FROM DIFFUSION TO COMMUNITY PARTICIPATION: THE COMMUNICATION STRATEGIES OF THE NATIONAL MALARIA CONTROL PROGRAMME (NMCP)

BY

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AHMADU BELLO UNIVERSITY, ZARIA,
NIGERIA

MAY, 2014

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A THESIS SUBMITTED TO THE POST GRADUATE SCHOOL, AHMADU BELLO UNIVERSITY, ZARIA,

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DEPARTMENT OF THEATRE AND PERFORMING ARTS,
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MAY, 2014

DECLARATION

I declare that the work reported in this thesis was carried out by me in the Department of Theatre and Performing Arts, Faculty of Arts, Ahmadu Bello University Zaria, Nigeria, under the supervision of Prof. Jenkeri Zakari Okwori and Prof. Dapo Adelugba. All information derived from the literature have been duly acknowledged in the text and a list of references provided. I declare that no part of this thesis has been submitted elsewhere for a degree or diploma in any university.

Suleiman Haruna

_____ _____

Signature Date

CERTIFICATION

This thesis titled "From Diffusion to Community Participation: The Communication Strategies of the National Malaria Control Programme in Nigeria" by Suleiman Haruna meets the regulations governing the award of the degree of Master of Arts (Development Communications) of the Ahmadu Bello University, Zaria, and is approved for the scholarly contribution to knowledge and literary presentation.

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DEDICATION

In the hope that fewer Nigerians would die of Malaria, I hereby dedicate this work to the memory of the millions of Nigerians who lost the battle.

ACKNOWLEDGEMENT

I thank the Almighty God, who out of his mercy enabled me to witness the conclusion of this work despite the numerous challenges I have had to face in the intervening period between the commencement and the conclusion. I wish to express my deep sense of gratitude and indebtedness to my supervisors at Ahmadu Bello University, Zaria, the late Professor J.Z. Okwori and Professor D. Adelugba for their guidance from the proposal stage to the completion of the work. I acknowledge also the contributions of the then Head of Department of Theatre and Performing Arts, the late Professor Sam Kafewo and the Post-Graduate Coordinator for the Department, Dr. Jegede Emmanuel for their support in various aspects of this study as well as all my lecturers who have added value to the final cut of this thesis.

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Abbreviations

ACSM	Advocacy, Communication and Social Mobilization
ACT	Artemisinin Combination Theraphy
ANC	Ante-Natal Care
BCC	Behavior Change Communication
CCM	Country Coordinating Mechanism
CfSC	Communication for Social Change
CM	Community Mobilization
CWG	Communication Working Group
DDT	Dichlorodiphenyltrichloroethane
DFID	UK Department for International Development
EPI	Expanded Programme on Immunization
GFATM	Global Fund to Fight Aids, Tuberculosis and Malaria
GMAP	Global Malaria Action Plan
GMCS	Global Malaria Communication Strategy
HECTIC	Health Education, Communication, Training and Information Committee
IEC	Information, Education and Communication
IMNCI	Integrated Management of Neonatal and Childhood Illness
IPT	Intermittent Preventive Treatment
IPTi	Intermittent Preventive Treatment for Infants
IPTp	Intermittent Preventive Treatment for Pregnant women
IRS	Insecticide Residual Spraying
ITN	Insecticide Treated Nets
IVM	Integrated Vector Management
LLIN	Long Lasting Insecticide Net
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MEWS	Malaria Early Warning System
MIS	Malaria Indicator Survey
NGO	Non Governmental Organization
NMCP	National Malaria Control programme

PF	Plasmodium Falciparum
PLA	Participatory Learning and Action
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Tests
REMASAB	Refuse Management and Sanitation Board, Kano State
SCSM	Somali Communication Strategy for Malaria
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SP	Sulfadoxine-Pyrimethamine
SUFI	Scale up for Impact
SWAp	Sector-Wide Approach
UN	United Nations
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
USAID/PMI	United States Aid programme/President's Malaria Initiative
TFD	Theater for Development
WHO	World Health organization
WMR	World Malaria Report

ABSTRACT

This study examines the effectiveness of communication strategies deployed by the National Malaria Control Programme (NMCP) in fighting malaria in Nigeria. Over the years, these strategies have been more diffusion-based than participatory. Available documents indicate that the rate of success in the fight against malaria as championed by the agency has not been encouraging; leading to investigation of the reasons behind this lackluster performance. Communication was singled out as a major determinant of success for this project and this was investigated in Sokoto and Kano States, where qualitative processes were applied to assess the scope, depth and impact of the strategies employed through data analysis conducted on the documents of the agency and others relevant, in-depth interviews with four officials at state and local government offices of the NMCP and field interviews with 40 beneficiaries of the intervention in the two states. The findings of the study revealed that communication strategies play a key role in planning development interventions, but that these communication strategies need to be very effective to succeed. At the NMCP, it became clear that primarily, the diffusion-based communication strategies employed by the NMCP have not been very successful. This is because they do not engage the beneficiaries of the programme, despite the desire of the beneficiaries to have such engagement. Other secondary findings include the revelation of an apparent lack of capacity in the area of communication by officials and a template of activities that is skewed more towards some aspects of the programme than others. As part of the recommendations of this study, the need for the inclusion of participatory approaches among the regime of strategies employed by the NMCP was canvassed in order to establish the needed dialogue with beneficiaries and add value to the overall performance of the Agency in fighting malaria in Nigeria.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study: Communicating Development

After the second world war, developed countries came to the realization that the backwardness of the third world is a drag on their own development and they decided to initiate interventions in these countries with a view to bringing development to them. Interventions targeted the economic growth of these countries with the success of the developed countries as the model aspiration. Development was thought to be triggered by and was pursued through the diffusion of modern technologies, planned in the national capitals under the guidance and direction of experts. “Often, the people in the villages who are the 'objects' of these plans would first learn that 'development' was on the way when strangers from the city turned-up, frequently unannounced, to survey land or look at project sites” (Yoon, 1996: 37).

Building on the American scholar Daniel Lerner’s influential 1958 study of communication and development in the Middle East and Wilbur Schramm’s 1964 study on the role of media for national development, communication researchers assumed that the introduction of media and certain types of educational, political, and economic information into a social system could transform individuals and societies from traditional to modern.

The term ‘development communication’ was first used in the Philippines in the 1970s by Professor Nora Quebral to "designate the processes for transmitting and communicating new knowledge related to rural environments" (Bessette, 2004: 14). It eventually came to cover all those seeking to help improve the living conditions of the disadvantaged people. In the same period, Erskine Childers strongly promoted “Development Support Communication” in the UNDP system, insisting on the importance of having a communication component in all

development projects' (Bessette, 2004: 14).

The interventions were introduced with the help of mass communication which played a key role due to its public reach. Opinion leaders were invited to speak on the importance of the interventions; health, education; new methods of agriculture; contraception, et cetera. Posters, leaflets and other publications also augmented the process. The concept of Development Support Communication, Development Communication or Communication for Development was defined by Wilkins as "the strategic application of communication technologies and processes to promote social change" (Wilkins, 2000: 197).

1.2 Problems of Communicating Development

The diffusion model was the first platform on which development communication was founded and it was premised on the belief that communities lacked information that can accelerate their development. In response therefore, there was information transfer through social marketing, intended to increase knowledge and improve attitudes and practices which would ultimately lead to behavior change. Over the years, this approach was used to 'market' interventions in different parts of the world with varying degrees of success and sometimes with failure. It was while investigating the poor performance, and cases of failure of the approach in some locations that queries began to appear.

One such study, a childhood immunization campaign in Zaire that included print and radio material and the training of health workers found that while radio listening did lead to increased knowledge about immunization among poorer, less-educated people, this knowledge was not extended into practice: "no evidence was found that radio spots or programs about immunization influenced people to have their children immunized" (Yoder, Zheng and Zhou, 1991: 38). Many studies of this nature led to the conviction that the diffusion approach does not necessarily lead to

behavior change, let alone sustainable development.

Many development projects eventually failed primarily because the community was not involved in its implementation:

> Many of the agricultural extension projects failed because farmers were reluctant to abandon their time-tested ways for strange new methods. They were also nervous about planting exotic crops which they could not eat but had to sell for money with which to buy food from the market … Mothers were lectured on the bliss of two-child families when fathers were bent on having at least six children to help work the land and tend to the livestock… farmers became side-lined by irrigation authorities who built new channels and dictated the release and termination of water supply. Eventually when the irrigation channels broke down, the farmers, believing that the system did not belong to them, just waited for these same authorities to turn-up to repair them rather than fix the problem themselves. If they did not, the system was abandoned (Yoon, 1996: 37).

The failure of the approaches became noticed and activists began to criticize them as being focused on the symptoms, not root causes of underdevelopment. They noticed that top-down communication ruptured fragile communities by under-mining their indigenous knowledge, beliefs and social systems. Calls then became more pronounced for more inclusive approaches, that would be more process, rather than outcome oriented and which would support information exchange, rather than transfer.

It became apparent, as observed by the MacBride Commission, that there was the need to overcome ‘stereotyped thinking and to promote more understanding of diversity and plurality, with full respect to the dignity and equality of peoples living in different conditions and acting in different ways’ (International Commission for the Study of Communication Problems, 1980: 254).

Researchers came to the realization that "it is the people's conviction that they can change things for the better, their refusal to be the permanent victims of any situation, and the emergence of a sense of self-confidence" that can lead to the success of any development intervention. The role of the researcher or development practitioner in using communication therefore, "does not consist in transmitting or disseminating messages, but in facilitating participation in local development" (Bessette, 2004: 18).

Various participatory approaches emerged from this scenario. Though the approaches seem to be quite different, they share the common intent of actively involving people who were the "subjects" of development in shaping the process. Uphoff (1985) identified four ways of participation as follows:

- Participation in implementation: People are actively encouraged and mobilized to take part in the actualization of projects. They are given certain responsibilities and set certain tasks or required to contribute specified resources.
- Participation in evaluation: Upon completion of a project, people are invited to critique the success or failure of it.
- Participation in benefit: People take part in enjoying the fruits of a project, this maybe water from a hand-pump, medical care by a "bare-foot doctor", a truck to transport produce to market, or village meetings in the new community hall.
- Participation in decision-making: People initiate, discuss, conceptualize and plan activities they will all do as a community. Some of this may be related to building schools, removing corrupt officials, organizing a traditional feast, prayers for an end to the drought, etc.

The concepts of "participation as a means", infers people being encouraged to participate in order to ensure the success of the intervention, as exemplified by the first 3 categories mentioned above, and "participation as an end" refers to where the intervention itself results in people's participation as referred to in the last category. As opposed to the diffusion model, the hallmark of participation is dialogue, which is triggered by conscientization (Freire, 1970).

There are debates concerning which interventions require participation and which do not; for example it has been said that a mother whose child suffers from severe malaria does not need any participatory approaches - it is clear that the fight against malaria is one intervention that can only succeed with the direct involvement and full participation of the community. But has the community been involved in malaria control as a development intervention over the years? What are the problems encountered along the way?

1.3 Statement of Research Problem

Despite huge commitments by local and international stakeholders, the high rate of morbidity and mortality from malaria, as well as hospital attendance and cost has refused to drop in Nigeria since 2004. This may be attributable to the seeming poor public commitment to the fight against malaria, which in-turn is primarily the result of the failure of conventional communication strategies by the coordinating agency for malaria control in Nigeria, National Malaria Control Programme (NMCP).

Presently, the communication strategy employed by the organization is a cocktail of top-down type, dominant paradigm approaches which are mostly disseminative and neither dialogic nor participatory, they include mass media-based programmes and jingles, small media productions like posters and exhibitionist approaches like road shows and site shows. Many scholars of

Development Communication have agreed that the use of these traditional tools can create awareness, and sometimes even lead to a sudden, spontaneous change in Behaviour, but they hardly ever lead to a sustained change in the individual's attitude.

In response to this problem, the project investigated the gaps in these communications strategies and also discussed the effectiveness, and recommended the inclusion of alternative approaches to communication which will ultimately lead to a rapid drop in morbidity and mortality from malaria in Nigeria.

1.4 Aim of the Study

The aim of the study is to show how the National Malaria Control Programme can succeed in achieving a significant reduction in malaria morbidity and mortality in Nigeria, through the use of effective communication strategies.

1.5 Objectives of the Study:

i. To determine why there has not being a significant drop in malaria figures in Nigeria,

ii. To establish the role communication strategies play in planning interventions by NMCP,

iii. To analyze the impact and limitations of existing communication strategies applied by NMCP

iv. To explore what value - added alternative approaches to development communication can contribute towards successful interventions by NMCP

1.6 Significance of the study

Nigeria accounts for 25% of all malaria deaths in Africa, for 60% outpatient visits to health

facilities, 30% childhood deaths, 25% of deaths in children under one year and 11% maternal deaths. It also leads to 300,000 deaths each year and an annual financial loss estimated to be 132 billion Naira. It is also on the list of countries showing least levels of progress for as long as 10 years. This has implications for capacity development, productivity, economy and ultimately development, with all the loss of life and man-hours as well as money seemingly expended with little result. This study tabled the practices of the NMCP and checked for the gaps responsible for this stagnation and recommended plugs to ensure a complete turn-around, so that policy makers and researchers can see how best projects like those of malaria can be handled for success.

