# Managing Malaria Control Outreach Programme Activities in Remote and Rural Ghana: A Qualitative Analysis of Communities' Contributions

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## **Abstract**

With malaria continuously posing as a major public health challenge in the remote and rural areas of Ghana, its management has been an issue in recent times. However, while the crucial roles that Community Health Workers (CHWs) play in managing malaria are well recognized, little is known about the contributions made by the communities themselves. This study therefore sought to explore communities' contributions to the management of malaria within the context of control outreach programme activities in the Ashanti region of Ghana. Qualitative case-study method was used with in-depth interviews and focus groups discussions techniques to explore the views of the community members and health professionals themselves. Data were audio-taped, transcribed and analysed for emerging categories and sub-categories. The findings indicated that there were a number of important roles played by the communities. These include: providing information, mobilisation and educating fellow community members; acting as surveillance agents for most stakeholders, motivating and advising community health officials. The conclusion was that Communities were important assets to be reckoned with and as such they should be given recognition in major issues on disease prevention and control. The paper therefore suggests that the major intervention components of control programmes' activities should be transferred from the national level to the community levels.

Keywords: Outreach programmes, Communities, Contributions, Remote and Rural Ghana, Malaria management,

## 1. Introduction

For many years now, while Ghana has had many challenges in terms of the number of persons who die of certain diseases like AIDs, Tuberculosis and others none of these is causing more developmental problems with huge amount of financial burdens placed on both households and the economy than malaria (Asante and Asenso-Okyere, 2003). In terms of health, the available evidence indicates that in every year, there are almost 3.5 million cases of clinical malaria, which represents about 44% of all outpatient illnesses that are reported in public health facilities. In addition, it is estimated that malaria accounts for 36% of all hospital admissions and 22% of all deaths in children under-five years every year (National Malaria Control Programme Annual Report, (NMCP AR) 2008; S, Owusu-Agyei et al. 2007). Finally, amongst pregnant women, it has been emphasised that over 13.8% are infected with the disease and 9.4% of all deaths are attributed to malaria (Ghana Health Service (GHS), 2008). With regards to financial burden, it has been found that a single episode of malaria in a household could result in an estimated average cost of almost 13.4 Ghana Cedis (US\$ 15.79) (Asante and Asenso-Okyere, 2003). Thus, decades now malaria has been one of the country's sources of underdevelopment due to economic losses, high rate of morbidity and mortality (Asante and Asenso-Okyere, 2003).

In the face with these challenges posed by malaria, the government of Ghana has made all attempts to prevent and control the disease and to increase access to health workers particularly those in the remote and rural areas where delivery of health services has been lacking. In achieving this goal, for some time now, outreach programme activities have often been used to enhance, for example, the community access to bed nets as well as to reduce the vulnerability of certain individuals like the pregnant women by promoting rational use of artemisinin-based combination therapies (ACTs) and to strengthen diagnostics (NMCP Report, 2008). Implicitly, outreach programme activities have been used for both curative and preventive purposes through the provision of treatment and education respectively to potential victims of the disease which otherwise could have been

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difficult to be provided by the existing local health facilities.

However, while the impact of these services have been well documented (IK, Friberg et al. 2010) and the important roles that Community Health Workers (CHWs) play in delivering these interventions are generally recognized in many developing countries, (Z.A, Bhutta et al. 2010; U. Lehmann & D. Sanders 2007; I. Agyepong & C. Marfo, 1992), little is known about the significant contributions usually made by the community members themselves in ensuring these effective outreach services, particularly in Ghana. Often the outreach programme activities are affected by a number of constraints and these include: lack of health personnel, scattered nature of villages and limited transport as well as logistics problems which make it harder for the health officials to execute their duties properly such as organising and or providing the right information to the most community members (WHO, 2005; MOH, 2007). As a result, health authorities often have to rely on the community members themselves which gives rise to the various roles played by the community members. Nonetheless, most of these contributions made by the communities go unnoticed. This study therefore aimed at providing empirical evidence by investigating the contributions the communities make to the malaria control outreach programme activities in the remote and rural areas in the Ashanti region of Ghana.

