronger immune system to fight off the disease impacting on health-seeking behaviours of men.

It (malaria) kills small children, mothers and women more than men (TH4TA).

The normal malaria that is caused by mosquitoes, I have been treating more women and children than men and these young boys, so I think women and the children are the ones that this malaria attack more, but all these caused by spirit it can be serious to anybody whether women or men once they have committed evil (TH6SY).

Access to Hospital and Perceptions of the High Cost of Allopathic Treatment

Some traditional healers said that patient's are likely to avoid hospitals because they are perceived as dirty and fear contracting hospital acquired infections when compared to the facilities of traditional healers which are considered to be clean.

Hospital is a very dirty place, it is smelling every time,

so people are also fearing that if they go to hospital and another sickness catch them wetin (what) them go do (TH2EO).

The majority of traditional healers reported that the high cost of receiving allopathic treatment at the hospital is perceived as a barrier that contributes to the decision to seek traditional treatment, and hence delays in health-seeking.

When we go to the hospital, they charge us so much the cost of this treatment is so high for us that we cannot afford it, that is what makes us look for alternative, we don't have money and this treatment cost a lot of money (TH3TO).

The treatment at the hospital is expensive which is why people are not going there (TH6SY).

Competition between Traditional Healers and Healthcare Providers

Some traditional healers argued that there is an underlying tension between healthcare providers and traditional healers which impacts on the health-seeking decisions of patients. They said that the healthcare professionals usually discourage patients from seeking and utilising the traditional treatment, and in turn healthcare professionals discourage their patients from utilising the allopathic treatment.

Some of the patients that come to us have told us that we treat them better than the hospital people, yet these doctors discourage them from coming to seek our (herbal) treatment, you see, so, we also tell people that we are better than them in treating diseases and they should not go to the hospital first, so my advice is if the government does not make us (traditional healers) to be known and accepted in this country as part of treatment providers, we will also continue telling people not to go to the hospital because actually they are not good (TH7PO).

Suggestions for Improving Health-seeking for Malaria Treatment

Traditional healers gave suggestions on how to improve health-seeking for malaria treatment. They argued that traditional practices should be acknowledged and traditional healers should be integrated as part of national health providers by the government of Nigeria.

The only way I can encourage people to go to the hospital is when the hospital people and us start to work together and when they also know that we are giving the best treatment and they are referring people to us and the government should take us important in Nigeria as people that can provide treatment in this country, if not I cannot encourage anybody to go to the hospital treatment, especially for malaria treatment (TH2EO).

The traditional healers continued to say that there should be a stronger working relationship between healthcare professionals and traditional healers when delivering patient care, whereby both can make referrals to each other.

Right now in this our country, the doctors do not want to relate with us, because they look at us as if we are not doing what is correct, but they know that we are providing correct treatment, so what I have to say is that both doctors, nurses and everybody in the hospital needs to be working together with us (traditional healers) then we can also advice people to also go to the hospital to see the doctors (TH5MA).

There is a need for the Nigerian government to invest more funding to research traditional medicines to fight against malaria.

All drugs that are used to treat people in the hospital are gotten from plants, so drugs are plants, but some chemicals are mixed with drugs when producing it which is not good for the body, and so the government should look at our plants and study them very well how they can be used to treat malaria and other diseases without mixing all these chemical, because we have been using only the herbs to treat people and they are getting fine every year, so the Nigeria government should look at this and study it so that more people can be sure about using the herbs instead to delaying to seek treatment (TM7PO).

DISCUSSION

To the best of our knowledge this is the first qualitative study that explores the views of traditional healer's on delays to health-seeking behaviours for malaria treatment in Makurdi, Nigeria. We have identified some perceptions and attitudes that contribute to the delays in health-seeking behaviours for malaria treatment from the viewpoint of traditional healers.

The findings of our study identified some key structural factors contributing to delays in health-seeking. Traditional healers said that community fears related to accessing and contracting hospital acquired infections was a key perception that could be contributing to delays in health-seeking behaviours for malaria treatment which is similar to the finding in previous research [29,30]. The high cost associated with allopathic treatments was also discussed as a deterrent.

Our study shows that our traditional healers felt that healthcare provider were reluctant to refer patients to them for traditional medicine. This led to traditional healers discouraging patients to seek allopathic treatment. A similar finding was reported by [31].