1.7 Scope of the study

The study focused on the role of communication in the fight against malaria in Nigeria, as led by the NMCP, which is the coordinating agency. Research covered the period between the commencement of activities of the NMCP in 1997 to 2010. However, documents analyzed were from 2004, when the programme commenced the production of public documents including annual plans, annual reports and communication related documents. All these available documents were reviewed, coupled with others from World Health Organization and the Global Roll Back Malaria Office. These are the World Malaria Report and the Global Malaria Action Plan, respectively. Impact assessment of these Strategies were conducted at the RBM state and local offices as well as with beneficiaries of malaria interventions at Unguwa Uku in Kano and Kumbotso village in Kumbotso Local Government in Kano State and two communities in Sokoto state, namely Gagi village and Kofar Aliyu Jodi in Sokoto municipality.

1.8 Outline of thesis

Chapter one discussed the introductory part of the work, stating what it means to communicate development and the problems associated with this exercise. The problem being studied has also been stated in this chapter and so is the scope, the aim and objectives.

In chapter two, the relevant literature on participatory communication were reviewed. Both primary and secondary sources were reflected, quoting copiously from experts about its various dimensions and applications, and how it can transmute to participatory diffusion for the betterment of the intervention, as well as the place of cultural sensitivity to all this. Also reviewed is literature on communication strategies, where the work of four experts were studied. The history of malaria control was reviewed and dovetailed to the history and mandate of the NMCP and the traditional communication strategies they employed over time. The second part studies the theories relevant to communication, with special focus on theories of health communication. Two theories that guided the research were reviewed and emplaced. Trans-theoretical and ecological perspective.

Chapter three discussed the methodology used in conducting the research, including content analysis, in-depth interviews with officials and field interviews with respondents, in both Kano and Sokoto states. The main issues were isolated from the three processes. In chapter four, isolated issues were reviewed within the context of the objectives set out for the study to provide the findings, which were discussed and in chapter five a summary of the work was provided, recommendations outlined, conclusion reached and study's contribution to knowledge isolated.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

After biology, the most significant binding attribute of all living things is communication. As posited by S. F. Scudder (1980), “all living entities, beings and creatures communicate.” It is the import of this concept that led to the development of theories to understand its workings. Discussions on communication centered on the interpersonal and was seen as information exchange. This exchange was seen as a basic human function in which individuals request, provide or exchange information.

2.1.1 Communication Theories

Berger and Calabrese (fathers of Uncertainty Reduction Theory) believed that the major motive for such an exchange is the reduction of uncertainty, while Walter Lipmann in his own theses believed that the exchange is not always equal on both sides; especially in a democracy, the elites use propaganda through the media to make members of the public to believe they are more important than they really are, by thinking they have a say in governance, when all they are doing is affirming the decisions of the ruling minority elite. “the compounding of individual ignorances (sic) in masses of people can produce a continuous directing force in public affairs" (Lipmann, 1925: 39). He further argued that it is propaganda that gave rise to the concepts of agenda setting and gate-keeping for the media.

Another angle to the communication discourse centered on the audience of a communication; what they see as the uses and gratifications of media. It was MacQuail (1983) who asked "why

do people use media and what do they use them for?" The Uses and Gratifications Theory regards the public as active, rather than passive receivers of information as advocated by the Hypodermic Needle Theory. The media in this case has to compete with other information sources for audience's need satisfaction (Katz et al., 1974a). Four gratifications that different members of the public get from media are a) diversion, b) personal relationships, c) personal identity and d) surveillance.

Diffusion of Innovations is another theory proffered by Everett Rogers in an attempt to respond to a question by Tarde (1903) on why some innovations are adopted and spread throughout a society, while others are ignored. Rogers believed that all innovations have a chance of being accepted and adopted throughout a society through Diffusion of Innovations. According to Rogers (1996), diffusion refers to "the process by which an innovation is communicated through certain channels over time among the members of a social system. An Innovation is an idea, practice or object perceived as new by an individual or other unit of adoption. The diffusion of innovations involves both mass media and interpersonal communication channels" (Rogers 1996: 409). Rogers (1996) spoke of, "A critical mass occurring when the diffusion process becomes self-sustaining. Though most of the diffusion studies are individual centered, some have been conducted on institutions. Lazarsfeld's two step flow theory provides a natural progression for Diffusion of Innovations as it showed that opinion leaders are more important than mass media in the diffusion process.

The Two-step Flow Theory was developed by Lazarsfeld in the 1940s. The main thesis of this theory is that personal influence exercised by other people normally plays a more crucial role in everyday decision making than information obtained from mass media. Information flows from the media to opinion leaders, and then from leaders to the masses. Influence, such as that of

social groups and local or grassroots leaders became more pronounced as a result of this theory. Eventually, however, Robinson proffered a Multi-step Flow Theory by arguing that it is only in the case of politics that a two-step flow is relevant; that for other matters, the one way flow theories still held relevance.

Theories of Communication relating to media discuss the relationship between people and mediated content. Media Equation Theory (Reeves and Nass, 1990) posits that humans interact with media as they would to other humans. Media are seen as real social actors; according them with human traits like manners, personality, emotion and even social roles and responding to them in like manner. This theory underscores the significance of media, not just as a tool, but as a partner and player in the communication process; shielding the real force behind the message and providing a convenient platform for manipulation and propaganda.

There are also theories dealing with media effects on a receiver audience. A crucial theory in this group is the Hypodermic Needle Theory also known as the Magic Bullet Theory, which contends that technical advances and mass production of popular culture have led to a mass audience focusing on the same messages, eliciting an immediate, mechanical and uniform response, compatible with the sender's intentions. This becomes a tool in the hands of multi-national corporations and interest groups; a tool so powerful that once the message hits or is injected into the audience, will exert its powerful influences on its victims.

2.1.2 Participatory communication

How do we define participatory communication? Nair and White (1987) define participatory development communication (PDC) as a two-way, dynamic interaction between grassroots receivers and the information source, mediated by development communicators, which facilitates

participation of the target group in the process of development.

Bessette (2004) defines PDC as 'a planned activity, based on the one hand on participatory processes, and on the other hand on media and interpersonal communication, which facilitates a dialogue among different stakeholders, around a common development problem or goal, with the objective of developing and implementing a set of activities to contribute to its solution, or its realization, and which supports and accompanies this initiative'.

There are a multitude of problems that plague human societies which can only be solved through interventions that attract buy-in from the people. It is important to note that when people distrust an intervention it is only conscientization that can convince them to this buy in. The case of stigmatization of polio vaccine in northern Nigeria is one such example. Some pertinent issues which have been embraced and are worked through participatory processes include health care, nutrition, sanitation and shelter, issues of self determination, self reliance, cultural autonomy and human rights.

Even though over time, interventions have realized the importance of the involvement of people and their buy in, most were either conveniently unaware or are deliberately not interested in the actual participation that is required for a successful intervention. It emerged that the conceptualization of participation ranges from those seeing participation-as-a-means, to those who see it as an end (Huesca, 2002; Mefalopulos, 2005; Melkote & Kandath, 2001; Melkote & Steeves, 2001; Yoon, 1996). Participation-as-an-end is when communities are really involved in the decision-making process; the type of participation favoured by advocates of participatory communication (Mefalopulos, 2005; Melkote & Kandath, 2001; Melkote & Steeves, 2001). Participation-as-a-means is criticized as being "a process where the participation of the intended

beneficiaries is obtained to actually serve the ends of authorities" (Melkote & Kandath, 2001)

The clear difference between the old and the new concepts of development gradually posed a challenge to those in the old school and those treating participation as a means to an end. In the new development focus, communication was used to "conscientize the common people to their needs and problems, facilitate problem articulation, help in self-development efforts, foster cultural growth, serve as a tool for diagnosis of a community's problems and serve as an important vehicle in bringing about community participation" (Melkote, 1991: 176). These cannot be achieved through mere diffusion. Besides there are clear results that manifest from participation; these include strengthening of new social movements, the enhancement of cohesion among isolated, indigenous communities, and the intensification of collective consciousness, while weakening individualism (Dervin and Huesca, 1997).

Rather than the paternalistic design of diffusion approaches, which results in spoon-feeding people, those in the rural areas particularly, will have to be taught that self-reliance and self-help are the main factors that can save them from their present dismal plight (Bhattacharya, 1976: 49) and not government, as is the practice in most communities. That is why rather than distribute free bed nets, people should be conscientized to purchase them, rather than wait for sanitation officials, they should keep their environments clean always for their own good.

With the acceptance of participation as a key concept in development, it became necessary to redefine the concept of development itself. Rogers (1976) defined it away from the economic perspective, as a "Widely participatory process of social change in society, intended to bring about both social and material advancement for the majority of the people through their gaining greater control over their environment".

2.1.2.1 Should Development be Revolutionary or Evolutionary?

There are two approaches to Participatory Development Communication; the first is called dialogical pedagogy, resulting from Paulo Freire's work "Pedagogy of the oppressed" (1970). Freire believes that individuals have the capacity for reflection, for conceptualizing, for critical thinking, for making decisions, for planning and social change. He was convinced that "awareness", has to have a relationship with a project of social transformation, whereby consciousness and action on consciousness are dialectically linked. Freire called this "action and reflection". To him, it is this dialectical and emancipatory process of action and reflection that constitutes the process of conscientization, which Abah (2005: 34) sees as "changing perspectives in a critical and positive direction" Freire's theory of dialogic communication and action is based on group dialogue rather than the mass media.

The second concept of participation is UNESCO's and it revolves around three key terms; self-management, access and participation, Access refers to the use of media for public service. It may be defined in terms of the opportunities available to the public to choose varied and relevant programs and to have a means of feedback to transmit its reactions and demands to production organizations. Participation implies a higher level of public involvement in communication systems. It includes the involvement of the public in the production process, and also in the management and planning of communication systems. Participation may be no more than representation and consultation of the public in decision-making. On the other hand, self-management is the most advanced form of participation. In this case, the public exercises the power of decision-making within communication enterprises and is also fully involved in the formulation of communication policies and plans. (UNESCO, 1977, cited in Berrigan, 1979)

Discussing the differences between the two approaches, Servaes states that the UNESCO

discourse anchors on the idea of a gradual progression toward development, as opposed to Freire's theory which believes in emancipating subjugated peoples. The UNESCO discourse talks in neutral terms about "the public"; Freire talked about "the oppressed".

According to UNESCO, not all participatory communication should be targeted at ‘emancipation of the oppressed’ because not all social problems require revolutions. Emancipation itself connotes paternalism.

The "oppressed peoples", used to their natural evolutions, may take longer to be conscientized towards revolutions than to changes in health and agricultural habits. Participatory Communications should therefore not intend to cause empowerment through changing power relations in society but through changes in behavior, attitude and social norms. This is because changes in power relations hardly come peacefully as they cause a lot of upsets that may delay the implementation of development interventions. It is true that communal dialogue and decision making eventually lead to communal democracy in the long run, bringing people to "express their points of view and listen to others, and to build consensus around a course of action" (Bessette, 2004); however, as the participatory continuum suggests, this should be evolutionary, beginning with co-option to compliance, consultation, cooperation, co-learning and collective action.

The issue of their willingness to change is critical. Mefalopulos (2011) believes that if development is about change, then interventions are about people *being willing* to change their behaviours. Changing of behaviours does not happen in a vacuum as "every individual is embedded in a web of relations of different nature (e.g. affections, power, work, etc.) that will

affect his/her decisions" this position as explained by the ecological perspective, is in three concentric circles, the intrapersonal influences, the interpersonal and the communal.

If women, for example do not go for ante-natal care because their husbands do not allow them to, what is required to counter this is a gradual conscientization to secure the willingness of the husbands towards acceptance as provided in the stages of change theory. The same goes for infrastructural, educational, agricultural and health interventions. This is in line with the position of the uncertainty reduction theory and the health belief theory, which have argued that all human beings are in constant need of new information.

The fight against malaria is one such intervention because communities need to know that mosquitoes are responsible for malaria and that they breed in stagnant waters, which include ponds, drainages and animal drinking sources. They also need to know that they can control these sources through regular sanitation in order to control the spread of malaria. They also need to dislodge the notion that the disease has anything to do with evil spirits and must go to the health center for treatment. All that is required here is the stimulation of community dialogue.

Stimulation of community dialogue should not only be aimed at changing the social structure, but should aim at democratizing communication and encouraging innovation and thinking out of the box. The Some Frierian experts like Beltran (1976) and Diaz Bordenave (1976), among others, have observed the oppressive social, political, and economic structures that exist in developing countries and that constitute barriers to progressive social change (in Melkote, 1991) which need to be overcome. Mowlana and Wilson have also stated that:

> Communications policies are basically derivatives of the political, cultural and economic conditions and institutions under which they operate. They tend to legitimize the existing power relations in society, and therefore, they cannot be substantially changed unless

> there are fundamental structural changes in society that can alter these power relationships themselves (Mowlana & Wilson, 1987: 143).