# **Literature Review**

# The concept of Community

The concept of community has been defined in so many ways which makes it impossible for one definition to be used to explain the whole idea of a community. For example, P. Boothroyd (1990) defines a community as 'A Human system of more than two people in which the members interact personally over time, in which behavior and activity are guided by collectively- evolved norms or collective decisions, and from which members may freely secede'. Roberts (1979) also sees a community as 'a collection of people who have become aware of some problem or some broad goal, who have gone through a process of learning about themselves and about their environment, and have formulated a group objective'. From the above definitions it can be realised that a number of scholars have different understanding of the concept because of its multifaceted and slippery nature which it lends itself to quite diverse interpretations. These various meanings are based on the beliefs that "community" demands social bonds, relations and communications that are deliberate, directed by norms, values, and traditions that are socially transmitted, (P. Aggarwal, 2004). According to P. Dal Fiore, (2007), socially cohesive communities serve as "spaces of belonging" for their members. A. Agrawal (1999) also argues that the main characteristic of community which has offered the

maximum attention in its edifice as a social artifact is its homogeneous composition. In general, many researchers suppose communities to be groups of equally endowed, comparatively homogeneous households who have common features in terms of ethnicity, religion, caste, or language. Such homogeneity is considered to enhance cooperative solutions, lessen hierarchical and problematic interactions, and help to promote better resource management.

In spite of this, it cannot be taken for granted that community is always compassionate and helpful. Similar to various families, according to P. Aggarwal (2004), a community can be domineering too as it may hold on to value system that is patriarchal, repressive, exclusive and undemocratic. Thus, while community can be a group of people who have something in common, there can be multiple interests and actors. According to Watts. (M. 1995), recognizing and working with these variety of actors and interests is critical for those advocating community-based programs. Such recognition demonstrates that empowering local actors to utilize and manage their own development programmes is far more important than merely transferring administrative power from the central government to the community.

Health outreach programme service delivery in remote and rural Ghana

Conceptually, many public health scholars have described health outreach programme service delivery as health care services that are offered by a mobile or community-based team of trained health providers, usually from a district level, to communities that have limited or no health services (FK. Nyonator *et al.* 2005; WHO 2008). These outreach programme services are normally offered at locally available community facilities that are not necessarily meant for clinical services, such as schools, health posts, or other community structures. In effect, these programme services are often designed to make use of the local resources that are existing at the grassroots level thereby making it easier for services to be provided to those that are not easy to be reached (SJ. Lewis *et al.* 1992; FK. Nyonator *et al.* 2005).

According to Kols and Wawer, (1982), in delivering these services greater emphasis is usually put not only on the most common health problems within the community but also those health problems for which there are potential efficient and effective remedies with relatively safe and simple means to provide the services. For example, in the case of malaria, service delivery often focuses on non-clinical prevention and control service approaches by using community organization, structure, and institutions to promote the use of safe and simple measures against the disease (e.g. the use of bed-nets).

Approaches to malaria control outreach service delivery in Ghana

In Ghana, malaria control programme outreach services are usually provided in various forms. One approach of

outreach service delivery is the Mobile Community Health Outreach Workers (MCHOW) model. This type of outreach service model is often characterised by the periodic mobilisation of health workers from one place that has services, usually at the district capital to provide services to other areas (rural areas) which do not (J. Awoonor-Williams et al. 2002; FK. Nyonator et al. 2005). In this case, those mobile teams of community health outreach workers are not obliged to stay with the community members neither are they to enhance the skills of the community members who might be engaged in the provision of control services like education on malaria. Effective engagement with the community is limited and the strategy for delivering services has the features of top-down approach with instructions always coming from the mobile health team to the communities (MoH. 2008: FK. Nyonator et al. 2005).

Another model of outreach health programme services is the Community-based Health Planning and Services (CHPS) which was implemented in 1999 (FK. Nyonator et al. 2005; F. Binka et al. 1995). With an initial emphasis on mostly poor rural areas of Ghana, CHPS focuses on providing mobile community-based care by a resident nurse, in contrast to traditional community health outreach workers model (FK. Nyonator et al. 2005). CHPS, is a kind of outreach programme service which often thrives well on a decentralized system of management by relying greatly on traditional communities leaders for guidance. One unique feature of this type of outreach programme services is that it depends on participation and mobilization of the traditional community structure for service delivery (FK. Nyonator et al. 2005). The local health staffs are supported by community volunteers who help with community mobilization, the maintenance of community registers and other essential activities and the District Health Management Teams are obliged to enhance the skills of those involved in the delivery of preventive and curative care (FK. Nyonator et al. 2005; F. Binka et al. 1995; FK. Awoonor-Williams et al. 2002; WHO 2008).

