

The Need to Incorporate Senior Caregivers in Health Education Relating to Malaria in Rural Areas

Ali Arazeem Abdullahi*, Anton Senekal** and Cecilia Van Zyl-Schalekamp***

Abstract: Using a combination of qualitative research techniques this study has investigated the place and the roles of senior caregivers in the management of malaria in children in rural communities of Nigeria. The study was conducted in Okanle and Fajeromi in Ifelodun Local Government Area of Kwara State. The study shows that a variation may exist between young and older caregivers with respect to desire for modern or traditional medicines in the treatment of malaria. While most senior caregivers continued to rely on herbal treatment regimens, younger parents seemed to have preference for modern treatment but not without difficulties. Given their important position within the extended family structure, senior caregivers seemed to also possess tremendous influence on health care decision making process. The study suggests the need to incorporate senior caregivers in health promotion strategy related to malaria control in rural communities.

Introduction

There are strong indications that the majority of the people who suffer from malaria worldwide live in Sub-Saharan Africa (SSA) where *plasmodium falciparum* is responsible for the highest number of malaria cases and deaths. Like other affected countries in SSA, malaria is ranked one of the leading causes of morbidity and mortality in children less than five years of age in Nigeria (Olasehinde et al. 2010: 159; Oshikoya, 2007: 49). It is estimated that between 250,000 and 300,000 children below five years of age die from malaria every year in Nigeria (FMoH, 2009) representing about 30% of infant mortality (Malaria Byte, 2007; Mosanya, 2000; Okafor and Amzat, 2007) and about 25% of the global malaria deaths in children within this age-bracket (Okeke et al. 2006). Although malaria is increasingly becoming an urban phenomenon in Nigeria (see Oguonu et al. 2005; Oreabga et al. 2004) and beyond (Baragatti et al. 2008), the highest number of deaths and disability are often recorded in the rural areas where the level of poverty is relatively high coupled with limited access to information, modern preventive and curative measures.

Given the recent and the on-going socio-political commitments to fight malaria head-on, one expects the trends of malaria to have receded very significantly among the Nigerian children. For instance, there have been remarkable health sector reforms such as change in the treatment policy from chloroquine to artemisinin-based combination therapy ACTs in line with the World Health Organisation's (WHO) directives and 'free' distribution of millions of doses of ACTs and insecticide treated bed nets (ITNs) to the 36 States of the Federation including the Federal Capital Territory (FCT), Abuja. Some States of the Federation have even started to implement the 'free' malaria treatment for children younger than five years of age. In Kwara State where this study has been conducted the government has partnered with a number of local and international non-governmental

* Department of Sociology, University of Johannesburg, South Africa and Department of Sociology, University of Ilorin, Nigeria. Email: kwaraeleven@yahoo.com

** Department of Sociology, University of Johannesburg, South Africa

*** Department of Sociology, University of Johannesburg, South Africa

organisations (NGOs) to provide 'free' bed nets and treatment for children younger than five years of age (Saraki, 2009). Despite these efforts, malaria crisis has continued to linger unabated in rural communities with thousands of children falling prey to the disease. The questions are: what have the government of Nigeria and its agencies failed to do or recognise in promoting health education in rural areas? To what extent can senior caregivers be integrated into health promotion strategies and education in order to avert some of the debilitating consequences of malaria in children in rural Nigeria and beyond?

Indeed, one of the most influential cultures in the world is the 'Western culture'; the widespread of which has been aided and exacerbated by a constellation of events and factors such as the Western imperialistic occupations, religion (particularly Christianity), capitalism, urbanisation and globalisation phenomena. This is evident in contemporary African societies. In *Globalisation and its Implication on African Culture and Development* with specific focus on the African system of education, Oni (2005) noted that the impacts of colonisation and globalisation in African societies are enormous and multifaceted. They are usually manifested in the political, educational, family and cultural systems. Some scholars have attributed the widespread cultural and family disintegration across African societies to the infiltration of the so-called 'Western lifestyles' and their attributes (see Oni, 2005; Mbakogu, 2006). The post Apartheid South Africa represents a perfect example of a country in contemporary Sub-Saharan African societies whose family systems have suffered considerable disintegration or set-back owing to many years of Apartheid. In modern South Africa there is widespread evidence to suggest that a large proportion of the nation's children are growing up in a female-headed household with little parental control and financial support (see Preston-White, 1993). While all of these predicaments cannot be blamed on 'Western cultures' and their attributes, many scholars are of the opinion that the so-called 'Western cultures' and their attributes constitute the 'carrier agents' of the evils that have befallen the African society over the years (see Oni, 2005).