This position can be likened to that of Jurgen Habermas (Alessandra Padolo, 2009: 348-349), who idealized bourgeois public sphere, by believing that they control public sphere and so only 'their will' is done. He was attacked by critics who came up with other concepts like proletariat public sphere (Neqt and Kluge), and women's public sphere (Mary Ryan).

Needless to say, Friere's idea was very successful not only in his own application of it, but even in its application by others like Augusto Boal, through his theatre of the oppressed and legislative theatre. This success is mostly recorded in the Americas and the developed world where literacy and education levels are very high. It remains to be seen whether the same level of success can be achieved in Africa, where different cultural, historical and educational realities obtain.

Simone St. Anne observed that human history is a story of participation and that we enter into collective relationships for two reasons: "to achieve that which cannot be achieved individually and to transcend the limitations of the self through the experience of human interaction" (St. Anne, S. in Nair & White, 1999: 69). She is also convinced that whenever people come together to collaborate, "there is a very real sense in which they have a group IQ – the sum total of the talents and skills of all those involved." (Ibid: 70).

Since participation is critical, those who conceive of development as a process of social transformation view participatory communication as a necessary instrument and condition for change to take place (White, 1999: 36). The most important outcome of participatory communication for the people is consciousness-raising through critical reflection about their own condition which will lead to a significant voice in social action. (Ibid: 48).

Discussing how the transformation from participation to action takes place, Renuka Berry (in White, 1999: 240) argues that people are willing to take risks and to challenge the prevailing power structures when they see that their needs and those of their community are being addressed. They feel the need to have a voice in shaping their lives. It is however important to note that genuine participatory communication takes time and resources so requires serious commitment.

In the opinion of Inagaki, the hallmark of any development communication intervention is the explicit and implicit desire to change the way people behave. The role of communication experts, therefore, is to design and implement a communication message or system of information flows that would trigger reactions leading to the adoption of desirable behavioral patterns (Inagaki: 2007: 24).

According to Bessette (2004), 'working with Participatory Development Communication (PDC) means involving the local community in identifying the development problem (or a common goal), discovering its many dimensions, identifying potential solutions (or a set of actions) and taking a decision on a concrete set of actions to experiment or implement.' Using communication to support a participatory development or research process also means sharing both traditional and modern knowledge related to the analysis of problems as well as the identification of potential solutions.

2.1.2.2 Participatory Approaches

So, why participatory approaches? What can they do differently? Participatory development communication is interactive, unlike older, more dominant paradigmatic approaches, which are tailored to disseminate messages, with the belief that increased information would lead to development. As Vilanilam (Nair and White, 1993: 83) observed, however, disseminating

targeted information through media does not itself make people willing participants in the change process. Once there is no participation, there can be no buy-in from the communities for whom development interventions are targeted, and once there is no buy-in, there can be minimal or no impact. This could explain why after so many years, the dominant, top-down approaches employed by the NMCP have yielded poor results.

A key element in participation is conscientization. When one is conscientized, he wants to act, to change the status quo, to grow, to develop. According to Melkote (1991), the goal of participation efforts should be to facilitate conscientization of peasants. It is through conscientization and collective action that peasants could be made to perceive their real needs, identify their real constraints and plan to overcome problems.

The main approaches employed by the NMCP are principally diffusion related and identified through terms as mass media, IEC, and Entertainment-Education, such approaches are guided by definitions as that of Yadava (Nair and White, 1993: 74) which states that "Development communication can be viewed as all the communication decisions, actions and inputs which facilitate the process of social change in a desired and predetermined direction in specified areas or sections of a given society." Quebral (1973), also defined "Development Communication as the art and science of human communication applied to the speedy transformation of a country from poverty to a dynamic state of economic growth that makes possible greater economic and social equality and the larger fulfillment of the human potential."

The key term in Quebral's definition is "economic growth", while that of Yadava is "predetermined direction", putting facilitators at the centre of the communication process. Development communication should be people-centered and not facilitator-centered. Facilitators

must not have predetermined plans before setting out on a campaign because the outcome of a campaign can never be predetermined. As for economic growth, most communities are contented to preserve the status quo, because in it, their culture has been sustained for generations. Quebral's definition embodies the concept of development as seen from the diffusion approaches which were geared towards principally economic growth and modernization; diffusion here referring to simply dissemination of communication materials; audio, video and print. According to Vilanilam, experience has proved that simply disseminating targeted information through media does not in itself make people willing participants in the change process. It was also assumed that increased access to information would lead to greater participation, and in turn be beneficial to all sectors of the population Vilanilam (Nair and White, 1993: 89). People, however, have to be conscientized to desire the participation that will lead them to change ingrained negative behavior.

Panos agrees that 'The idea is now well established that people's behavior is more likely to change if they are not just passive recipients of messages but are more actively involved in the process: discussion is better than listening.' (Panos, 2007: 7) As Inagaki argues, Participatory approaches are identified by the following characteristics:

> (1) the participation of the intended beneficiaries in different or all of the project-cycle stages, (2) horizontal dialogue rather than vertical information transmission, (3) cultivation of trust and mutual understanding rather than persuasion, (4) local-level actions rather than national-level programs, (5) local knowledge, (6) the role of development specialists as the facilitator and equal participants rather than decision makers, (7) communication process rather than specific outcomes, and (8) the use of communication to articulate deep-seated social relations"(Inagaki, 2007: 7).

2.1.3 Using Participatory and Diffusion Approaches Together

The communal knowledge is that which surfaces through dialogue while the modern knowledge

gets disseminated through the mass media. The term dissemination, although associated with the dominant paradigm, is important in creating awareness of modern methods and processes that lead to development. The need for a marriage of convenience between old and the new paradigms of development has been proposed. In the revised version of the Diffusion of Innovation Theory of 2003, Rogers (2003) himself recognizes that the incorporation of participatory aspects into the diffusion model increases its effectiveness. He states that mass media are needed to raise awareness of an issue, while PDC is needed to mobilize action towards a development objective. This approach that combines the two models has been further supported (Rogers, 2006; Waisbord, 2005a; Waisbord, 2005b). Adam Rogers (2006), chief of the communications and public information unit of the UN Capital Development Fund, calls this approach "participatory diffusion." Rogers (2006) supported this marriage by agreeing that "a good idea is a good idea" (182).

Waisbord (2005a) argues that "inclusive approaches and openness to a diversity of programmatic insights and strategies is required" (82). He argues that a growing consensus around five ideas of development communication exist: centrality of power, the integration of top-down and bottom-up approaches, the need to use a communication "tool-kit" approach, the articulation of interpersonal and mass communication, and the incorporation of personal and contextual factors.

The Food and Agricultural Organisation's (FAO) Participatory Rural Communication Appraisal (PRCA) is another such marriage:

> This methodology combines participatory communication with traditional and modern media to involve all stakeholders in the planning and implementation of effective communication strategies for development. PRCA is used for creating dialogue with all stakeholders in order to identify and analyze their problems and needs, their existing knowledge and practices; their feelings and attitudes, as well as their perceptions of the development issues under investigation (Anyaegbunam et al., 2004).

2.1.4 Cultural Sensitivity

A basic principle underlying the PDC approach is respect for the knowledge, values, and culture of indigenous people (Balit, 2004). To implement PDC strategies successfully, the audience and the context must be understood (Muturi, 2005). However, in practice, development organizations often do not fully integrate the social and cultural context in the design of a development initiative, with the consequence that PDC activities will not be adapted by the local stakeholders (Balit, 2004; Kiiti, 2005; Muturi, 2005). Another important principle, according to the Encyclopedia of Communication Theory (2009), is the recognition of human agency.

Agency refers to the capacity of cultural members to define their own problems, articulate their needs, and participate in communicative processes and practices that seek to address their articulated needs. Communication is seen as a process through which agency is expressed, as meanings are shared locally, nationally, and globally in order to address the structures that facilitate and constrain the possibilities for health. This approach emphasizes the meanings that are co-constructed by cultural members as they participate in a variety of transformative practices that seek to change unhealthy social structures even as they work with these structures. Therefore, communication serves as a process for creating participatory spaces for listening to the voices of local communities and for dialoguing with cultural members in order to address the broader structures that impede the possibilities for health.

Mefalopulos (2011) while discussing the importance of social norms in communicating development has observed that where individual behavior is guided by social norms, change cannot occur easily, 'no matter the amount of dialogue engaged in, the channel used or how well-crafted the message.' He provided an example of Female Genital Cutting by stating that if a family does not perform it in a community where that is the norm, their daughter may most likely

be marginalized and ostracized by other peers, and she might also never be able to get married. It is therefore imperative to target the social norms from the start.

2.1.5 Communication Strategies

Anyaegbunam (1999), Bessette (2004), and Tufte & Mefalopulos (2009) lined up four stages in the design of effective communication strategies. These are Participatory Communication Assessment (PCA), (Participatory) Communication Strategy Design (CSD), Implementation of Communication Activities (ICA) and Monitoring and Evaluation (M & E). The first phase is variously called PCA by Tufte and Mefalopulos, Diagnosis by Bessette and Participatory Rural Communication Appraisal (PRCA) by Anyaegbunam and commences with a Baseline Study, which is understood to be a stage of problem analysis and has five basic steps:

1) understand the socio-cultural context while identifying and defining key issues which Bessette called 'establishing a relationship with a local community and understanding the local setting. This is the stage at which facilitators enter the community, going through the community leaders, explaining their purpose and seeking permission. It is the community leaders that will mobilize their people to relate with the facilitators.
2) create a common/public space, establish dialogue, and build trust among key stakeholders. This can be achieved through a process described by the Johari Window which portrayed the ideal relationships in knowledge sharing between facilitators and the indigenous people. starting with dialogue based on common knowledge shared by all parties involved; in the table, 'we' refers to the outside experts, while 'they' refers to the local stakeholders. Common knowledge here may mean knowledge that mosquitoes exist, that they are responsible for malaria and that there is the need to control malaria. Window 2 represents the knowledge of the local stakeholders that is unknown to the experts, this may refer to their own way of preventing the disease and treating

it; Window 3 is the opposite, knowledge of the experts shared with the local stakeholders, covering areas unknown to them, including modern prevention and treatment methods. Window 4 represents the end of the exercise and concerns issues unknown to both groups like harmonizing the indigenous knowledge and the project knowledge. At this point, knowledge, experiences and skills of key stakeholders must come together to find the most appropriate options and solutions leading to the desired change.

Window 1: ***OPEN KNOWLEDGE*** ***What we know and they know***	***Window 2:*** ***THEIR HIDDEN KNOWLEDGE*** ***What they know and we do not know***
Window 3: ***OUR HIDDEN KNOWLEDGE*** ***What we know and they do not know***	***Window 4:*** ***THE BLIND SPOT*** ***What neither we nor they know***

Table 1 The Johari Window

3) assess needs, problems, risks, opportunities and solutions, or as Bessette puts it, Involve the community in identifying a problem, its potential solutions, and the decision to carry out a concrete initiative. The best way to achieve this step is to utilize the tools of Participatory Learning and Action (PLA). Participatory Learning and Action (PLA) is part of a family of methods that enable local people to analyze, share and enhance their knowledge of life and situation, and to plan, prioritize, act, monitor and evaluate (Absalom et. al., 1995; Chambers, 1997). The methods and approaches evolved during the 1980s and 1990s in an effort to find ways to facilitate participation by communities in international development strategies, rather

than rely on top-down projects designed and led by outsiders. One of the tools that can be used in this instance would be Transect Walks, which means simply walking across an area with a community member/group of community members, observing, asking questions and listening as you go. This information is then represented visually in a transect sketch/diagram. Another is community mapping as explained by Thomas allows the community to show and talk about how they see the area where they live, the resources/facilities available and what is important to them in their environment. It is at this level that members of the community will pen their drainages, pools, important ditches, clinics, mosques and churches etc. which will enable the outsiders to begin to see a community through the eyes of the local people.

4) prioritize key issues for change, and reconcile different perceptions; the use of Pair Wise ranking can be a very useful tool at this level, having identified the exact issues that contribute to the perpetuation of the malaria problem, Thomas posits that ranking/scoring activities provide a way for community members to weigh up/rate/ prioritize items or issues either relative to one another or according to criteria. Then a pair wise ranking could be conducted to select the most critical breeding grounds to focus attention on.
5) validate findings and define solutions. This ranking is validated with the people who made them and solutions are then discussed and defined.