In general, outreach programme services act as a complement to programmes that promote the permanent posting of health workers in remote areas (MOH, 2007). Basically, in any of these approaches, most services often focus on promoting demand for and encouraging community members to use preventive materials, (e.g. in the case of for malaria, sleeping in treated bed-nets) through provision of information and education. This can be done through mobile doorstep services by travelling from compound to compound on either motorcycle or bicycle by voluntary or paid local health staffs (FK. Nyonator *et al.* 2005; F. Binka *et al.* 1995).

In essence, both models of outreach services contribute in minimising barriers to geographical access to health care for widely dispersed and isolated populations. This helps communities in the unreachable rural areas to have access to broader services such as

convenient access to malaria preventative materials without having to seek another source of care. There is therefore potential improvement in the capacity, scope and the quality of the front-line health workers' activities (WHO 2011; FK. Nyonator *et al.* 2005). Moreover, through these outreach programme activities, when it comes to malaria control, the outreach staffs also get the opportunity to promote changes in beliefs and behaviours through educational campaign strategy. In addition, outreach service also improves comprehensive community involvement and participation by mobilizing majority of the communities for service delivery (FK. Nyonator *et al.* 2005; F. Binka *et al.* 1995).

## Methods

The method for the study was qualitative with the use of in-depth interviews, focus group discussions and non-participant observations. The data were collected from June 2016 to October 2016 in the selected area in Ghana.

## The study area

The study region was the Ashanti, which is one of the ten regions in the Republic of Ghana. It is worth mentioning that the choice of Ashanti region was for practical purpose. In fact, while all the regions in Ghana were malaria endemic regions and therefore any of them could have been chosen, the selection of Ashanti was based on the following reasons. Firstly, it was based on practical considerations, such as availability of background information, familiarity with the local language, and an available research network. Secondly, the opportunities for cooperation from the policy actors and the communities were far more certain than the rest of the regions.

The remote and rural district selected was Ahafo Ano North (AAN) which was amongst the 138 districts in Ghana. The choice of the AAN district was randomly made since almost all the rural districts in the Ashanti region had all kinds of outreach programme activities going on.

## Data Collection

The research used in-depth qualitative methods, including semi-structured interviews, focus group discussions (FGDs). We identified two groups of interviewees. The first group were selected from the local health staffs including other public officials whose sectors are related to local malaria control programme activities. The second group of interviewees included community residents and a number of village health volunteers on malaria control programme activities. The interviewees were purposefully selected to include men and women; the youths and the elderly. However, the FGDs conducted were mainly carried out with the community members so as to gain insight into the nature and the roles they play in control and preventive outreach programmes' activities.

Interviews lasted from 30 minutes to 45 minutes while the FGDs took about one and half hours hours. The names of the interviewees have been concealed in this article in order to ensure anonymity, hence the use of numbers 1-45 representing the participants.

In total, there were 45 participants. These included 25 individuals who took part in the in-depth interviews and 4 focus group discussions (involving 20 participants with 5 participants each in a group).

## **Findings**

The results of the study demonstrated that there were a number of important roles that were played by the community members through their involvement in the outreach services. These roles included the following:

(i) The mobilisation of the people and organisation of NMCP activities

The study found that during the outreach services, community members often played the roles as both 'mobilisers' and 'organisers'. They often had, not only to mobilise the people but also organise the community meetings for the health officials. This was confirmed by one NGO officer who stated that:

"Sometimes when I need to go there (the remote and rural areas), once I send message to any of the volunteers, especially their head, all the organisation of the meetings will be done before I even get there. They are always ready to assist" (Nr 3)

This assertion was supported by other health officials who also stated: "we do not know much about these areas. ....In the area of organisation, they (the communities) help in arranging meetings with the rest of the communities that we cannot reach particularly when we have to conduct an educational campaign" (Nr 24)