We identified cultural factors that contribute to delays in health-seeking for malaria in Makurdi. Traditional healers argued that herbal medicines are more effective and safe when compared to allopathic medicines because they are developed from natural herbal materials while the latter are developed from chemical substances which they consider to be unsafe for human consumption. Research carried out in other parts of Nigeria also found similar perceptions within the general community [2,33,37,38]. In our study the traditional healers explained that their patients often spoke about the lack of efficacy of allopathic medicine to treat malaria. The perceptions of the effectiveness and safety of traditional verses allopathic medi-

cines has also been reported in the literature, as being related to family upbringing, community experiences cultural beliefs, lack of knowledge of available services and treatments and our participants had similar views [31,35,36].

The issue of utilising traditional medicine to preserve ancestral cultural values and heritage is also identified in the literature as contributing to delays in health-seeking behaviours for malaria treatment, and this was also a dominated discussion among our participants who argued that the traditional medicine has been helpful to their community for many generations and is perceived as part of their cultural heritage [35,36].

Our traditional healers did not view malaria as a serious disease when compared to other illnesses like cancer and HIV/AIDS. The perception that malaria is not a serious disease is well documented in the literature and previous studies have also reported a similar perception within the community [31,33,37,38]. Traditional healers also reported that the causes of malaria determined severity and treatment options. Malaria caused by mosquito bites was considered to be less dangerous than malaria caused by witchcraft and evil spirits. The latter was treated through exorcisms. This finding is also reported by in other research [33,39-42]. Women and children were said to experience higher severity of malaria compared to men because men were perceived to have a stronger immune system and therefore able to fight off the disease, and age was also seen. Similarly, studies conducted in Tanzania also emphasised that the severity of malaria is associated with gender and age as they revealed that women and children experience higher malaria-related severity than men. Moreover, previous study also argued that children tend to experience higher severity as it relates to their developing immune system to malaria and women tend to experience higher severity also as it relates to pregnancies which lowers their immunity and makes them susceptible to malaria infection [43].

We asked our traditional healers to make suggestions for improving health-seeking for malaria treatment and they argued that traditional medicine should be formally acknowledged in the Nigerian Health System. In this way traditional healers would be more inclined to refer patients to healthcare professionals for allopathic treatment. They also suggested that the Nigerian Government should increase funding to understand the benefits of traditional medicine in the treatment of malaria.

LIMITATIONS

This study was carried out during the COVID-19 lockdowns. We were successful in recruiting seven traditional healers to take part in interviews. Although the number of participants was low the interviews generated in-depth findings. The traditional healers were from different cultural and ethnic origins, gender, religions, and different locations within Makurdi to ensure a range of views were represented.

CONCLUSION

The findings from this study have provided in-depth, contextualised perceptions and attitudes from the viewpoints traditional healers that are contributing to delays in health-seeking

behaviours for malaria treatment in Makurdi. Our findings are similar to other studies on the reasons for delays in health-seeking behaviours. Discussions highlight the importance of taking a public health approach to dealing with delays in health-seeking for malaria in Makurdi by co-designing community-based interventions to encourage timely health-seeking behaviours for malaria treatment in Makurdi. Traditional healers should be a key part of these interventions with healthcare professional as well as the public, religious leaders and policy makers. The Ministry of Health should formally acknowledge the importance of traditional healers for providing treatment for malaria, this could further help to establish a connection between herbal providers and allopathic providers, hence, encourage the promotion of referrals of patients from traditional healers for malaria treatment.

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AUTHOR'S CONTRIBUTION

This research is part of a wider findings from Peter Ochepo's PhD and he designed the study material and manuscript. Peter Ochepo wrote the study protocol. Both Anthony Farrant, Nasreen Ali and Peter Ochepo conducted the literature review. PO conducted in-depth interviews with the participants. NA and AF checked the interview guide, transcripts against the recordings and coding. The final copy of the manuscript was read and approved by all AF and NA who were PO PhD supervisors.

ETHICS APPROVAL AND PARTICIPANT'S CONSENT

The Research Ethics Committee (REC) of the University of Bedfordshire (UoB) provided ethical approval for this study. All participants provided audio consent to indicate their willingness to participate, and these were recorded after going through the participant information sheet they all understand the voluntary nature of their participation, as well as understanding that all information obtained would be confidentially secured.