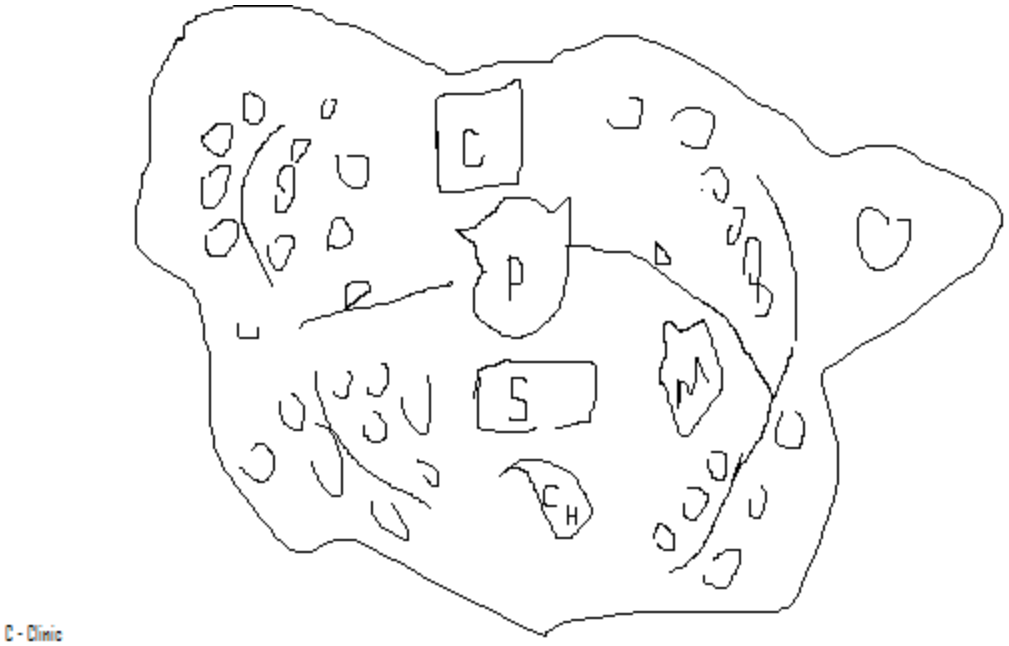

Figure 1 Community map

X	Blocked drains	Open wells	Blocked channels	Stagnant pool	Stagnant ditches	Dirty compounds	Total points
Blocked Drains	-						
Open wells		-					
Blocked channels			-				
Stagnant pool				-			
Stagnant ditches					-		
Dirty compounds						-	

Table 2 Pair wise ranking

The second phase of the campaign is problem solving, described as Communication Strategy Design by both Tufte & Mefalopulos and Anyaegbunam, and Planning by Bessette, and it comes on stream with the following steps; the first of which is 1) defining SMART (Specific, Measurable, Achievable, Relevant and Time-bound) objectives;

2) stakeholders/audiences; stakeholders are grouped in a hierarchy, the primary, the secondary and the tertiary. The primary audiences are our main targets for change. In the fight against malaria, heads of households are the key audiences that can change the status quo, but they need to be reminded, goaded and if necessary, enforced. The goading and reminding comes from influencers, who are the secondary audiences. These include the wife/wives, children and horizontally from fellow heads of households. The wives can be engaged for communication especially during ante-natal talks in the clinic, while the children can be engaged at school. These talks can deliver strategic information on the dangers of malaria, the need for clean environments and the need for regular spraying of the compounds and surroundings with insecticides. Other men will draw his attention when he errs by leaving the drains around his house unmaintained; they can be engaged during community meetings.

The third group is made up of tertiary audiences or the enforcers. In this group are the opinion leaders in the village and in fact the village heads, who coordinate expanded community projects like neighbourhood supervisions and community labour/self-help activities. This group will enforce community decisions concerning sanitation and decide reprimands for violators. Dialogues are usually arranged with this category of people to discuss with them on the need for vigilance.

3) level/type of change (e.g., collaboration, mobilization, mediation, partnership building, etc.); In this case, what is required most is mobilization. According to Lisa Howard-Grabman,

‘Community Mobilization (CM) is a capacity building process through which community members, groups or organizations plan, carry out and evaluate activities on a participatory and sustained basis to improve their health and other conditions either on their own initiative or stimulated by others.’ Mobilization is a gradual process and is achieved by degree from *cooption*, which implies token involvement of people in the community through *compliance, consultation, cooperation, learning,* to *collective action,* which implies local people setting their own agenda and mobilizing each other to carry it out without outside facilitation.

Phil Bartle (n. d.) in his own analysis came up with four questions that the community must be mobilized to discuss and answer:

a) "What do we want?"

b) "What do we have?"

c) "How do we use what we have to get what we want?" and

d) "What will happen when we do?"

4) communication approaches and activities; one of the most successful community mobilization in this regard is Forum Theatre. Forum theatre was created by Augusto Boal as part of what he calls his "Theatre of the Oppressed." The special feature of this is the direct engagement of members of the audience (called spect-actors) during a play. They could stop a performance at anytime and make inputs by suggesting different actions for the actors to carry out on-stage in an attempt to change the outcome of what they were seeing. In a malaria campaign where sanitation and insecticide spraying are the target, the play may present the various actions of households that lead to accumulation of stagnating water, leading to sleeplessness in the house and sickness thereafter. The play can present options, especially ineffective traditional methods like swishing

leafy branches to drive mosquitoes, or using cloth to drive mosquitoes out of the room. The audience are bound to suggest better options like using the LLIN, if they are conversant with it or even the use of insecticide coils and the burning of orange peels. After the play, discussions could follow on actions that need to be taken by the community. The problems identified and validated at (phase one, 5) above have a chance of a wider acceptance as the audience of the play are necessarily larger than that involved in PLA. It should be remembered that Bartle's Four questions are pertinent in this regard and a successful play will answer the questions the same way.

5) partners; for a successful project, the secondary and tertiary audience should be engaged to ensure the success of the programme. This should be done through the most appropriate channels. At this level, participatory message development takes place with the different audiences.

6) target issues; the critical thing at the end of the day is the achievement of a significant reduction in the spread of mosquitoes and malaria. All messages and discussions must therefore be geared to achieving this with the different audiences, especially as it affects their roles.

7) expected outputs and outcomes; the expected outcomes must also be defined and shared with the different groups at this level, though Tufte & Mefalopulos believe that for a participatory communication project, it is always difficult as the facilitator has less input (33). outputs however are achievable.

The third phase is Implementation of Communication Activities, which is otherwise referred to as an action plan for the implementation and facilitation of the process and monitoring of all relevant activities. Starting from the objective, the plan includes people (audiences), who are

engaged in the needed change, activities planned, resources needed (both human and financial), party responsible for each activity, and timeframe as well as a column about indicators to assess outputs and outcomes can be added to facilitate monitoring of the activities

. **Audience/ Stakeholders**	**Activities**	**Resources**	**Party responsible**	**Timeframe**	**Indicators**
Who are the actors addressed by the initiative?	***Which are the needed activities?***	***What are the financial/human resources needed?***	***Who is the party (person or institution) responsible?***	***What is the schedule for their completion?***	***Which are the indicators to assess and evaluate their impact?***

Table 3 Communication plan template

The fourth phase is that of Monitoring and Evaluation, which Bessette described as the assessment stage. This phase should commence at the beginning of the project and should concentrate more on outcomes (sustained use, feedback) than outputs (materials produced, staff trained, adoption of new behaviours, rate and use of innovations). Monitoring the actual process is crucial to understand the outcomes. According to Vickery & Aswani (2011: 21), there are three stages for monitoring and evaluation for any Communication Strategy;

a) During the design stage – develop an understanding of stakeholder awareness and attitude towards the issue, this is best achieved through baseline surveys,
b) During implementation – we must verify that planned activities actually take place, and their effectiveness is regularly and closely monitored to enable planners alter approaches as needed,

c) After implementation – draw conclusion as to whether the strategy delivered on the objectives and/or assess what went wrong in case of failure.

Monitoring and evaluation, according to the authors, usually answers some questions like 'what changes in attitude or action did we catalyze? How did that affect support for the intervention? And what would results likely have been without the Communication Strategy? Answering these questions satisfactorily will see us looping into a second stage of the campaign, and this in return will reinforce sustained behaviour.

It is pertinent to note that awareness creation is an integral part of every campaign at three stages; at the onset, to sensitize and mobilize the citizens; during the project to sustain the interest, and after the project to reinforce the key issues.

2.1.6 Development Projects on Malaria

In its preamble, Nigeria's Revised National Health Policy (NHP) notes that disease programmes such as that of malaria are currently operated within a weak health system and have had little impact; and that consumers health knowledge including IEC and their obligations are low (NHP: 2,3). The policy declares that people have a right to participate individually and collectively in the planning and implementation of their health care (NHP: 5) and even speaks of measures to ensure effective community involvement (NHP: 9) including the establishment of ward and village health committees (NHP: 17) which would provide a good participatory platform. The policy notes that the 1999 constitution was silent on health care delivery, and expressed the need for a national health care act, (NHP: 8) which has now been approved by the national assembly and awaits the signature of the President of the Republic.

PLANNING
DIAGNOSIS
INTERVENTION OR EXPERIMENTATION
ASSESSMENT
1 Developing a relationship and undertanding the local setting
2 Working with the community to identify problems, solutions and action
3 Identifying concerned community groups and stakeholders
4 Identifying communication needs, objectives and activities
5 Identifying appropriate communication tools
6 Preparing and pre-testing communication content and materials
7 Facilitating the building of partnerships
8 Producing an implementation plan
9 Monitoring, evaluating and documenting
10 Planning the sharing and utilization of results

The policy also contained a list of health interventions including a National Policy on Roll Back Malaria, with the objectives of reducing morbidity and mortality among children and mortality among pregnant women to 50% by 2010 and to reduce fatality cases and their effects to 20% by 2010 (and 75% by 2015 according to the World Malaria Report). The strategic thrusts of this policy include disease management and disease prevention through Intermittent Preventive Treatment (IPT), Integrated Vector/Environmental Management (IV/EM), Insecticide Treated Nets (ITN), Information, Education and Communication (IEC), Partnerships, Research, Monitoring and Evaluation (NHP: 26).

The World Malaria Report 2010 noted that Nigeria was identified among countries said to have a limited evidence of decrease of malaria morbidity and mortality between 2000 and 2009, even among these countries, some have maintained evidence of wide scale implementation of malaria control activities to more than 50% of the population at high risk. Nigeria did not feature among those countries. (WMR: 41). Having 25% of all Africa cases, Nigeria is the example of a malaria endemic country.

Studying the various strategic plans and annual reports of the NMCP, it is obvious that malaria control efforts have failed to produce satisfactory results primarily because of the failure of communication. It is easy for communication to fail if the necessary processes for its planning and implementation are not followed; and as stated copiously in this document, communication should be targeted at the audience and not the media or even the message.

Before a message is developed, let alone disseminated, there are issues to be considered. Adiel K. Mushi et al (2008) captured this while developing a BCC strategy for a vaccination-linked malaria control tool in southern Tanzania. They stated that Behaviour Change Communication

(BCC) strategies for health interventions must be both culturally appropriate and technically sound. Many other countries have understood this and are making progress in their control efforts.

One of the guiding principles of the Somali Communication Strategy for Malaria (SCSM, 2010) is that it values local knowledge and structures and will at all times make use of these to facilitate change from within. The strategy directs the agencies involved in the implementation of the strategy to as a matter of obligation utilize the local structures and knowledge in implementing their communication related activities. Community engagement and participation at all stages of malaria communication development and implementation were viewed as very crucial since health is a basic human right. Optimal use of available local resources in the form of human, financial, knowledge and material are to be utilized for the successful implementation of the strategy (SCSM 2010: 6). According to the Somali strategy, IEC materials were not an end but means to an end., IEC is intended to support the implementation of other strategies by reminding the community the key messages communicated (SCSM 2010: 19).

One of the recommendations of the WHO Study Group on Malaria Vector Control and Personal Protection (SGMVCPP) 2004, was that 'active community involvement should be encouraged, as it is essential for effective personal protection and vector control interventions' (SGMVCPP, 2004: 53).

In its Strategic Directions for 2006-2010, the Cambodian NMCP plans to pursue BCC approaches strategically during the five year period to include both community outreach approaches such as interpersonal and group health education by village health volunteers and female change agent health educators, school malaria health education for teachers and pupils,

child to child approach to reach out-of-school children, orientation of village, commune, operational district and provincial level key influencers, malaria health education training of mass media personnel, and use of traditional media such as participatory community theatre (2005: 58).

The report indicated that IEC materials and methods were being developed through collaboration between the National Malaria Center and NGOs, through employing Participatory Learning Approaches with the affected communities. The further scaling up of the Child to Child approach (to reach out of school children) and the staging of Community Theatre performances will be undertaken through the participation of some of the most affected communities with the greatest burden of malaria in the country (2005: 70).

Zambia is one of the few African countries that have attained more than 50% reduction in malaria cases. (WMR 2010: 41) The Zambia Roadmap for Impact on Malaria 2006 – 2011 argues that the rapid scale up of malaria control will only prove successful if the community accepts and uses the prevention and treatment measures being implemented. Each require individuals, families and communities to decide whether or not they believe malaria is a preventable and curable disease and require that individuals, families and communities take action to protect themselves and their loved ones; the roadmap however seem to propose only intensive dissemination of IEC messages on malaria in order to significantly promote appropriate practice of behaviour related to care seeking, care giving and prevention by caretakers, families. (WMR 2010: 31-32) In mobilizing community response, the roadmap plans to develop community capacity in implementing an integrated package for malaria control as well as a community demand driven approach (WMR 2010: 33).

Eritrea, another country to attain more than 50% reduction in malaria cases by 2010, has even introduced a Malaria Early Warning System (MEWS) and is in the process of initiating necessary linkages, data transfers from sentinel sites to zones and data analysis. (Reaping Eritrea, page 12).