".....The community members ...... have the ability to bring the people together and ensuring that whatever the message that we health officials have for them reaches everybody. The local chiefs make it their responsibilities by asking all of them to come out of their houses to listen to us" (Nr 33)

From the above statements, it is fair to state that the communities have a wealth of untapped human resources and energy that can be harnessed and mobilized through community participation (A. Robertson, & M. Minkler, 1994). By employing certain practical techniques that can engage other community members, the community members at the study site were enhancing their participation in the health programmes. This provided the communities the chance to devise and initiate strategies that were suitable for them and also helped them to improve their health

status. In essence, by involving in health outreach programme activities, the rural communities are often empowering themselves which also could assist them to gain their self-confidence and understanding that are necessary to articulate their concerns. In that way, they are able to make sure that proper action is taken to address their problems and more importantly gain control over their lives.

(ii) Communities as informants and as peer educators

Another finding of this study was that during the outreach services, the community members played a role as informants as well as educators. It was found that due to the problems facing rural population, (e.g. lack of proper local media and or transport) the community members were always the people who took it upon themselves to inform others about any activities that needed to be done at the village levels. In addition, more than half of those interviewed admitted that there were certain individuals within the community who often contributed in educating the rest of the communities on the prevention and control malaria. For example, one officer declared that:

"The community members help in educating themselves on issues that have to be discussed during our meetings (e.g. prevention and control activities). Some of the members are very good in explaining things to the members particularly if we have to conduct any educational campaign. They play important roles during these campaigns as educators" (Nr 22)

This was also corroborated by most of the community members themselves who believed that it was their responsibility to help the district health workers in carrying out their duties. Based on this belief, they were not only organising meetings during educational campaign but also educating the people about the dangers of malaria. This argument was openly confirmed by some of the community members who said:

".....We also contribute in disseminating information to other rural areas. At times, they will like to go rounds in the various towns and villages, but there is no other means to let those there have information before the date. So we can volunteer to go either on foot or by bicycle and deliver such messages (Nr 41).

".... Sometimes, I also educate pregnant women who get into my car about the necessity of attending antenatal care because I have experienced what malaria can do to pregnant women" (Nr 3).

In reality, from the above statements, it can be argued that with the help of peer educators from within the communities, health officials were able to provide information to the remote or marginalized populations which hitherto had been impossible.

(iii) Community members as 'motivators' of health officials

The third finding on the issue of roles crucially played by the communities was in relation to providing help to resolve the problem of low motivation of health workers at the rural areas. In most remote and rural areas, it was found that it was the communities who helped in mobilising and galvanising their own resources to motivate health officials. This was to complement the efforts of the national government by encouraging the few health officials posted to the rural areas to stay and work with them so as to improve their health status through, for example, malaria control.

The majority of the interviewees validated this. For example, one NGO officer explained this claim by stating that:

"These community members contribute in motivating or de-motivating most health staffs to either stay within the community or go out of the community. For example, they can contribute sometimes in kind by giving gifts such as farm produce to most of the health workers" (Nr 13) One health officer also stated that:

.....It is these same community members who provide assistance like supplying us with chairs and at the same time food stuffs from their own farms. These are some of the incentives in working in these rural areas. We do not need to buy food all the time (Nr 27).

Community members also confirmed their role in this area. For example, one elderly woman said:

... I have even once helped the staffs by providing food and free accommodation. For me that is a token of solidarity in the fight against the disease" (Nr 44)

The kind of participation in the form of voluntary contribution resonates with the argument made in the literature which states that participation can be in cash or in kind (Woelk, 1992). In the case of the study site, the latter (by kind) has been found to be one of the ways in which the poor community members in the rural area participate with the aim of effectively improving the retention of front-line health workers in rural district. This has been very significant since communities can no longer rely on central government alone to successfully address the health needs of the people by adequately providing the needed incentives to health officials to remain in the rural areas (F. Espino *et al.*, 2004).