Despite the infiltration of the so-called 'Western cultures' or lifestyles into the socio-cultural and political landscape of African societies, the extended family system, which has been in existence aeons ago, has remained a very powerful normative ideal in most indigenous African communities. In some of these communities especially in rural areas, sociologists and anthropologists have found that the extended family structures have endured and remain unbroken. In such a family system senior parents (including grandparents and mother-in-laws) have remained important elements of the extended family system (see El-Safty, 2001; Jonasi 2007; Kerr et al. 2008) as they are generally perceived as the custodians of indigenous knowledge system (IK) and culturally obligated to guide the activities of the younger generations (Aubel, 2006). The role of the grandparents particularly the senior women in the well-being and up-keep of younger children becomes even more important where the biological parents are unwilling (perhaps as a result of family disorientation) or incapacitated (by sickness and poverty) to provide adequate care for their children (Jonasi 2007).

However, most development programmes and malaria control strategies have tended to ignore the important roles often played by the senior caregivers in the community well-being as a result of which they (senior caregivers) are often ignored in an effort to strengthen the existing family and community survival strategies (see Aubel, 2005). Where they are involved in health education at all, experience has shown that their ideas are often considered obsolete and incongruent with 'modernisation' or Western idea of medicine (Kerr et al. 2008). In this study, therefore, the place of the senior caregivers (both men and women) in the management of malaria in children and health decision making process has been investigated. First of all, the study probed the differences in the patterns of health care seeking behaviour between young and senior caregivers and their impacts on the treatment of malaria in children keeping track of the factors responsible for such differences. It also investigated the role of the senior caregivers in the decision making process. This study became important considering the web of responsibilities of the senior caregivers in the well-being of little children in rural communities which have been hitherto neglected in development projects aiming at controlling and eradicating childhood diseases in rural communities.

Methodology

The Anatomy of the Study Areas

This study was conducted in Okanle and Fajeromi in Ifelodun Local Government Area of Kwara State. Okanle and Fajeromi are typical examples of indigenous and rural communities in Nigeria under the Omupo district. Based on the 2006 population census, the total population of Ifelodun local government is about 204,975 people (Federal Republic of Nigeria [FRN], 2009). The Okanle Village Area Council was established in 1956 with other seven villages that included Fajeromi (Okanle Descendant Union [ODU], 2009). Okanle and Fajeromi are a few metres away from each other. The villages are about 30km away from Ilorin, the Capital of Kwara State, along Offa/Ajase Ipo Road and exactly 6km from Idofian town. The people speak Yoruba language. The number of households in Fajeromi is less than 40 while that of Okanle is more than 60. Before the introduction and acceptance of Islam and Christianity in the community, the people were predominantly traditional believers.

One of the most common characteristics of rural communities in Nigeria is communal life where the basic residential units are compounds and an extended family structure in which older generations play important roles. The extended family structures are also generally patriarchal in nature where men are seen as the heads of the households and are expected to be responsible not only to themselves and families but the entire community. The family head is known as the *olori-ebi* who is culturally expected to provide financial, moral and spiritual responsibilities to members of his family. This is not to suggest that women are prevented from playing active roles in the day-to-day activities of the communities. Women make concrete and significant contributions to the sustainability of the family. The majority of women engage in farming activities. Some of them engage in buying and selling in order to support or augment the family income to meet certain important family demands like education and health. However, culturally, domestic responsibilities like cooking, washing and taking care of the children are considered to be women's roles. Housing patterns in these areas vary. Most

buildings are constructed with mud and bricks and roofed with corrugated iron sheets. There are, however, a number of modern buildings that include the *Oluode* and *Idera* estates in Okanle.

In most indigenous communities in Nigeria, traditional institutions remain to be seen as an embodiment of cultural identity and tradition and the traditional rulers as catalysts and symbols of these institutions. Each of the rural communities studied is headed by a traditional village head. Okanle is headed by a King known as the *Oba* or *Kabiesi* popularly addressed as "Olokanle of Okanleland". The *Olokanle* is a member of Ifelodun Traditional Council with the headquarters in Igbaja. In Fajeromi, on the other hand, the traditional title of the village head is *Baale*. In traditional hierarchy, the *Baale* is lower than the *Oba* mostly because of historical antecedents. Indeed, in both communities, the traditional rulers are conceived as the representatives of the community in matters affecting the people at all levels of governance: district, local and state levels.

Okanle and Fajeromi are like many rural areas in Nigeria where people have very limited access to basic social amenities. The roads leading to both communities from both Arugbo and Idofian are not tarred and as a result difficult to traverse. Although the communities have just been electrified, the researcher hardly saw any electricity in use throughout his visits to both communities. Almost every household had a transistor radio to listen to news. The community health centre was established in 1978 through the initiatives of both Okanle and Fajeromi communities. The facility is situated in-between the two communities. However, the management of the health centre has since been taken over by the State government. As a result, it is in a deplorable condition due to poor maintenance. Indeed, the hospital lacked basic health facilities with just two beds in a dilapidated building. Most of the rooms in the health centre have been abandoned because the roofs were collapsing.