REFERENCES

1. Oladepo O, Oyeyemi AS, Titiloye MA, Adeyemi AO, Burnett SM, et al. (2019) Malaria testing and treatment knowledge among selected rural Patent And Proprietary Medicine Vendors (PPMV) in Nigeria. *Malar J* 18(1): 103.
2. Rosenthal PJ, John CC, Rabinovich NR (2019) Malaria: How are we doing and how can we do better. *Amer J Trop Med Hyg* 100(2): 239..
3. Dasgupta S (2018) Burden of climate change on Malaria mortality. *Int J Hyg Environ Health* 221(5): 782-791.
4. Oladele OV, Onuoha SC, Hamafyelto HS, Omisope O, Fauziyya A, et al. (2018) Prevalence of Malaria infection among patients attending Murtala Muhammed specialist hospital Kano, Nigeria. *Afr J Clinical Exp Micro* 19(3): 8-11
5. Dave-Agboola IO, Raji JI (2018) Health-seeking behaviour of Malaria patients in Lagos, Nigeria. *Int J Health Sci Res* 8(7): 259-264.
6. Oboh MA, Singh US, Antony HA, Ndiaye D, Badiane AS, et al. (2018) Molecular epidemiology and evolution of drug-resistant genes in the Malaria parasite *Plasmodium falciparum* in South-Western Nigeria. *Infect Genet Evol* 66: 222-228.
7. Uzochukwu BSC, Ossai EN, Okeke CC, Ndu AC, Onwujekwe OE, et al. (2018) Malaria knowledge and treatment practices in Enugu state, Nigeria: A qualitative study. *Int J Health Policy Manag* 7(9): 859.
8. Jombo GTA, Mbaawuaga EM, Denen AP, Dauda AM, Eyong KI, et al (2010a) Utilization of traditional healers for treatment of malaria among female residents in Makurdi city and its environs. *Asian Pacific Journal of Tropical Medicine* 3(7): 563-566.
9. Gogtay NJ, Bhatt HA, Dalvi SS, Kshirsagar NA (2002) The use and safety of non-allopathic Indian medicines. *Drug Saf* 25(14): 1005-1019.
10. Getahun A, Deribe K, Deribew A (2010) Determinants of delay in Malaria treatment-seeking behaviour for under-five children in South-West Ethiopia: A case control study. *Malar J* 9(1): 320.
11. Abiodun MT, Ilori OR (2022) Caregiver's perception and determinants of delayed presentation of children with severe Malaria in an emergency room in Benin City, Nigeria. *Niger Postgrad Med J* 29(3): 198-205.
12. Udujih OG, Udujih HI, Ukaga CN, Iwuala CC (2020) Health-seeking behaviour among caregivers in treatment of childhood Malaria in Imo State, Nigeria. *Intl J Trop Dis Health* 38-45.
13. Uneke CJ, Obeka I, Uneke BI, Umeokonkwo A, Nweze CA, et al. (2021) An assessment of nursing mother's and young people's access to proprietary and patent medicine vendor's services in rural communities of South-Eastern Nigeria: Implication for review of National drug policy. *J Pharm Policy Pract* 14(1): 1-14.
14. Isiguzo C, Anyanti J, Ujuju C, Nwokolo E, De La Cruz A, et al. (2014) Presumptive treatment of Malaria from formal and informal drug vendors in Nigeria. *PloS one* 9(10): e110361.
15. Mishra LC, Singh BB, Dagenais S (2001) Ayurveda: A historical perspective and principles of the traditional healthcare system in India. *Altern Ther Health Med* 7(2): 36-43.
16. Adekannbi JO (2018) Relationship between orthodox and