## (iv)Community as agents of surveillance

When it comes to Monitoring and Evaluation of outreach malaria control programme activities, it was also found that members in the study site play certain crucial role which has significant impact on the activities' outcomes. For example, the communities were considered to be agents of surveillance who were relied upon for vital information on malaria during assessment. After the implementation of outreach programme activities, it was found that most of the community members used their local skills and knowledge on the environment to play various roles as local 'monitors' and 'advisors'. The perceptions of most of the health officials on this role played by the community demonstrated their appreciation towards communities, particularly in the remote and rural areas. One officer described the community's roles as "irreplaceable" and continued to say that:

....without the good will of the local people, we cannot do anything. They are everything to us and their suggestions are valuable to our programmes. So they are our advisers and at times we need to depend on them for the progress of our job. I am sure it is not me alone who share this view. Most of my co-workers will agree with me, especially when it comes to implementation of control programme activities in these rural areas. While we can use them as instruments to achieve our goal, they can also be part of the solution. And when it comes to surveillance or monitoring, their role is significant because they know where possible malaria breeding sites are and they can show you where there is poor sanitation, wrong places for waste dumping and who has done it, gutters,.....I mean everything" (Nr 12).

The opinions of other interviewed officials did not differ from the above statement. Majority of the interviewed officials supported this claim and they also talked about, for example, the difficulties of controlling malaria without the help of the community members. For example, one health official argued that:

......"controlling diseases like malaria is not easy especially in these rural areas where most of the community members do not like to go to the hospitals and without reporting to the health centres, we have no overview about the state of affairs....and the success of an active case detection is difficult because the information must be obtained at the right time so that the disease (e.g. malaria) can be contained....It is extremely hard to execute any plan if the communities members do not help in carrying it out" (Nr 31)

Another officer also concluded that:

...." they communicate to us the results of our efforts. Without them, we will have no means to know what has happened to all the 'beautiful plans' we implemented. They are the 'judge' of all the programme activities. Simply they are our evaluators and we only contact them for results. They are our informants" (Nr 113)

A number of the community members also confirmed this. For example, some argued that:

"We often assist health officials to have first hand information about this place, particularly when it comes

to their M&E activities. All the information they need, we usually have to go with them to let them know what is happening in some of these villages, (Nr 24)

"...Often, we the members have all the good knowledge about the area. They depend on us for everything on M&E" (Nr 26)

".... we the community members are very instrumental in the achievement of their goals. I for one, I know every place in this area and any information about any possible place for mosquitoes to breed, I am aware of it. As a result, any knowledge they want to have about their work in this area, we can give to them"(Nr 106)

From the above statements it can be deduced that the community members can be regarded as actors with local knowledge who are prepared to share with the health officials when it comes to M&E of programmes. The community members help in detecting and reporting unusual events and locally important disease conditions such as potential breeding sites of mosquitoes to the health team. This kind of role played by the community members enhances health officers' access to quality of information on the outcomes of malaria control programme within the district. The information collected through the participation of the community members helps district health teams to react swiftly to offset any eventualities that could possibly happen to the community through planning of interventions, mobilizing and allocating resources (S.F. Rumisha, et al. 2007).

# **Discussions**

This paper has focused on the roles of the various communities in the area of the outreach programme for malaria control activities. Interviews and focus group discussions were used to elicit data from community members in these areas. The findings indicated that there were a number of roles often played by the communities in the management of malaria outreach control programme activities. The result of this study with regards to the communities' roles in outreach services demonstrated how rural communities usually contribute time, resources and skills in support of NMCP in Ghana. Their beliefs and roles in this programme exemplify one of the principles of the primary health care policy which asserts that community's health is not dependent on health services but equally important is what people within the community do and for themselves (WHO, 1978). By engaging in education and advising community members themselves, the community members are adopting, in the words of Rifkin (1981) public health approach which has preventive perspective which includes the causes of malaria and the its negative impacts to most of their members. Furthermore, it could be argued that community members inter-personal communication skills (via house-to-house visits) act as an incentive to other community members to actually participate in health programmes (L.E.G. Mboera *et al.* 2007; D. de Savigny *et al.* 2004). With such a role, it is fair to state that because most community members often find support from their peer educators who are seen to be in similar situations, their positive attitudes in disease prevention and control are strengthened. Also, many commentators have argued that such knowledge sharing amongst community members that builds on indigenous knowledge has the potential to be more effective in enhancing community participation in health educational activities (J. Perez *et al.* 2007).