Data Collection, Analysis and Sampling Procedures

Data for the study were sought through primary and secondary sources. The study adopted a combination of qualitative research techniques to collect primary data from the respondents. In a study of this nature, a qualitative research technique often provides a 'richer' and 'more valid' basis than simply dealing with numbers and measures commonly found in quantitative research (see Yates, 2004: 139). A total of 20 semi-structured interviews, 10 in-depth interviews and two focus group discussions (FGDs) were conducted with young and older caregivers whose children or wards below the age of five had manifested malaria symptoms at one time or another. They aged between 25 and 80 years. The majority of the respondents belonged to the lower socio-economic status with limited income and without formal education. The secondary data included the 2008 Surveillance Report on Malaria Cases and Deaths sought from the Kwara State Ministry of Health. A purposive sampling procedure was used to select sample for the study. All the interviews were recorded using a tape recorder (widget). Data analysis was done both manually and electronically. The NVivo software package (Version 9) was used to aid analysis.

Results and Analysis

Theme I: Treatment of Malaria in Children: a Community Polarised

One of the cornerstones of malaria control and eradication across malaria endemic regions has been early detection, diagnosis and treatment through primary health care services that offer anti-malarial treatment in line with the WHO's guidelines of the artemisinin-based combination therapies (ACTs). However, much information available in malaria endemic regions has indicated that the majority of malaria cases are treated outside the formal health facilities. While some depend on spiritual healing others rely on self-medication with some elements of traditional and modern treatment; others completely ignore treatment. Nyamango (2002) found out that a significant number of patients rely on multiple sources of care when malaria occurs in rural Kenya. A recent study by Bamidele et al. (2009) in urban areas of Osun State, Nigeria, found that a high proportion of the people still believed in traditional medicine in the management of diseases even where there was 'adequate' access to modern health care facilities and health providers.

The current study however showcases a polarised community between young and older caregivers with respect to the status and use of traditional herbal regimens in the treatment of malaria in children. This notion became prominent when focus group discussions (FGDs) were conducted for young and older parents and questions were asked regarding the use of herbal medicine in the treatment of malaria in children. "In the olden days", argued by one of the senior caregivers, "you treat children with malaria exclusively with herbs. Nobody tells you to go to the hospital or use any white man's medicine (modern medicine)". In fact, "there was no hospital in those days" said by another senior respondent. The traditional therapies locally known as *oogun-ibile* or *agbo-ibile* used as the first point of treatment of malaria comprised principally of local plants, bark of a tree or root which are usually boiled together to make malaria herbs known in local communities as *agbo-iba*. Once boiled, they are usually sieved and allowed to cool down to create a broth (Ellis et al. 2007: 705). The *agbo-iba* is used as a normal wash either with or without local soap known as *ose-dudu* and as a medicinal drink usually administered at least three times daily as long as the symptoms persisted. As argued by most of the senior caregivers, this practice has been entrenched in the community's knowledge of medicine over a period of time. One of the senior women interviewed in Fajeromi said with some level of confidence that "everybody in this village knows that I don't go to the clinic when I'm sick and I don't take my children there either. I prefer herbal medicines... It's what I inherited from my parents".

I use to combine a number of local plants to cure malaria in my grandchildren. Once I observe symptoms of malaria in them I rush to the bush to pick some plants and roots and prepare for them to make herbal medicine. One of the plants is called "*panseke*". I also use "*dogonyaro*" leaves. All of these are very effective in treating malaria. Should the first set of plants not work you search to assemble another set. This is called "*akida*". But if these don't work then you may not have a choice than to go to the hospital or buy drugs from those vendors that come to the village from the neighbouring communities. (A grandfather in Fajeromi.)

Some of the older caregivers attached the efficacy of medicine to belief systems:

The efficacy or effectiveness of any method of treatment depends on the belief people have about it. Most times when you hold strong belief about traditional medicine or even hospital

drugs, it is bound to work for you. Our belief therefore has much influence on the efficacy of medication. The same belief the educated people have about modern medicine is what the old people have about traditional medicine. (A 58 year old mother in Fajeromi.)

However, most young mothers expressed different opinions. A significant number of young mothers recognised the fact that changes are taking place with respect to the treatment of malaria especially among the 'new generation' of caregivers. While most senior caregivers are still tied to the cultural pattern of disease treatment in children (absolute reliance on traditional medicine), a significant number of young mothers - with or without western education - are beginning to break away from the 'old tradition' of malaria treatment thereby supporting modern medicine in the treatment of malaria. This group of mothers see themselves as a new generation of parents. They believed they are more exposed than their grandparents. They felt that a total reliance on traditional herbal medicines is not only 'obsolete', 'precarious' and 'dangerous' it is also 'uncivilised' and 'barbaric' many of whom believed that herbal medicines are usually prepared under unhygienic conditions which they strongly felt must be corrected. As argued by one of the young mothers: "although, I think there is nothing wrong with the herbal medicines but something can be wrong with the way they are prepared". Others were however worried about the measurement, potency and efficacy of traditional drugs.

When we talk about traditional medicine there is always the problem of dosage, potency and efficacy since their drugs are not clinically tested. There is no proof to show that traditional medicines are efficacious or that when patients use them there won't be side effects. What we know is that herbal medicines contain some corrosive elements that are injurious to the body system and any drugs taken by any patient goes directly to the liver. Things like that can cause damage to the liver... Although I was raised with herbs I cannot use the same herbs to raise my children now because we have to move with time. Medicine is not static. It is a dynamic thing. In order for us to catch up with what is happening in the world, we have to make sure we move with time (a young educated father in Okanle).