2.1.7 History of Malaria Control

The World Health Organization's Global Malaria Action Plan (2008: 28) provides a history of the fight against malaria as beginning in the mid-19th century. Malaria was then said to be endemic in most countries and territories of the world, affecting about 90% of the world's population and stretching as far north as the Arctic Circle. Successful efforts to reduce malaria with *Dichlorodiphenyltrichloroethane* (DDT) began in 1945 and by 1955, the 8th World Health Assembly launched the Global Malaria Eradication campaign for all malarious countries except Madagascar and those of sub-Saharan Africa, using Insecticide Residual Spray (IRS), primarily with DDT, as a vector control tool together with case management. In all, 37 of the 143 countries that were endemic in 1950 were freed from malaria by 1978, of which 27 are in Europe and the Americas.

By 1973 it was concluded that in some countries a "time-limited eradication program was impracticable", and strategies were shifted into long-term integrated control programs. The Global Malaria Eradication campaign was then abandoned as little attention was paid to malaria over the subsequent years. Despite the end of the official WHO campaign, a number of countries successfully eliminated malaria on their own since that period, including Tunisia (1979), Maldives (1984), and the United Arab Emirates (2007).

Malaria mortality and morbidity began to increase again in the 1980s due to a combination of

factors such as the increase in parasite and vector resistance to the current anti-malarial drugs and insecticides, the weakening of traditional malaria control programs, rapid decentralization and integration into deteriorating primary health services, and the increase in humanitarian crisis situations in many malaria-endemic areas. This dramatic increase led to the adoption of the Global Malaria Control Strategy in 1992 and to the creation, in 1998, of the Roll Back Malaria Partnership to coordinate global efforts in combating malaria.

In recent years, malaria has received greater international attention and is included among major international development targets and acknowledged as a contributor to global poverty. The United Nations' Millennium Development Goals call for halting and reversing the incidence of malaria by 2015. In the Abuja Declaration in 2000, African leaders affirmed their commitment to halving malaria mortality by 2010. These initiatives have led to increased attention and funding to fight the disease.

2.1.8 The Roll Back Malaria Initiative

The Report of WHO Study Group on Malaria Vector Control and Personal Protection (2006:1) gave an insight into history of the Roll Back Malaria (RBM) Initiative launched by the World Health Organization in 1998, as a Cabinet Project to coordinate global actions against malaria. The Initiative was endorsed by the Executive Board (Resolution EB 103.R3) and thereafter by the World Health Assembly (Resolution WHA 52.11). RBM is a global project geared towards bringing about a significant reduction of the malaria burden with special focus on the high transmission areas of Africa.

The Roll Back Malaria (RBM) Partnership comprises all malaria-endemic countries, bilateral and multilateral development partners, the private sector, non-governmental organizations,

community-based organizations, foundations, and research and academic institutions involved in malaria control as well as the RBM Secretariat, Working Groups, and Sub-Regional Networks. The Global Malaria Action Plan was designed to foster agreement among all partners around the goals, strategy, and activities that the RBM Partnership will pursue, and to clearly lay out those goals, strategies, and activities.

The plan aims to maximize the impact of the malaria community's work by guiding the prioritization of resources and by strengthening the alignment across and effectiveness of various initiatives. The plan also proposes that even though activities like the creation of country plans, and the development of implementation plans of individual partners remain the responsibility of countries and partners, it may influence this activities.

The RBM Partnership reaffirms the targets articulated in its Global Strategic Plan 2005-2015.

• By 2010, through targeting universal coverage: 80% of people at risk from malaria are using locally appropriate vector control methods such as long-lasting insecticidal nets (LLINs), indoor residual spraying (IRS) and, in some settings, other environmental and biological measures;

− 80% of malaria patients are diagnosed and treated with effective anti-malarial treatments;

− in areas of high transmission, 100% of pregnant women receive intermittent preventive treatment (IPTp); and

− the global malaria burden is reduced by 50% from 2000 levels: to less than 175-250 million cases and 500,000 deaths annually from malaria.

By 2015:

− universal coverage continues with effective interventions;

− global and national mortality is near zero for all preventable deaths;

− global incidence is reduced by 75% from 2000 levels: to less than 85-125 million cases per year;

− the malaria-related Millennium Development Goal is achieved: halting and beginning to reverse the incidence of malaria by 2015; and

− at least 8-10 countries currently in the elimination stage will have achieved zero incidence of locally transmitted infection.

• Beyond 2015:

− global and national mortality stays near zero for all preventable deaths;

− universal coverage (which translates to ~80% utilization) is maintained for all populations at risk until local field research suggests that coverage can gradually be targeted to high risk areas and seasons only, without risk of a generalized resurgence; and

− countries currently in the pre-elimination stage will achieve elimination.

In April 2000, Global RBM office organized the first Summit on malaria in Abuja, Nigeria. The Summit, which brought together African Heads of State and Government set three main targets to be reached by 2005, and estimated that it was necessary to obtain US$ 1 billion each year to reach the stated targets. These targets in both funding and achievement remain good terms of reference for the global initiative which is gaining momentum, even if at a slower pace than expected. In 2001, the UN General Assembly declared 2001–2010 the decade to roll back malaria in developing countries, particularly in Africa. (The African Summit on Roll Back Malaria, 2005).

The current solution for this is the Sector Wide Approach (SWAp) where a partnership between the Ministry of Health and health sector donors create a basket of funding where donor funds are added directly into the sector. The central government and the donors jointly determine longer-

term expenditure frameworks and annual budgets. Often a share of the SWAp funding is passed on to districts to support decentralization. This usually takes the form of a district health basket fund controlled not by the Ministry of Health but by a local authority. Neither the donors nor the Ministry of Health earmark these funds for particular interventions or activities, but they may provide guidelines, set ceilings or minimums with regard to expenditure by type (e.g. ceilings for capitalization, allowances, etc.).

2.1.9 National Malaria Control Programme

In 1997, Nigeria adopted a National Malaria Control Policy in response to the government's growing concern over the increasing burden of disease and death due to malaria. The National Malaria and Vector Control Program (NMCP) was therefore set up to oversee all malaria and vector control activities in Nigeria. In doing so, it has collaborated with a wide range of partners, united under the goal of "halving the burden of malaria by the year 2010 and thus ensuring that the disease no longer constitutes a public health problem" (NMCP, 2004). The agency has a vision of 'a malaria - free Nigeria' and a mission which reads "The government and the entire people of Nigeria believe that every Nigerian has the right to access highly effective malaria preventive services and curative care delivered as close to the households as possible; and that "all households, communities and Governments at all levels are working together to take appropriate and effective action to prevent and treat malaria" (NMCP, 2004).

The National Malaria and Vector Control Programme is alternately called Roll Back Malaria Programme, because RBM is domiciled in the NMCP in the Federal Ministry of Health. The operationalization of its policy is guided by the Global Malaria Control Strategy (GMCS), which was adopted by the WHO Ministerial Conference in Amsterdam in 1992, and its four main objectives:

1. to provide early diagnosis and prompt treatment of malaria;

2. to plan and implement selective and sustainable preventive measures, including vector control;

3. to detect early, contain or prevent epidemics;

4. to strengthen local capabilities in basic and applied research to permit and promote the regular assessment of a country's malaria situation, in particular the ecological, social and economic determinants of the disease.

Nigeria has the highest rates of morbidity and mortality due to malaria in Africa, accounting for 25% of all estimated malaria cases in Africa, Malaria transmission in Nigeria takes place all year round and almost all cases are caused by *Plasmodium falciparum*. The NMCP reported 4.3 million suspected malaria cases in 2009 (42% increase compared to 2000), representing only a fraction of the real malaria burden due to underreporting (World Malaria Report, 2010).

In Nigeria, the disease is responsible for 60% outpatient visits to health facilities, 30% childhood deaths, 25% of deaths in children under one year and 11% maternal deaths, as well as a cumulative death package of 300,000 each year. The financial loss due to malaria annually is estimated to be about 132 billion Naira in form of treatment and other costs. 300,000 deaths per year in a population of 150 million people may sound insignificant. That however translates to 1 death in every 500 citizens per year; and for states like Kano and Lagos with a population of over 10 million each, that will amount to 20,000 deaths per year out of which 15,000 (75%) are children. (NMCP, 2004).

As reported in the RBM Needs Assessment Report 2010 (18), the major donors to the malaria cause in Nigeria are: the Federal Ministry of Health, the Global Fund, the President's Malaria Initiative, the World Bank, UNICEF, WHO and DFID. All the donors seem to have an interest in

supporting the area of LLINs, IPT, Treatment, Behaviour Change Communication (BCC), Monitoring and Evaluation (M&E) and Programme Management. Only two, however (World Bank and WHO) are interested in the area of IRS and mosquito larva control, not even the Federal Ministry of Health.

It is astonishing to note that the malaria status figures of Nigeria have remained consistent and unchanging, despite the efforts of the NMCP in coordinating an onslaught on the disease. The unprecedented partnerships and expenditure of several hundred millions of dollars in government appropriation at three tiers as well as grants and loans from international agencies and nongovernmental organizations seem not to result in any meaningful change.

So what is the problem? There are allusions to sabotage by anti-population pundits, allegations of official corruption, lack of regular research and wrongful prioritization, as vector control gets very little, white nets get all the attention. Another is the poor use of development communication strategies. The issues of sabotage and corruption can certainly not be confirmed empirically and all evidence points to a reasonable level of transparency in the running of the agency. Perhaps the issue of regular research may hold some water as very little is expended on research.

The argument of wrongful prioritization could also be correct to the extent that over 50% of the budget is spent on the acquisition and distribution of ITNs, with poor results, to the detriment of other prevention methods like sanitation and source reduction.

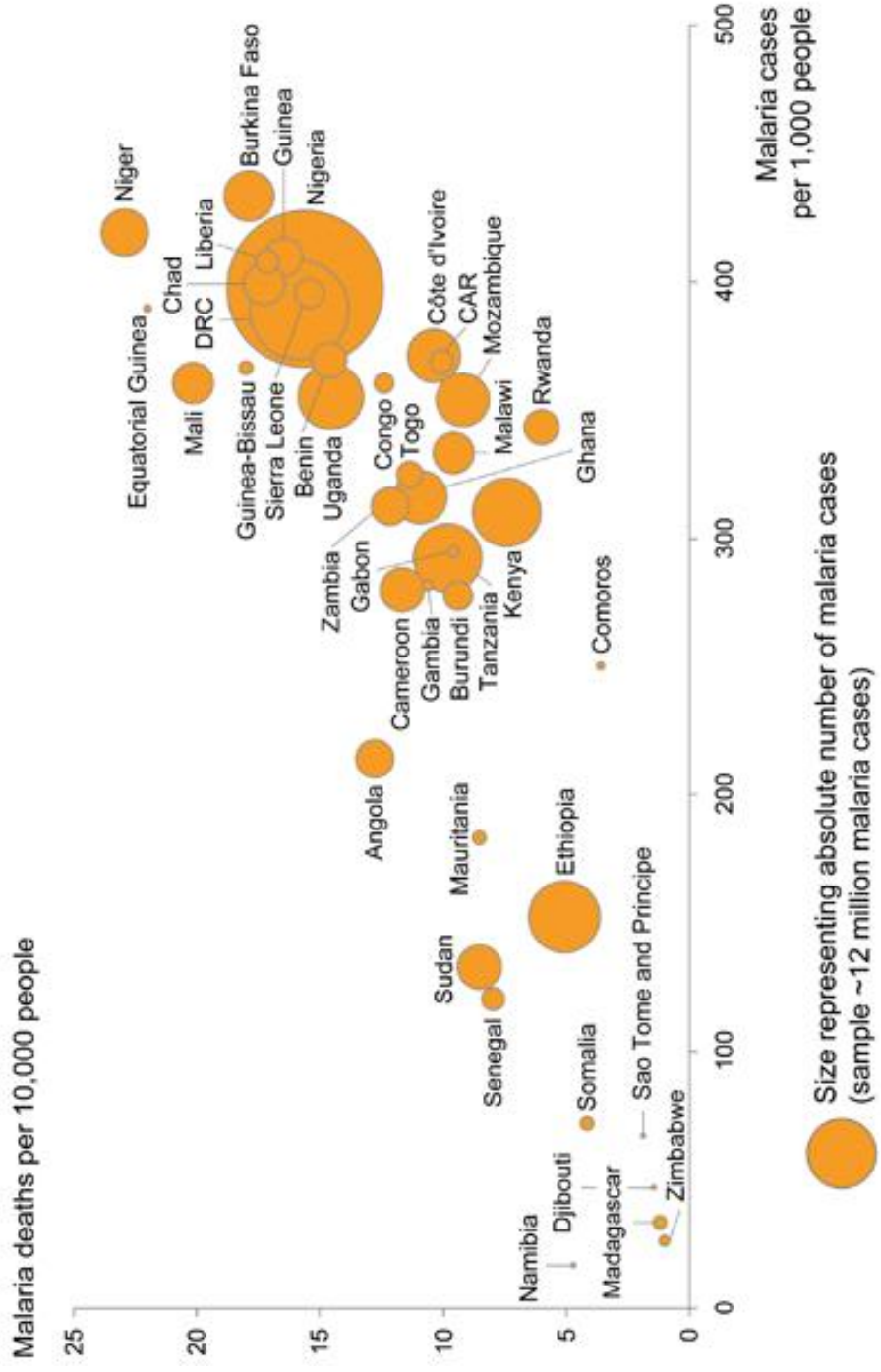

Figure 3 Illustrating malaria cases and deaths in Africa; note Nigeria's high figures. Credit: Global Malaria Action Plan

In fact, a recent study published by the medical journal 'The Lancet' (18/08/2011) indicate mosquitoes now resist the chemicals applied to the LLINs and therefore pose a great challenge to the control efforts, in a study conducted in Senegal. This leaves us with the last argument, that it is a failure of communication, which implies that most of the communication approaches employed by NMCP do not involve the community, and so do not bring about any appreciable change in behavior which is necessary to curtail the spread of malaria. The approaches used are media related and are basically vertical and top-down, which have been variously proved to be unworkable (Rajasunderam and Bessette, 1996: 6, 16), and which cannot succeed in today's world where approaches directed at the people, rather than the message or the media hold sway.