- traditional medical practitioners in the transmission of traditional medical knowledge in Nigeria. *Health Info Libr J* 35(2): 130-140.
17. Wada AS, Jatau AI, Bala AA, Haruna A, Isa AM, et al. (2019) Use of traditional medicines among pharmacists in Nigeria. *Complement Ther Clin Pract* 35: 53-56.
 18. Uzochukwu BS, Onwujekwe OE (2004) Socio-economic differences and health seeking behaviour for the diagnosis and treatment of Malaria: A case study of four local government areas operating the Bamako initiative programme in South-East Nigeria. *Int J Equity Health* 3(1): 6.
 19. Ajala AS, Wilson NA (2013) Local aetiology and pathways to care in Malaria among the Ibibio of South-coastal Nigeria. *Health Cult Soc* 4(1): 80-90.
 20. Abubakar A, Van Baar A, Fischer R, Bomu G, Gona JK, Newton CR (2013) Socio-cultural determinants of health-seeking behaviour on the Kenyan coast: a qualitative study. *PLoS one* 8(11): 71998.
 21. Falade CO, Ogundiran MO, Bolaji MO, Ajayi IO, Akinboye DO, et al (2005) The influence of cultural perception of causation, complications, and severity of childhood malaria on determinants of treatment and preventive pathways. *International quarterly of community health education* 24(4): 347-363.
 22. Naderifar M, Goli H, Ghaljaie F (2017) Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education* 14(3).
 23. Fusch PI, Ness LR (2015) Are we there yet? Data saturation in qualitative research. *Qualit Rep* 20(9): 1408.
 24. Halcombe EJ, Davidson PM (2006) Is verbatim transcription of interview data always necessary. *Appl Nurs Res* 19(1): 38-42.
 25. Bryman A (2012) *Social research methods*. Oxford: Oxford University Press.
 26. O Reilly M, Parker N (2013) Unsatisfactory saturation: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualit Res* 13(21): 90-197.
 27. Walker JL (2012) The use of saturation in qualitative research. *Can J Cardiovasc Nurs* 22(2): 37-46.
 28. Fereday J, Muir-Cochrane E (2006) Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International journal of qualitative methods* 5(1): 80-92.
 29. Bedford KJA, Sharkey AB (2014) Local barriers and solutions to improve care-seeking for childhood Pneumonia, Diarrhoea and Malaria in Kenya, Nigeria and Niger: A qualitative study. *PLoS one* 9(6): e100038.
 30. Bello IS, Rehal S (2014) A qualitative study exploring health seeking behaviour and cultural beliefs of mothers in paediatric Malaria treatment decision-making process in Ile-Ife, South-West Nigeria. *Malaria J* 13(1): 9
 31. Okeke TA, Okafor HU, Uzochukwu BS (2006) Traditional healers in Nigeria: Perception of cause, treatment and referral practices for severe Malaria. *J Biosoc Sci* 38(4): 491-500.
 32. Nuwaha F (2002) People's perception of Malaria in Mbarara, Uganda. *Trop Med Intl Health* 7(5): 462-470.
 33. Okeke TA, Okafor HU (2008) Perception and treatment seeking behavior for Malaria in rural Nigeria: Implications for control. *J Human Eco* 24(3): 215-222.
 34. Babalola AS, Idowu OA, Ademolu KO (2021) Utilization of herbs with abortifacient potentials to prevent Malaria in pregnant women in South Western Nigeria: A random survey. *Ethnobotany Res App* 1(1): 1-11.
 35. Lestaris T, Keman S (2018) How does the dayak Ngaju community treat Malaria? A qualitative study on the use of traditional medicine in central Kalimantan Province, Indonesia. *Indian J Public Health Res Dev* 9(11): 1724-1728.
 36. Ogbuehi IH, Ebong OO (2015) Traditional medicine treatment of Malaria in Onitsha, South East Nigeria. *GreenJ Med Sci* 5(1): 11-18.
 37. Okeke TA, Okeibunor JC (2010) Rural-urban differences in health-seeking for the treatment of childhood Malaria in South-East Nigeria. *Health Policy* 95(1): 62-68.
 38. Pilkington H, Mayombo J, Aubouy N, Deloron P (2004) Malaria, from natural to supernatural: A qualitative study of mother's reactions to fever (Dienga, Gabon). *J Epidemiol Community Health* 58(10): 826-830.
 39. Maslove DM, Mnyusiwalla A, Mills EJ, Gowan J, Attaran A, et al. (2009) Barriers to the effective treatment and prevention of Malaria in Africa: A systematic review of qualitative studies. *BMC Int Health Hum Rig* 9(1): 26
 40. Nofal SD, Peto TJ, Adhikari B, Tripura R, Callery J, et al. (2019) How can interventions that target forest-goers be tailored to accelerate Malaria elimination in the greater mekong subregion? A systematic review of the qualitative literature. *Malar J* 18(1): 1-10.
 41. Makundi EA, Malebo HM, Mhame P, Kitua AY, Warsame M, et al. (2006) Role of traditional healers in the management of severe malaria among children below five years of age: The case of Kilosa and Handeni Districts, Tanzania. *Malar J* 5(1): 1-9.
 42. Gessler MC, Msuya DE, Nkunya MHH, Schär A, Heinrich M, et al. (1995) Traditional healers in Tanzania: The perception of malaria and its causes. *J Ethnopharmacol* 48(3): 119-130.
 43. Agyepong IA (1992) *Women and Malaria: Social, economic, cultural and behavioural determinants of malaria*. Women and tropical diseases. Ottawa: IDRC 176-91.