The differences in the patterns of health care seeking between young and older caregivers were attributed to several factors some of which are pervasive cultural diffusion, intermarriages, 'exposure' or 'civilisation' rooted in the Western system of education as well as nurse/doctor's advice. According to a 66 year old mother in Fajeromi:

Changes in management of disease are bound to happen in modern society where people often marry from different cultures than theirs. In contemporary societies, intercultural marriages are common. If you are married to a woman who is not from your cultural background you may have to forgo certain things about your own culture as a sign of respect for your partner. Both of you might need to find a middle ground. This middle ground might be the hospital as far as the management of disease is concerned... Also related to this is the issue of modernisation and exposure. People are more exposed nowadays unlike before... For instance, my senior child who lives in Lagos has instructed me not use herbs for my grandchild who lives with me here when he's sick. I don't have any choice than to accept whatever instruction he gives and support all of them in prayers (a middle aged woman from Fajeromi)

One of the senior caregivers in Okanle also argued that:

The nurses and doctors are the major reasons for this kind of attitude. They feed mothers with all kinds of dangerous information. They advocate for modern medicine as the most effective way of managing diseases in children as against traditional medicine. They even instruct them to stop giving children herbs completely... So, when we try to convince them at home to use local measures for infants, they simply ignore our advice...

On the one hand, the above comments suggest that senior caregivers are still attached to the cultural patterns of disease management using an exclusively indigenous method of healing for children in their custody. On the other hand, it also suggests that a sizable number of young parents are beginning to break away from what they perceived as the 'old tradition' or the 'old-fashioned' way of treatment. However, a growing concern was observed among the older parents with respect to young parents' inclination to modern medicines. While some acknowledged and applauded the 'positive' attitude, a significant number of them condemned it outright because they believed it was a derailment from the normative patterns of disease management which the communities have known for years. They attributed the prevalence of chronic diseases in the contemporary society to over dependence on modern medicine and non-compliance to cultural instructions regarding traditional medicines. For instance, the prevalence of HIV/AIDS is believed to be one of the prices to be paid for ignoring indigenous cultural practices and belief systems. As a result, sometimes young parents are compelled to administer herbal medicines to their children (see the next theme for detailed discussion).

Where this happens young mothers are usually forced to combine herbal medicines with selected modern drugs in the treatment of malaria usually at home. Some of the older women had no problem or objection to young mothers' inclination towards combining traditional and modern medicines in as much as herbal medicines are not abandoned. Some of the older parents even expressed the harmonisation of the two methods in proverbs and idioms: "in life one hand washes the other" said by one of the older caregivers. Some used religion to justify the combination of treatments: "both the native and modern doctors are 'angels' sent by God to heal the world" said a woman in Okanle. For this group of respondents, the use of traditional and modern drugs was complementary rather than competitive. One of the young mothers in Fajeromi said "it is not that young mothers have stopped using herbs completely. Those of us who still appreciate the efficacy of herbal medicines still use them. The difference is that we use them with caution and together with orthodox medicine most times". Another young parent interviewed in Okanle said "nowadays, you don't have to be exclusively attached to a single method of treatment. Once you try the traditional one and it doesn't seem to work then there is nothing wrong in trying the modern ones". This finding agrees with previous findings where a combination of modern and traditional healing methods has been reported (see Amira and Okubadejo, 2007; Sharma, 2008; Wiseman et al. 2008). Amira and Okubadejo's (2007) study shows that a significant proportion of hypertensive patients receiving conventional treatment at the tertiary health facility in Lagos, Nigeria combined modern drugs with traditional therapies even without the consent of their physicians.

It must be mentioned however that in an attempt to use the services of the modern health care facilities most young caregivers are still faced with some difficulties. The majority of the younger caregivers interviewed identified a lack of money as the most outstanding factor that could hinder the use of modern health care services. The majority acknowledged that the amount of money charged during consultation often depends on the severity of cases but since most of them do consult with the

doctor at a later stage of malaria in children there are possibilities of paying more money which might further worsen the financial burden in the household. . For mild malaria, caregivers are usually charged between N150 and N400 (\$1 - \$3) at the Basic Health Centre available in the communities. For complicated cases, charges could run to thousands of naira which the majority of the caregivers could not afford. Therefore, to be able to raise such money parents usually borrow money from neighbours or the cooperative society where they are members. They sometime pawn some valuable properties to be able to raise money for treatment. Others appeal to the nurse to allow them to pay for treatment later or in installments. Unfortunately, those who cannot afford to raise this kind of money continued to rely on herbal medicines until the condition of the child improves.