2.1.10 Communication Strategies of the NMCP

In providing a background to the review on the communication strategies employed by NMCP over the years, it would not be out of place to refer to the RBM's Global Malaria Action Plan (GMAP) and what it provided. To RBM, BCC includes the basic components of IEC, but starts with a focus on the key individual and group behaviors to be changed and employs a wider range of interventions beyond cognitive-based, knowledge transfer.

The action plan introduces Communication for Social Change as a more participatory approach to engaging communities that focuses more on the client-identified end actions in regard to the health intervention and that communication programs need to combine both the delivery of messages and other behavioral interventions and opportunities for dialogue, shared learning and consensus-building to produce results. Regardless of the methodology, any effective communication program aims to affect the health-seeking or care-providing behavior of individuals and communities creating demand and sustaining use of malaria services and products.

It further posits that it is important to not only create demand via communication, but also to focus on increasing appropriate utilization of service and products, such as ensuring a household dynamic where pregnant women and children sleep under mosquito nets. The resulting field effectiveness due to appropriate utilization of preventive interventions is a key driver of treatment costs. For example, increasing operational effectiveness of LLINs and IRS from their current field effectiveness of 50-60% up to 98% can theoretically reduce incidence and therefore treatment costs, by almost 50%. Modeling a 98% effectiveness rate showed a potential cumulative savings globally of US$ 960 million from 2009-15. This makes a powerful argument for investing in communication and behavior change programs.

Communication programs should create opportunities and motivate people to discuss malaria issues, both among themselves and with decision-makers and service-providers. In addition to changing household practices, social norms and mobilizing communities to participate actively in malaria interventions, communication programs can also improve the quality of client-provider interactions by providing health workers with the interpersonal skills and the motivation to communicate more effectively with clients.

The GMAP then recommended that communication activities should be integrated into National Strategic Health Plans, malaria business plans, and education programs from the very beginning. Community involvement and participation during the design and implementation will ensure the activities are successful. Lessons learned in health promotion have demonstrated that neglecting community involvement in all stages of the program design and implementation will decrease the chances of the program succeeding.

The action plan then identified a number of challenges around communication and behavior

change methodologies both at the national and at the community level. Some of the key cross-cutting issues at the national level include the lack of time, capacity and resources for the design and implementation of communication programs. These were explained to be due to low prioritization, as well as ineffective advocacy to promote malaria control programs as priority interventions in national government agendas. Others include the failure to evaluate communication contributions to malaria program objectives and therefore the allocation of insufficient resources for communication programs, lack of sustained communication with multiple channels (schools, workplace, women's groups, etc.) and over-reliance on mass media and promotional items at the expense of participatory and interpersonal communication.

At the community level, the challenges include failure to identify and ensure the participation of local political, religious and traditional leaders to facilitate information dissemination and malaria control within the community, insufficient attention paid to participatory methodologies, especially in the development of messages and interventions, insufficient communication targeted for home-based care and service providers and application of broad, generic strategies, without considering the most marginalized populations that are often most at risk. The rest are insufficient insights drawn from community leaders and grass roots efforts and lack of integration of malaria communication activities with other health programs (Expanded Program for Immunization (EPI).

In 2004, NMCP with the support of USAID embarked on a communication campaign, the details of which were given as;

> massive above-the-line (Radio, T.V and Billboards) and below-the-line (Market storming and expansion, women's group activations, etc) communication campaigns in more than 16 states of the Federation. A total of 4,691 Radio spots were aired in 17 stations; 108 TV spots in 5 stations; and 64 billboard locations in 6 states in the year under review (NMCP,

2004).

This paternalistic, diffusion-based approach is a complete volte face to the foundation set by the Global RBM. It is also the general picture through the years as reflected by the documents of the organization. Could this be the reason for the poor showing that the NMCP has been making? Certainly, the failure of the efforts to effectively manifest clear successes could easily be attributed to the failure of communication. Any intervention that does not involve the target community and makes no effort to secure its buy-in is bound to fail. In its 'way forward', the 2004 report vaguely recommended awareness creation on the problems of malaria in Nigeria and advocacy at all levels of Governance to support malaria control activities. It soon became clear that what is needed is a comprehensive strategy of community engagement, but rather than a communication strategy, the agency developed a behavior change communication (BCC) strategy, which appeared in March 2005 (2005: 7.2).

The BCC Strategy was released to achieve consistent, integrated, and appropriate BCC interventions across the main RBM priority strategies 'through a participatory approach'. However, recent developments such as the new policy on Case Management in 2005, adoption of the Integrated Vector Management (IVM) in 2006 as the main strategy for Vector Control and the revision of RBM targets based on the 2006 African Union Summit, called for a revision of the strategy. Between 2006 and 2008, several technical meetings were held to develop this revised BCC strategic document, with the involvement of all the key stakeholders in RBM activities.

The status quo persisted, however, as most of the BCC efforts to date have used interpersonal and group channels such as clinic based health talks and outreach counseling sessions by community health workers. The need for community outreach and creation of awareness

continued to be raised in all official documents, with little explanation as to how. Most of the channels employed are Billboards, Posters, Handbills, Community demonstration sessions, Drama, folklore and Novelty items.

An example of communication approaches to be used for Community Mobilization for Children Under age 5 listed at page 42 include Community Channels like Health talks at women's groups, churches, mosques, market days, community mobilization and social events. Town announcers, folklores/dramas; the Interpersonal like Health talks at Ante Natal clinics, safe motherhood health talks, school health clubs, group discussions; and Mass Media including Radio/TV spots, posters, billboards, booklets, reminder cards, drama and film shows. Though there is some debate as to whether billboards are of the mass media, it is impossible to classify counselling cards, posters, booklets and handbills as mass media. While a BCC strategy is always associated with messages, coming from the agency to the audience, a communication strategy will have at its heart the recipient of such a message, as his freedom of selective perception, retention, recall and even utilization will determine whether the message is accepted or not.

In June 2010, NMCP released an Advocacy, Communication, and Social Mobilization Strategic Framework and Implementation Plan, a verbose name for a communication strategy. The key community level behaviours associated with malaria include improved vector control and working with communities for improved participation in community-oriented interventions. (NMCP, 2010: 13) this is to be achieved through: advocacy, for leadership and direction, social mobilization, with a focus on positive change of social norms, and behaviour change communication at the individual level.

Advocacy is targeted at policy makers and is aimed at garnering support for the project; Social Mobilization is said to be a five-tiered process aimed at gaining public support; beginning with information dissemination, which is said to result in motivation, which in turn leads to increased awareness, community mobilization and finally total awareness and full involvement. BCC, however was explained as a set of interventions intended to bring about individual changes in behaviour.

The report made reference to the Communication Pathways Model for Social and Behavioural Change model which recognizes that social and individual behaviour change will not happen as a result of one intervention alone or focusing on one level of society, but rather through social, individual, and structural change coming together to produce a supportive society.

The NMCP produced 3 Strategic plans with the first being 2000-2005, which reported that Preliminary findings from a 2005 evaluation survey carried out to assess progress in implementation showed minimal progress towards set targets with a great promise for significant improvements provided rapid scaling up of interventions is carried out at sub-national levels e.g. States, Local Government Areas and communities. The culprits were identified as increase in drug resistance, Non-availability of ACT, and limited resources. Communication was not even broached as a factor.

The 2nd Strategic plan 2006-2010 re-echoed the 2004 report at pages 9, 15, 17, providing the same figures on the malaria status of Nigeria. It also gave a picture of expenditure profile of the organization. A total of $827.1m was budgeted for expenditure during the strategy period out of which $108.1 was earmarked for BCC, BCC is only second to case management with $512.1m.

In one breath, the plan argued that the rapid scale up of malaria control in Nigeria will only

prove successful if community accept and use the prevention and treatment measures being implemented. Each require individuals, families and communities to decide whether or not they believe malaria is a preventable and curable disease and require that individuals, families and communities take action to protect themselves and their loved ones. In another breath, it stated that due to the poor perception about the cause, prevention and management, the plan proposes intensive dissemination of IEC messages on malaria in order to significantly promote appropriate practice of behaviour related to care seeking, care giving and prevention by caretakers, families, communities and health workers. It is curious that this conflict reflects the plan's uncanny resemblance (see pages 39 - 40) to the Zambia Roadmap for Impact on Malaria 2006 – 2011 (pages 31 - 32). The contents are the same almost to the word.

The 2006- 2010 Strategic Plan was revised midstream to cover 2009-2013 in order to accommodate a change from malaria prevention targeted to biologically vulnerable groups to universal access.

Overall objectives for the period 2009 – 2013 are to nationally scale up for impact (SUFI) a package of interventions which include appropriate measures to promote positive behaviour change and to prevent and treat malaria as well as to sustain and consolidate these efforts in the context of a strengthened health system and create the basis for the future elimination of malaria in the country.

With regards to community mobilization, the plan proposed empowering the communities, without explaining how, in order to ensure broad participation of the grass root level of society (NMCP, 2009-2013: 29), and claimed that efforts will build on the existing structures such as the Ward and Community Development Committees to engage communities and families in playing

an active role in malaria prevention as well as to increase correct treatment behaviours.

2.2 Theoretical Framework

According to the U.S. Surgeon General's 1979 Healthy People report, health promotion was dominated by the view that individual behavior was largely responsible for health problems and, consequently, interventions should focus on changing behavior. The fight against malaria was one such problem which requires behavior change at many levels; individual, organizational and community, targeting behavioral and the social context in which they occur. (National Cancer Institute, 2005: 5). This work is therefore guided by two dominant theories in this regard; these are the ecological perspective and trans-theoretical theories.

2.2.1 Ecological perspective

The ecological perspective theory provides a window for the examination of the dynamic relationships between individuals. Three levels of influence have been identified around an individual, these are intrapersonal; having to do with an individual's knowledge, attitudes, beliefs and personality traits, interpersonal; to do with interactions among family, friends, peers that provide identity, support and recognition, and lastly the community, which is driven by community factors, institutional factors and public policy. The ecological perspective is used primarily as a qualitative research perspective where environmental factors are influential and studied in addition to the primary subjects of the research. It is used to understand why individuals take or do not take certain actions in society. That is why beyond the study of the practices of the NMCP through content analysis and in-depth interviews with its officials, respondents were engaged in field interviews to understand why they have not played a key role in malaria control and why the intervention that affects them had not led to any considerable

reduction in the high rate of malaria morbidity and mortality.

2.2.2 Trans-theoretical model of change

The Trans-theoretical or stages of change theory was espoused by Prochaska & DiClemente, in 1983 and it describes the individual's motivation and readiness to act. People pass through a series of stages when change occurs. The stages discussed in the change theory are pre-contemplation (ignorance of need for change), contemplation (thinking of changing), preparation (ready to change), action (making change) and maintenance (staying on track). This theory provides the lateral window for examining whether the project has done all it should do in moving its beneficiaries from the point of entry to the point of change. Many projects overlook certain important stages in the process of change and in doing so negatively impede sustainable behavior change from occurring, that is why it was necessary for this study to not only identify the influences around the individual, but also to track whether and how every stage in the change process is implemented.

Both theories provide for the full engagement of members of the community through themselves as individuals, their peers, family, and the community as a group, on the one hand, and through gradual, evaluative progression on the other. The next chapter therefore is an engagement with forty respondents from four communities in two different states; Sokoto and Kano. The contents of relevant documents of the NMCP and interviews with its field officers were also analyzed for manifest and latent content to see how they measured up to the provisions of these theories.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study has explored, through qualitative processes, the operations of NMCP in its coordinated effort to fight malaria in Nigeria. Studies were longitudinal, covering 1997, when the NMCP came into being to 2010, and they interrogated whether the interventions have caused reasonable individual and community change in behavior to substantially cause a reduction in the spread of mosquitoes, malaria cases that get treated and malaria related deaths. As Cecilia Cabanero-Verzosa observed, qualitative studies are used to develop hypotheses and gain insights rather than draw hard and fast conclusions or project responses. (Cabanero-Verzosa, 2005: 87).