The bottom line of the above arguments is that, involving the community in a programme (e.g. malaria control) is inevitably the key to the success of a control programme since it has the potential to increase local ownership of programme as well as enhancing a sense of responsibility for maintaining services provided by the programme officials. These aspects of ownership and accountability are both crucial for the sustainability of such programmes particularly if the persistence of malaria is to be minimised quality of life of the communities are to be extensively maintained (H. Tam 1995).

In terms of the perceived community roles in M&E, it can be said that engaging community members control programme activities can ensure the reduction of predisposing factors toward malaria infection and can assists in having prompt and accurate epidemiologic data collection (L.E.G. Mboera *et al.* 2007). This means that although Ghana has a poor surveillance system (USAID, 2008; F.K. Nyonator *et al.* 2005) with weak health management information system (HMIS), the inclusion of the community members in the planning, implementation and M&E could help mitigate the delays in submitting reports.

The implication here is that it is important for local health officers to appreciate the involvement of the communities in epidemiologic and technical dimensions of the malaria problem. The simple reason is that whether particular control policy strategy will be technically possible, socially and politically acceptable, and advantageous, would depend on the degree of the communities' participation (L.E.G. Mboera, et al. 2007). As it has already been noted, often, most of the community members perceived the support they gave to the health staff and the general control programme as part and parcel of community life. They had an idea that health staff were working for the community and therefore needed to be supported. They had the beliefs that there was a strong sense of community life as the rural communities were homogeneous with high communal spirits. The whole processes of engaging in the outreach control programmes activities were directed to community benefit and community participation was regarded as service to the community members. The members' participation was therefore geared towards the viability of the community and they had the belief that:

"when individual members within the community is healthy, then the whole community is healthy" (Nr 1).

The community members therefore had a sense of duty not only to support each other but to the health staff and to be the 'guardian' of the NMCP. Their participation as an actor helped in promoting strong intersectoral collaborative efforts amongst the sectors within the district.

Overall, the finding corroborate with the results of earlier studies elsewhere in SSA. The results of these other studies indicated that this system of communitybased surveillance approach has been used successfully in SSN. For example, in both Ghana and Niger, F. Binka et al (1995) and SM. Ndiaye et al (2003) respectively found that such an approach motivated and enabled community members to identify local health problems. In a way, the role played by the communities in AAN in implementing programme activities of malaria go to support the argument made by L. Prichett and Woolcock, (2004) that without the communities participating in programme activities and playing important roles, health programmes like malaria control will fail to produce any meaningful results. At the same time, this way of community participation in the NMCP validates the argument made by Rifkin (1996) that:

'Although difficult for planners to accept, it may well be that to gain improved health status they will have to surrender their dominant position and let community people decide in which way programmes will develop' (p. 246).

In effect, it can be argued that the due to the communities' ability to possess the creativity to adapt their knowledge to their local realities (C. Acho-chi, 1998) health authorities must, the very least, involve them in their planning. This strategy can assist health workers to respond to diseases like malaria of epidemic potential and to take the necessary steps to avert the problem (S.F.Rumisha *et al.* 2007).

## **Conclusions**

The aim of this study was to assess the contribution of community members in the context of malaria control outreach programme activities. The findings have shown that community members play significant roles in the areas of implementation, monitoring and evaluation and these roles included: mobilisation of the people and organisation of activities; acting as surveillance agents and providing information during M&E, educating other community members, motivating and advising community health officials and promoting intersectoral collaborators' network on M&E in malaria control programme.

The study findings indicated the extent to which the problem of malaria is multifaceted and addressing the

problem alone by a sector or few sectors will potentially set the country back into failure in its fight against the disease. Obviously, any policy strategy such as outreach control programme activities that incorporate the efforts of the major actors, especially the local communities, in controlling the disease will be critical. This means that although using outreach control programme strategy interventions can be seen as a policy at the right direction, policy makers must not lose sight of the fact local community members in particular who are mostly affected by the problem and the policy outcomes are as important as the professional health workers and the study finding have demonstrated that.

The implication of this finding is that all efforts must be made to involve the local communities in malaria control policy design, implementation and M&E. This is necessary because engaging the communities in disease control activities will go a long way in enhancing the possibility of achieving the Millennium goal of reducing malaria. Such strategy will be a step in the right path for improving the quality of life for the rural poor and the most vulnerable such as the pregnant women and children under five in the Ghanaian society today

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