Theme II: The Place of Senior Caregivers in Health Decision Making Process

A number of studies have shown a positive correlation between economic factors (Asenso-Okyere et al. 1997; Kofoed et al. 2004; Mathews and Hill, 1990; Oths, 1994; Weller et al. 1997), user fees and health care decision making process in poorer communities of Africa and elsewhere. What most of these studies have found is that poverty and the introduction of the user fees in public health care facilities has resulted in treatment delays thereby aggravating the levels of morbidity and mortality especially in children (Lugalla, 1995; Stratton et al. 2008; Turshen, 1999). However, Kamat (2006: 2946) has noted that an overemphasis on the correlation between poverty, user fees and treatment delays has mirrored in most of these studies may have prevented or diverted attention away from other significant existing cultural and structural constraints affecting health-care decision making process and outcomes, one of which is the place of senior women or grandparents in health-care decision making process.

The role of “significant others” most importantly the senior women in health care decision making process cannot be overemphasised especially in a community where people have firsthand knowledge of one another and where people live a communal lifestyle. Most of the people interviewed in this study lived in extended family structures which comprised of biological parents and other members of the family. At the beginning of the malaria crisis the biological mother and other women within the household, particularly the mothers-in-law and grandparents known as senior women, have the primary role of ensuring that the child’s health is restored within a reasonable period of time. Hence, the pursuance of health for a sick child commences with traditional medicines which according to the majority of the respondents is typically under the control of the senior mothers. The use of an indigenous treatment episode is encouraged and often seen as the first treatment option by the senior women because they are easily assembled and prepared often without cost. The influence of the senior women in the decision making process is usually felt more by the young mothers believed to be inexperienced when it comes to childhood illnesses. The husband only intervenes when malaria symptoms have persisted after some days without any improvement and may suggest additional traditional measures or encourage seeking treatment outside home which could include buying drugs from ambulatory quack vendors or over-the-counter drugs or seeking the services of the medical experts. One of the young mothers in Okanle said “as you can see I live with my husband’s family. So,

my mother-in-law plays a significant role in seeking treatment for my child. More importantly, I always depend on my mother-in-law whenever my child is down with malaria because she knows too much”.

However, in the absence of senior mothers and the husband sometimes other members of the family could assume the responsibility of the husband and senior mothers by encouraging the biological mother to seek treatment at the nearest facility. This might include the husband's siblings. The influence of social networks in decision making process as revealed in the present study is illustrated below:

When my child had malaria and was obvious that the situation was getting out of hand after doing what I was supposed to do (home treatment using a combination of herbs and modern drugs) I had to call my husband's elder brother because my husband was not in town... I told the brother because I can't single-handedly manage the situation. What if something terrible happens eventually? I need to let at least a family member know about it. Besides, my husband's elder brother will be the one to bear me witness when my husband returns. I should have told my mum but she's not staying where we stay and I don't have friends around here who could assist me. My child is my friend. (a 30 year old mother in Fajeromi).

Indeed, the decision to seek health care on behalf of a sick child within or outside the family set-up goes beyond the individual biological mother. As seen in this study other members of the family especially grandparents play a very significant role in the health care seeking decision making process. They often determine when, how and where treatments are sought.

Discussion

This study has investigated the place of the senior caregivers in the management of malaria in rural communities of Nigeria using a combination of qualitative research techniques. This study has shown that a variation may exist between young and older parents in terms of their desire for modern or traditional medicines in the treatment of malaria. While most senior mothers continue to rely on herbal treatment regimens in the management of malaria, younger parents seemed to have preference for modern treatment regimens but not without difficulties. Younger parents' thoughts and feelings about modern medicines have been influenced largely by Western education, modernisation and health education usually received from the health officials in public hospitals. Instead of complete reliance on traditional remedies, some young mothers believed that there is nothing wrong with benefiting from each of the healing methods which is also the core issue in contemporary discourses about traditional and modern medicines. The changing patterns of health care utilisation in the treatment of malaria in this study between young and senior women concur with the finding made by Wiseman et al. (2008) in Gambia. Like Wiseman et al. (2008) while older parents in this study are still attached to the herbal treatment option, younger parents are more likely to seek modern health care services earlier than older parents, few of whom may have tried the traditional medicine first without major improvement.

Meanwhile, it needs to be mentioned that whether responding to malaria using herbal medicines is an appropriate or inappropriate treatment option remains a highly controversial issue. Evidence is abound to show that traditional medicines and the practitioners advocating them have contributed immensely to the overall health care delivery systems, hence the growing demand for traditional

medicines across the world. In fact, more than 60% of children with high fever resulting from malaria in countries like Ghana, Nigeria, Mali and Zambia receive herbal medicines from home as the first line of treatment (WHO, 2002). In Gambia, a drug known as chemoprophylaxis given to pregnant women by the traditional birth attendants (TBAs) was found to reduce malaria-related morbidity and poor pregnancy outcomes (Greenwood et al. copied from Mbonye et al. 2008). What is less controversial, however, is the surge of complicated cases of malaria in children caused by poor handling which may have been induced by incorrect use of herbal and/or modern medicines or lateness to seek care from the appropriate medical service providers.