3.2 Sample Population

In each of the four communities selected for this work, ten (10) respondents were interviewed. Each respondent was adult, male and head of a household. In order to cover the NMCP well, one state and one local official were interviewed to give face to the documents of the organization that were analyzed.

3.3 Data Gathering Techniques

Impact assessment was conducted on the operations of NMCP as an institution. This is to establish whether its programmes are appropriate to the needs of the fight against malaria in Nigeria. Content analysis was conducted on core and other relevant documents to derive both manifest and latent meanings, including relevant ones from other countries and organizations. The second is an assessment of the communication strategies employed by the organization over

time to get across to its target audiences, to see whether they are hitting their target or not. Individual survey (field) interviews were conducted with beneficiaries of NMCP's interventions. Also to gauge the involvement and capacity of state and local officials, qualitative (in-depth) interviews were held with them.

Study conducted discourse analysis to discover manifest and latent content from both document analysis and interviews. Direct observation was also employed to see the gravity of public health issues, which include open drainages, pools, ditches that collect water and residential drainages.

3.4 Scope

The primary unit of analysis is the National Malaria Control Programme, Nigeria, while the secondary units are the state and local level officials as well as local respondents. The study will study the operations of the state offices of Sokoto and Kano states and two local offices in each of the states. These are Gagi village and Kofar Aliyu Jodi in Sokoto and Unguwa uku and Kumbotso village, both in Kano state. Study will analyze content of official documents from 1997 - 2010.

3.5 Data Presentation and Analysis

3.5.1 Content Analysis

Content analysis is the study of recorded human communication (Babbie, 2005: 328) among the forms suitable for study are books, magazines, journals, web pages, official documents etc. This study analyzed both manifest and latent content from WHO and RBM documents as well as those from the NMCP. Documents reviewed include the World Malaria Report, Malaria Indicator Survey, Global Malaria Action Plan, NMCP strategic plans, NMCP BCC strategies,

and NMCP ACSM strategy, Zambia Roadmap for Impact on Malaria and other primary and secondary sources.

3.5.1.1 World Malaria Report and Malaria Indicator Survey

Literature review has revealed that Nigeria ranks very low in malaria control performance among African countries with a high malaria burden. At page 40 of the *World Malaria Report 2010*, it was reported that the 35 high burden countries in the WHO Africa Region have until recent years treated malaria in children under 5 years of age **presumptively, and only have data on suspected malaria cases** (emphasis mine)**.** Nigeria was listed among 31 countries that recorded limited evidence of decrease in number of malaria cases between 2000 – 2009 and among the 15 worst, while 11 countries have achieved over 50% decrease in the same period (WMR 2010: 40, 41). This can be further confirmed from the latest document released by the NMCP in March 2012, *Malaria Indicator Survey 2010*, which at page 2 repeated the traditional malaria figures (Nigeria MIS 2010: 2) as indicated at page 35.

3.5.1.2 Global Malaria Action Plan

> Communication activities should be integrated into National Strategic Health Plans, malaria business plans, and education programs from the very beginning. Community involvement and participation during the design and implementation will ensure the activities are successful. Lessons learned in health promotion have demonstrated that neglecting community involvement in all stages of the program design and implementation will decrease the chances of the program succeeding (GMAP, 2008: 211).

The main document guiding the implementation of malaria control all over the world is the Global Malaria Action Plan, produced by the Global Roll Back Malaria Project, which laid a lot of emphasis on changing key individual and group behaviors and creating opportunities for dialogue, shared learning and consensus building. The document also provided for the delivery

of messages to encourage malaria product and service demand among members of the public and to ensure the sustainable use of these services and products. The Action Plan also outlined that communication must motivate people to discuss malaria issues both among themselves and decision makers and with service providers; and must lead to a change in household practices and social norms. It must also lead to mobilizing communities to participate actively.

The Plan also recommends to national programmes to ensure the incorporation of communication components that will feature prominently in community involvement and participation during design and implementation in order to ensure success.

Among the main challenges to the success of malaria programmes as identified by the Action Plan are low prioritization by government, which is the result of ineffective advocacy, lack of sustained communication with multiple channels (schools, workplace, women's groups, etc.) and over-reliance on mass media and promotional items at the expense of participatory and interpersonal communication. At the community level, failure to identify and ensure the participation of local political, religious and traditional leaders to facilitate information dissemination and malaria control within the community, and insufficient attention paid to participatory methodologies, especially in the development of messages and interventions were outlined as the main challenges (14).

As indicated at page 210 of the GMAP document, achieving the RBM 2010 and 2015 targets require effective communication between service providers and consumers of interventions, whether patients, family members or communities. It also opined that communication programs should create opportunities and motivate people to discuss malaria issues, both among themselves and with decision-makers and service-providers. In addition to changing household

practices, social norms and mobilizing communities to participate actively in malaria interventions, communication programs can also improve the quality of client-provider interactions by providing health workers with the interpersonal skills and the motivation to communicate more effectively with clients.

3.5.1.3 NMCP Documents

> Public health programmes need to influence clients and providers to modify their behavior in ways that will promote healthier lives. In particular, programs must work to influence individuals to take preventive action at the household level, to build effective community support for health-seeking behaviours' (Cabanero-Verzosa, 2005: 11).

An analysis of the documents of the NMCP has shown that the Agency can be said to be responsible for its own inability to succeed because at the beginning, the purpose of development initiatives as captured by Waisbord, is to contribute to a processes by which communities gain more control over their lives, and that community empowerment should be the main goal of interventions. Waisbord believes that individuals and communities become empowered by gaining knowledge about specific issues, communicating about issues of common concern, making decisions for themselves, and negotiating power relations. (Waisbord, 2005: 78-79). Unfortunately most programmes are meant to spoon-feed the communities, rather than empower them to stand on their own and solve their own problems. This is evident from the documents of the NMCP.

In Nigeria's national progamme, very little attention was paid to communication itself; as production of small media items like posters and handbills were mistaken for materials that will in themselves lead to behavior change. Unfortunately, publications and other materials can never on their own lead to behavior change. The use of mass media in any campaign should be to create public awareness while the use of small media should serve to reinforce memory and

recall. These two channels are therefore peripheral, though also integral parts of any successful campaign.

Lack of capacity perhaps another reason for the poor showing of the malaria program in Nigeria is the lack of capacity among professionals. This is evident in their inability to make distinctive plans for Nigeria and having to clone the strategies of other countries, which have very little in common with Nigeria. Pages 39 – 40 of the 2nd Strategic plan 2006-2010 seem to be copied from the Zambia Roadmap for Impact on Malaria 2006 – 2011 (31 - 32). The contents are the same almost to the word. This document was however reviewed 'in order to Scale Up for Impact (SUFI)', to cover 2009 – 2013, with the same basic principles being retained.

Another aspect is lack of effective advocacy, which is responsible for the low prioritization which malaria is accorded by government, both at the federal and state levels. When this happens, the programme gets sporadic, even meager allocations that will make it difficult to achieve substantial results. Whether a government decides that a given issue is a priority substantially affects the prospects of development work. Commitment from central and local governments to specific development issues has proven to be indispensable, particularly for scaling-up successful projects at the national level (Borgdorff, Floyd and Broekmans, 2002: 223). Another aspect of the lack of capacity is the apparent inability of the programme to understand the need for the principles of participatory development and participatory communication in malaria interventions. Even when they are discussed, usually in document preambles, they are never reflected in the main templates as they pertain to knowledge sharing with the local communities. In fact in some instances, participation is referred to as being an inter-agency affair, having to do with the inter-agency relationships in the workings of the malaria programme.

3.5.1.3 NMCP BCC and ACSM strategies

> … people make their decisions and take action on the basis of their calculation of the cost versus the promised Benefit/Value of the action being recommended. If the cost seems too much in relation to the benefit or value, they do not bother to pursue the action...cost here also means time and effort involved in carrying out the action. (WHO, 2002: 20)

The NMCP adopted a BCC strategy which covered 2005 – 2009, (reviewed midway to cover 2008 – 2010). It focused on interventions like media placements, in-terms of jingles, drama and announcements, interpersonal and group channels such as clinic-based health talks and outreach counseling sessions by community health workers as well as production and distribution of IEC materials such as billboards, posters, handbills, and novelty items. BCC Strategy goes beyond being associated with messages coming from the agency to the audience, it must also have at its heart the recipient of such a message, as his freedom of selective perception, retention, recall and even utilization will determine whether the message is accepted and utilized or not.

> There is the general assumption on the part of media professionals that they can disseminate a particular idea without a dialogue with the grassroots people because they consider themselves as specialists. A majority of them show little or no respect for the experience and knowledge of the people…that poor people are more suited to depict the issues concerning them and present their own lives. (Nair & White, 1993:160)

An Advocacy, Communication, and Social Mobilization Strategic Framework and Implementation Plan was unveiled in 2010 to focus on advocacy for leadership and direction, and then social mobilization, with a focus on positive change of social norms, and Behaviour Change Communication at the individual level. The practice, however continued the way it was with the objective of reaching the public with messages.

On the issues of dialogue, shared learning and consensus building as propagated by the Global Action Plan, the Nigerian action plan only ‘preaches’ to the community to accept and use prevention and treatment measures being implemented and to take action to protect themselves

and their loved ones only through *dissemination of IEC messages.* No attempt has been made to engage the community in the kind of options they might have up their sleeves so that there could be dialogue and not lectures, shared learning rather than preaching and consensus building, rather than mobilization.

3.5.2 Qualitative (In-depth) Interviews with RBM officials

As implementers of the national malaria plan at the state and local levels, having direct contact with the citizens, these officials have a special importance in the success or otherwise of the programme. Interviews were therefore slated with them in both Sokoto and Kano states to get a grasp of how their job is carried out, the challenges they have and their professional capacities and involvement in carrying out their tasks. They will also be required to comment on the level at which they interface with beneficiaries and how effective the contact has been. Qualitative interviews were selected and conducted for these officials because, as Barbie explains, they provide for an interaction between an interviewer and a respondent, in which the interviewer has a general plan of enquiry but not a specific set of questions that must be asked with particular words and particular order (Babbie, 2005: 314). Some of the reasons for these include:

a) They operate at different locations and may be influenced by different cultures
b) They hold different levels of seniority
c) They have different levels of access to the beneficiary communities

3.5.2.1 Sokoto State RBM Manager

At the session with the RBM Manager, he reported that the office manages malaria activities in the 23 local government areas of the state and their major activities include managing the

conduct of malaria treatment in the state hospitals, especially to pregnant women and children under 5, they also manage interventions like the IPT for pregnant women, the conduct of Rapid Diagnostic Tests, Insecticide Spraying and the distribution of LLINs. He stated that the more regular of these activities are the RDT and IPT and the free treatment offered to small children. He said in every local government, 10 health centers/hospitals provide these services for free. The IRS, he related is mainly organized by the local government and managed by the LG RBM officers. As for the LLINs, they are distributed when acquired from federal government or donor agencies.

The most important project run by the state office was the 2009 Child Health Week, which was a hybrid for polio immunization and household mobilization for the use of the LLIN, in the first week, there was polio immunization, which was followed by the net-card distribution. In the second week, the nets were distributed to those with cards. A post campaign survey indicated that the project was very successful, with 80% coverage and 40% utilization. However, asked whether the project has any communication component, the official replied in the affirmative and said there were jingles running on the radio and television regularly to sensitize people about the project.

In an effort to trace some dialogue in the process, I asked about the household mobilizers who were engaged for the project, what was their job? They mobilized households to allow their children to be immunized so that they can get LLINs, he had replied. This exposed a common mistake as observed by a WHO document, 'the past emphasis on community mobilization has been on getting the community to participate in a programme which has already been designed and planned, thus mistaking community mobilization as being synonymous with community participation (WHO/CDS, 2002), There was also in existence a Ward Health Committee, whose

mandate was to serve as an interface between the people and health establishment, organizing home visits and lectures where necessary to sensitize people on various health issues. People who have complaints and suggestions or calls for government action route them through the committees. The Health committees were made up of public opinion leaders who have no financial engagement with government and cover a wide range of issues in the health sector, not just malaria.

In the whole project, there was no plan to engage the people other than to convince them to accept polio immunization and get a free LLIN in return. This proved a very significant challenge to the whole project as a post survey assessment conducted a year later revealed that many families refused immunization unless it was accompanied by free LLINs. Even in the test case of a village where a bonfire was made of LLINs for suspicion of contamination, no effective strategy was put in place to communicate with them with a view to turning their position around.

3.5.2.2 Sokoto South Local Government RBM focal person

In the session I had with the Sokoto South Local Government RBM focal person, I had asked him whether he suggests to the people to collaborate and do their sprays and not wait for his office? He had said that some communities do that, some even buy malaria drugs and donate to the hospitals; he had however commented that when it comes to contributing money, it is not always easy even if one puts up a suggestion. Asked whether during his engagement with the people, they discussed how difficult it is to control mosquitoes on their own, like the maintenance of dirty drainages and difficult neighbours who would not agree to clean their surroundings? He confirmed that this seems to make it difficult for the people to work together to help themselves. Since this is a challenge, I asked him whether he needs some kind of training

that will enable him to help the people to organize and help themselves, rather than wait for government all the time? This he accepted and said training will help his job a lot.