Furthermore, studies on informal social networks and social support have gained momentum in the social science disciplines recently. A relationship between social interaction and subjective wellbeing (Taylor et al. 2001) as well as prevention of violence (Budde and Schene, 2004; Gervich, 2008) has been documented. There are indications that such interactions might have impacted on the health care decision making process. For instance, studies have found that close social support is a strong independent predictor of good health and that it enables people to cope better when they are ill (Asher, 1984; Zhang, 2007). Ciambrone's (2002) study in South Africa shows how women's social network composition helped to mediate the disruption caused by HIV/AIDS. Similarly, in the cultural domain of the communities studied where preference is attached to an extended family structure and social interaction, household decisions on important issues such as children's health are usually influenced by "significant others". Treatment is usually related to a community rather than for an individual's responsibility. This is usually based on the principle of "what affects one affects all".

More importantly, the senior caregivers hold a pivotal position within the family structure and hierarchy when it comes to diagnosing childhood illnesses and initiating and retaining the treatment process. Many young mothers in this study argued that they relied on the wealth of experience of the senior caregivers and the community at large in the management of malaria. This corroborates with previous findings that have been reported and documented. Kerr et al. (2008) clearly demonstrate that older parents hold powerful positions within the extended family structures and are often able to impose their wills on younger mothers in the management of diseases. A review of the literature by Aubel (2005) on grandmothers' roles in non-Western societies indicates that grandmothers, in virtually all cultures and societies, have considerable knowledge and experience related to all aspects of child and maternal health, and that they have a strong commitment to promoting the well-being of children and families. Indeed, a well informed, educated senior caregiver shall be able to pass correct and appropriate knowledge about disease management to the younger ones. Unfortunately, most policy designers in most developing countries like Nigeria have failed to come to term with this reality which often results in faulty designs.

Conclusions

In this study, the place and roles of senior caregivers in the management of malaria has been examined. This became important against the backdrop that most studies on health care seeking

behaviour in Nigeria have tended to ignore the role of senior parents and their influence on health care decision making process. Most development programmes are constructed on the belief that health education and promotion in indigenous communities should focus on the younger members of the society with a strong belief that they (the young members) will teach their elders (Aubel, 2006). This form of orientation however often conflicts with indigenous knowledge systems and local orientations. While health education and promotion is actually a prerequisite for sensitising the uninformed and possibly encouraging them to make the “right” choices, it has been well acknowledged and documented that knowledge on its own is not enough for positive health behaviour. In fact, most studies on knowledge, attitude and practice (KAP) towards ill-health have indicated that appropriate treatment procedures require an approach that goes beyond simply raising awareness to a more sustainable behaviour change that people are willing to make every day of their life even when they are not threatened by ill health (Alaii, 2003). Unfortunately, most health promotion strategies and initiatives in Nigeria and other places have tended to portray an individual as a mechanical device that automatically reacts to a ‘stimulus package’ without any processing and questioning. For instance, the so-called comprehensive Behaviour Communication Change Strategy (BCC) was developed in Nigeria in 2004 to strengthen malaria interventions (Roll Back Malaria [RBM] Secretariat, 2008). However, the BCC initiative has recorded a minimum level of achievement so far and the major factor responsible being a failure to recognise and incorporate local dynamics (for instance, the role of senior caregivers in the management of malaria) into their design and implementation.

To promote health behaviour and practices related to maternal and child health in Southeast Asia (Laos) and West Africa (Mali and Senegal), ‘The Grandmother Project’, a non-governmental organisation (NGO) came up with a methodological approach that focuses on i) the community-recognised indigenous knowledge authorities on maternal and child health and their conveyors (the grandparents); and ii) the merits and demerits of this system of knowledge (that is, their potency as well as harmful outcomes). The results achieved were overwhelming. Specifically, in Laos, grandmothers’ approach to treating diarrhea at home greatly improved during the one-year intervention. At baseline study, only 30% of grandmothers involved were giving “lots of fluids” to children with diarrhea whereas in the end-line study, 74% of grandmothers were giving the beneficial advice. Therefore, the proportion of grandmothers who advised mothers with young children to continue breast-feeding during diarrhea episode increased from 73% at baseline to 90% at end-line (Aubel, 2006). Therefore, health promotion and education initiatives about malaria in children in developing countries like Nigeria must take cognisance of the place and roles of the senior caregivers in order to reduce the disruption of lives caused by malaria among the children.

References

- Alaii, J. A. (2003). *Insecticide-Treated Bednets (ITNs) for Malaria Control: Factors Relevant for Utilisation in a Western Kenyan Community*. A Report. Unigraphic Maastricht.
- Amira, O. C., & Okubadejo, N. U., (2007). Frequency of Complementary and Alternative Medicine Utilization in Hypertensive Patients Attending an Urban Tertiary Care Centre in Nigeria. *BMC Complementary and Alternative Medicine*, 7(30): 1-5.

- Asenso-Okyere, W. K., Osei-Akoto, I., Anum, A., & Appiah, E. N., 1997. Willingness to Pay for Health Insurance in a Developing Economy: A Pilot Study of the Informal Sector of Ghana Using Contingent Valuation. *Health Policy*, 42(3): 223–237.
- Asher, C. C. (1984). The Impact of Social Support Networks on Adult Health. *Medical Care*, 22 (4): 349-359.
- Aubel, J. (2005). *Grandmothers: A Learning Institution*. Creative Associates and USAID.
- Aubel, J. (2006). *Grandmothers Promote Maternal and Child Health: the Role of Indigenous Knowledge Systems' Managers*. Indigenous Knowledge Notes. 89: 1-4.
- Bamidele, J. O., Adebimpe, W. O., & Oladele, E. A., (2009). Knowledge, Attitude and Use of Alternative Medical Therapy amongst Urban Residents of Osun State, South-Western Nigeria. *African Journal of Traditional and Complementary Medicine*, 6 (3): 281 – 288.
- Baragatti, M., Fournet, F., Henry, M., Assi, S., Ouedraogo, H., Rogier, C. and Salem, G. 2009. 'Social and Environmental Malaria Risk Factors in Urban Areas of Ouagadougou, Burkina Faso'. *Malaria Journal*, 8(13): 1-14.
- Budde, S., & Schene, P., (2004). Informal Social Support Interventions and their Role in Violence Prevention: An Agenda for Future Evaluation. *Journal of Interpersonal Violence*, 19: 341-355.
- Ciambrone, D. (2002). Informal Networks among Women with HIV/AIDS: Present Support and Future Prospects. *Qualitative Health Research*, 12 (7): 876-896.
- Ellis, A. A., Winch, P., Daou, Z., Gilroy, K. E., & Swedberg, E., (2007). Home Management of Childhood Diarrhoea in Southern Mali: Implications for the Introduction of Zinc Treatment. *Social Science and Medicine*, 64: 701–712.
- El-Safty, M. (2001). Culture, Public Health and Community Development. Health and Environmental Education Association of Egypt (HEEA). Pp: 1-18 (accessed from <http://unpan1.un.org/intradoc/groups/public/documents/IDEP/UNPAN003345.pdf> on the 23rd of April, 2009).
- Federal Ministry of Health. 2009. *Strategic Plan 2009-2013: A Road Map for Malaria Control in Nigeria*. The Federal Ministry of Health, Abuja, Nigeria.
- Federal Republic of Nigeria [FRN]. (2009). Federal Republic of Nigeria Official Gazette. Abuja: The Federal Government Printer, 96 (2): B34.
- Gervich, C. D. (2008). Loneliness and Belonging: A Reflection on the Meanings and Values of Social Networks in the Wake of the Virginia Tech Shootings. *Traumatology*, 14: 32-42.
- Jonasi, S. (2007). What is the Role of a Grandmother in a Malawian Society and How Can We as Health Care Workers Support Her?. *Malawi Medical Journal*, 19 (3): 126-127.
- Kamat, V. R. (2006). "I thought it was only ordinary fever!" Cultural Knowledge and the Micropolitics of Therapy Seeking for Childhood Febrile Illness in Tanzania'. *Social Science and Medicine*, 62: 2945–2959.
- Kerr, R.B., Dakishoni, L., Shumba, L., Msachi, R., & Chirwa, M., (2008). "We Grandmothers Know Plenty": Breastfeeding, Complementary Feeding and the Multifaceted Role of Grandmothers in Malawi. *Social Science and Medicine*, 66: 1095-1105.
- Kiringe, JW. (2005). Ecological and Anthropological Threats to Ethno-Medicinal Plant Resources and their Utilization in Maasai Communal Ranches in the Amboseli Region of Kenya. *Ethnobotany Research and Applications*, 3: 231-241.
- Kofoed, P. E., Rodrigues, A., Co, F., Hedegaard, K., Rombo, L., & Aaby, P., (2004). Which Children Come to the Health Centre for Treatment of Malaria?. *Acta Tropica*, 90(1): 17–22.
- Lugalla, J. L. (1995). The Impact of Structural Adjustment Policies on Women's and Children's Health in Tanzania. *Review of African Political Economy*, 63: 43–53.
- Malaria Byte. (2007). World Bank Approves \$180 million to Fight Malaria in Nigeria. *Care-net Nigeria*, 1(1): 1-4.
- Mathews, H. F., & Hill, C. E., (1990). Applying Cognitive Decision Theory to the Study of Regional Patterns of Illness Treatment Choice. *American Anthropologist*, 92: 155–170.
- Mbakogu, I. A. (2004). Is There Really a Relationship Between Culture and Development? *Anthropologist*, 6(1): 37-43.
- Mbonye, A. K., Bygbjerg, I. C., & Magnussenc, P., (2008). Intermittent Preventive Treatment of Malaria in Pregnancy: a New Delivery System and its Effect on Maternal Health and Pregnancy Outcomes in Uganda. *Bulletin of the World Health Organisation*, 86 (2): 93-100.
- Mosanya, M. E. (2000). The Need to Involve Indigenous Health Care Providers and Community-Based Organisation in the Control of Malaria in the Community. *Malaria in Africa*, 1: 34-50.
- Nyamongo, I. K. (2002). Health Care Switching Behaviour of Malaria Patients in a Kenyan Rural Community. *Social Science and Medicine*, 54:377–386.

- Oguonu, T. Okafor, HU and Obu, HA. 2005. 'Caregivers' Knowledge, Attitude and Practice on Childhood Malaria and Treatment in Urban and Rural Communities in Enugu, South-East Nigeria.' *Public Health*, 119: 409-414.
- Okafor, E. E., & Amzat, J., (2007). Problems of Malaria Menace and Behavioural Intervention for its Management in Sub-Saharan Africa. *Journal of Human Ecology*, 21, 2, 155-162.
- Okanle Descendant Union [ODU]. (2009). *A Brief History of Okanle in Ifelodun LGA, Kwara State*. Ilorin: OLAD Nig. Publishers.
- Okeke, T. A., Okafor, H. U., & Uzochukwu, B. S. C., (2006). Traditional Healers in Nigeria: Perception of Cause, Treatment and Referral Practices for Severe Malaria. *Journal of Biosocial Science*, 38: 491-500.
- Olasehinde, G. I., Ajayi, A. A., Taiwo, S. O., Adekeye, B. T., & Adeyeba, O. A., (2010). Prevalence and Management of *Falciparum* Malaria among Infants and Children in Ota, Ogun State, Southwestern Nigeria. *African Journal of Clinical and Experimental Microbiology*, 11(3): 159-163.
- Oni, A. A. (2005). Globalization and its Implication on African Culture and Development: Challenges for Education. *International Journal of African & African American Studies*, 4(2): 9-21.
- Oreagba Al. Onajole, AT, Olayemi, SO and Mabadeje, AFB. 2004. 'Knowledge of Malaria amongst Caregivers of Young Children in Rural and Urban Communities in Southwest Nigeria'. *Tropical Journal of Pharmaceutical Research*, 3 (1): 299-304.
- Oshikoya, K.A. (2007). Antimalarial Prescriptions for Children Presenting with Uncomplicated Malaria to a Teaching Hospital in Nigeria after the Change of National Guidelines for Malaria Treatment. *World Journal of Medical Sciences*, 2(1): 49-53.
- Oths, K. S. (1994). Health Care Decisions of Households in Economic Crisis: An Example from the Peruvian Highlands. *Human Organisation*, 53(3): 245-254.
- Preston-Whyte, E. (1993). Women who are not Married: Fertility, 'Illegitimacy', and the Nature of the Households and Domestic Groups among Single African Women in Durban. *South African Journal of Sociology*, 24(3): 63-71.
- Roll Back Malaria Secretariat. (2008). *A Strategy for Behaviour Change Communication In the Roll Back Malaria Programme, Nigeria*. National Malaria Control Programme, Department of Public Health, Federal Ministry of Health, Abuja, Nigeria. December.
- Saraki, AB. 2009. 'Flag off of Malaria Free Kwara'. Keynote Address by the Governor of Kwara State held at the Banquet Hall of Government House, Ilorin (accessed from www.kwarastate.gov.ng on 16 February, 2010).
- Sharma, V. R. (2008). When to Seek Health Care: A Duration Analysis for Malaria Patients in Nepal. *Social Science and Medicine*, 66: 2486-2494.
- Stratton, L., O'Neill, M. S., Kruk, M. E., & Bell, M. L., (2008). The Persistent Problem of Malaria: Addressing the Fundamental Causes of a Global Killer. *Social Science and Medicine*, 67: 854-862.
- Taylor, R. J., Chatters, L. M., Hardison, C. B., & Riley, A., (2001). Informal Social Support Networks and Subjective Well-Being among African Americans. *Journal of Black Psychology*, 27: 439-463.
- Teshome-Bahiru, W. 2006. 'Impacts of Urbanisation on the Traditional Medicine of Ethiopia'. *Anthropologist*, 8(1): 43-52.
- Turshen, M. (1999). *Privatizing health services in Africa*. New Brunswick, NJ: Rutgers University Press.
- Weller, S. C., Ruebush II, T. R., & Klein, R. E., (1997). Predicting Treatment-seeking Behaviour in Guatemala: A Comparison of the Health Services Research and Decision-Theoretic Approaches. *Medical Anthropology Quarterly*, 11(2): 224-245.
- WHO. (2002). *WHO Traditional Medicine Strategy 2002 -2005*. Geneva: World Health Organisation.
- Wiseman, V., Scott, A., Conteh, L., McElroy, B., & Stevens, W., (2008). Determinants of Provider Choice for Malaria Treatment: Experiences from the Gambia. *Social Science and Medicine*, 67: 487-496.
- Yates, S. J. (2004). *Doing Social Science Research*. London: Sage.
- Zhang, J. (2007). *Socio-Economic Positions and Utilisation of Preventive Health Care Services among Adults in the General Population*. A PhD Thesis. Queensland University of Technology, School of Public Health.