3.5.2.3 RBM Manager Kano state

Speaking about the functions of his office, the RBM Manager said the office was established in all states to coordinate and implement malaria activities and ensure synergy between the efforts of the federal, state, local governments and the various partners with a view to achieving the golden objectives. These activities include the distribution and propagation of the use of LLINs, provision of drugs of choice for treatment as a result of loss of potency of chloroquine, the office also embarks on environmental control measures and communication.

When he was asked if the activities outlined above are regular, he said some are, like the RDT and IPT and the free treatment offered to small children. The IRS is mainly organized by the state government through Refuse Management and Sanitation Board (REMASAB) and this is now becoming more regular as N10m is said to be spent monthly by the state government. As for the LLINs, the state government has been very encouraging as they spend millions of naira to purchase and distribute them regularly. The office also receives supplies from the federal government and donors. There are also publicity materials and radio and TV programmes and jingles. These are mostly sponsored by the development partners.

He was also asked if his office had input in the jingles produced for communication; he said they were not involved because the sponsors design their programmes, whether it is drama or jingle and pass it for possible vetting by Health Education, Communication, Training and Information

Committee (HECTIC) of the state ministry of health before they air it. Asked to assess the success of his office, he said he was convinced that the office was successful in the way they carry out assignments as they follow the action plans to the letter both at the state and local levels.

On why the office, which runs the malaria campaign doesn't have an input in the media campaigns, he said his office is involved in community mobilization, where they visit selected members of a community and discuss malaria issues with them and they in return will communicate with their people and supervise and enforce selected practices. He believes that the community mobilization is successful because the group they meet is like a standing committee in every community made up of public opinion leaders; they serve as an interface between the people and government on health matters , organizing home visits and lectures where necessary to sensitize people on various health issues. Whenever they communicate with the committee, it carries their messages across.

ACSM in Kano was said to be dormant since its inception. This committee was set up to design media strategies that will help in achieving the mandate of the NMCP. Made up of practitioners from across broadcast and print media as well as wire services and the Ministry of Information and chaired by the RBM manager, the committee suffered death 'on arrival' as the enthusiasm and momentum that greeted its inauguration suddenly waned due to inactivity.

On whether the office can ensure that the people accept the decisions of these committees, he said that is the tradition and it was initiated by the National RBM office for the whole country.

‘You cannot speak with the whole community, so you have to do it through a selection of the most important personalities. Community members always take directives from superior authorities.’

On whether LLINs are now accepted as a means of malaria prevention, the manager affirmed and justified this with the eagerness of the people to get the nets whenever they go out for distribution, though sometimes people sell them to others, at least they are circulating among the public. He was prodded on what the situation would be in the event that people may have to buy them, he posited that people may prefer it when it is free. This led to a question on the need for a demand creation campaign, which he agreed with, though he said the radio and TV messages always do advise the people to buy nets. Faced with the poser that some experts believe that radio and TV messages hardly lead to behavior change, he commented that behavior change occurs over a long period of time so one cannot say whether it has occurred on the issue of the use of nets, unless a research is carried out.

3.5.2.4 Focal person for Tarauni Local Government.

I also interviewed the RBM official for Tarauni Local Government. During the session, I had wanted to find out the level at which he interfaces with the people of the local government in the execution of his mandate. I therefore asked him when he carried out a major malaria activity in the LGA and how successful it was. He replied that it was in November, 2011 and included spray, fumigation and drainage maintenance. The event had been very successful and had led to a drop in malaria cases. I also asked what role people played during the activity. He replied that they contact community leaders for permission and guidance.

On whether he preaches demand creation for LLIN and IRS and whether the people actually listen, he replied that demand creation happens in areas where mosquitoes are more prevalent. He cited the case of a village called Dantsinke, which is severely disturbed with mosquitoes. He confirmed that beyond malaria, elephantiasis is caused by mosquitoes and a recent survey had indicated that 17 out of 50 residents are infected with the disease. Another area is Darmanawa, where special prayers had to be offered over the proliferation of mosquitoes. In these communities, people contribute money to purchase nets and chemicals and invite officials to spray their neighbourhoods.

About the challenges facing the office, he claimed to work with 50 officials for the conduct of IRS, Drainage maintenance, and other responsibilities, but he now works with only 18, 4 of which are retiring this year (2012). Another challenge is the fact that drainages and waste disposal points are no longer part of urban design and management. The waste disposal points keep changing as influential personalities continue to develop properties on them. The people therefore resort to disposing their waste in drainages, thereby blocking them and providing breeding grounds for mosquitoes.

On the conduct of community dialogue, he claimed to arrange one each month in a different community. The substance of the dialogue being to mobilize them towards self-help, which most times doesn't succeed due to the inability of the people to make financial contributions. On whether he requires training in order to make the best of the dialogue, he claims to have enough training as he said people are fed up with government inactivity and would always challenge government to face its responsibilities squarely.

3.5.3 Field interviews with respondents

In order to gauge the impact of the activities of NMCP to its beneficiary communities, officials were requested to direct the researcher to communities that they relate with regularly. This is to ensure that questions go to people who have something concrete to say on the matter. The interviews were conducted on males, who are heads of households with ages spread from 30 - 60 and varying literacy levels from Islamic knowledge, primary school leavers and graduates of tertiary institutions. Ten respondents were selected and interviewed in each of the four communities from the two states. These are Gagi, a small village in Sokoto South and Kofar Aliyu Jodi a settlement in Sokoto municipality. Despite the usual deviations of an interview, these were the main questions asked:

1. Name:
2. Age:
3. Address:
4. What do you know about malaria?
5. What causes it?
6. How do you prevent it?
7. Where/ how did you get your information?
8. How do you treat malaria cases?
9. Do you take malaria cases to hospital?
10. How far are you to a health centre?
11. What do pregnant women take for malaria?
12. Do you use bed-nets, why?
13. Are you aware of any malaria drugs, name them?

14. Which organizations relate with you on malaria?
15. What did you learn from them?
16. Is there any behavior change you acquired from meeting them?
17. What do you now do differently?
18. What would you prefer they do to you when next they come?
19. How involved were you when they visited?
20. Were your opinions sought as to how best to curb malaria?
21. Did you offer free advice to the officials?
22. Were your free suggestions accepted?
23. What suggestions would you have offered?

The questions were arranged in such a way as to get respondents' basic knowledge of malaria and how to prevent it (questions 4 - 6), where to get information and help (7 - 10), knowledge about nets and drugs (11 - 13), relationship with the RBM office (14 - 17) and whether they desire some direct involvement and participation in the process (18 - 22).

3.5.3.1 Respondents from Sokoto state

Information gleaned from the twenty interviews on basic knowledge of malaria, in response to questions 4 – 6, reveal that everyone knows about the disease, as they gave responses that revealed Malaria as a disease that leads to heating up of the body and comes with body pains, sometimes it leads to vomiting; It is caused by mosquito bites, that is why it is called 'fever of mosquito bites' and can be prevented by avoiding mosquitoes though mosquito coils, pressurized sprays, chemicals, mosquito nets or simply by killing them; It used to be seen as possession by

witches or convulsion, and is the most common disease in our community; it is caused by mosquitoes that breed in stagnant waters; it demobilizes its victim and makes them unable to do any work; a respondent described it as an 'old disease right from the days of our forefathers which was cured with herbs'; all respondents agreed that it is a dangerous disease that requires a visit to the hospital before it can be cured.

As for where respondents get information and help in response to questions 7 - 10, most of them claim they have no difficulty knowing about malaria, as 'Everyone knows about it, but the radio jingles remind us'; some other responses were 'I first learnt of malaria at school; I usually discuss health issues including malaria with my neighbor who works in the health centre; It is common knowledge; Malaria has been there before I was born, so I know; through social interaction; from friends and neighbours; even my wife seems to know as she sometimes burn orange peels to repulse mosquitoes'; as for hospital visitation, the younger respondents claim they go to the hospital as soon as they have it, while the older respondents usually try out herbs first, before going to the hospital. As for pregnant women, most of the respondents allowed them to go for ANC, where they are given drugs and counseling to protect them and the pregnancy.

Knowledge about nets and drugs (11 - 13), asked on the use of bed-nets, respondents answered differently. Some claim they don't because 'only the wife was given and she uses it for herself and the children'; others responded as follows: My children do. It keeps the mosquitoes out; Yes I do, it allows my family to sleep well and stay protected; I was given 2 nets for the two children that were immunized for polio, but I have seven children so I cover all of them with the two nets; I and my family use it as it protects us from mosquitoes; it is those that don't sleep in the nets

that get infected; yes, they are very useful, other people experience itching or rashes but we don't.

It appears younger and educated respondents were aware of malaria drugs: they listed Chloroquine, ACT, Coartem and Paracetamol, Fansidar, Metakelfin; while the elderly, less educated quoted 'the ones mentioned regularly in jingles' like ACT, others simply deny knowing the name of any malaria drug; some others claim not to know their names; some don't care to ask their names; one claimed to know of Chloroquine, but that 'they don't like it anymore' a respondent even retorted by saying that the names of the drugs are not important, as they were always given the appropriate drugs at the hospital.

Speaking on their relationship with the RBM office (14 - 17) they claimed that the organizations that relate with them on malaria are the ward health committee, the local government, RBM officials and the clinic itself. Villagers from Gagi claimed that the ward health committee in the village sometimes goes round to talk to them about polio, malaria, measles and the like.

On what they learnt from the officials, the respondents replied that they were told that malaria kills people and that everyone should sleep inside bed-nets and keep their surroundings clean. They were also advised to go to the clinic when they have it; on whether they acquired any behavior change from meeting the officers; some claimed that their families use the nets; others claim that their wives now take IPT during ante-natals; some claim they go to the hospital as they were advised, whenever they see signs of malaria, they don't allow water to collect in their compounds for fear of breeding mosquitoes; some others contributed money in the

neighbourhood and did IRS; some however claim that despite going to hospital, that they still trust local herbs. All the respondents claimed to go to hospital when infected.

On whether they do things differently as a result of contact with government officials, most of the respondents claim they now take their families to the hospital whenever they are infected with malaria, others claim they keep their environment clean while others claim they use the nets at night, at least one respondent claimed he doesn't bother about what the officials were saying, as he wasn't given any net.

Questions 18 – 22 enquired whether the respondents desire some direct involvement and participation in the process. Asked what they would like to gain from the officials when next they come, almost all respondents requested for more IRS in their communities. A few requested for more nets, free drugs and free treatment. Asked how involved they were when officials do visit them for talks, most respondents claimed that they were not involved, beyond listening to what the officials had to say. A few of them asked questions and got responses. They were also asked whether they had suggestions on malaria control, to which all of them responded positively, but when asked why they did not offer it, they claimed it was because they were not asked.

3.5.3.2 Respondents from Kano state

Respondents from Kano were presented with the same questions as their Sokoto counterparts; basic knowledge of malaria and how to prevent it (questions 4 - 6), where to get information and help (7 - 10), knowledge about nets and drugs (11 - 13), their relationship with the RBM office

(14 - 17) and whether they desire some direct involvement and participation in the process (18 - 22).

Respondents explained malaria as a terrible disease that has presented the most serious challenge to families. A respondent described malaria as poverty itself, saying it is poverty that is responsible for its becoming endemic. Asked why the poverty, the respondent said citizens are so pauperized that they are not thinking of protecting themselves against mosquitoes and they are in and out of hospitals too many times to steadily earn a living. Asked about government efforts at prevention, control and treatment, most respondents believed government can do better and blamed corruption for the poor scope of the interventions despite huge fund allocations.

Respondents get information primarily from the media and the RBM local government officials in that order. The media is always running jingles and drama on malaria. They also confirmed that their pregnant wives received counseling during ANC visits. Most of the respondents believed that they only need to be reminded rather than informed about malaria. Many of the respondents claim they go to the hospital for treatment, while many others treat malaria at home as they were aware of ACT and they could buy it off-the-shelf.

All the respondents seemed to appreciate the importance of LLINs as some of them have purchased the nets from those that sell theirs. They also know about the regularly mentioned drugs; SP for prevention and ACT for treatment. They all seem to know that chloroquine doesn't cure malaria anymore.

Speaking on their relationship with the RBM office, they commended the L. G. official for regular interaction and community mobilization. They also made reference to a ward health committee that one respondent called a 'sleeping committee' that does not answer its name. this

was blamed on the fact that members were not paid, but were expected to work for government; that they only come alive each time a health intervention is in the offing; but they never on their own go to discuss with their constituents.

On what they learnt from the officials, the respondents replied that they constantly get reminded that malaria kills and the need for all members of the family to use bed-nets and keep their surroundings clean and to go to the clinic when they have malaria; on whether they acquired any behavior change from meeting the officers; some claimed that their families use the nets; others claim that their wives now takes IPT during ante-natals; some claim they go to the hospital as they were advised, whenever they see signs of malaria, a few of them claim that they personally supervise domestic sanitation in their home.

On whether they desire some direct involvement and participation in malaria interventions, respondents declared that they would be happy if the RBM office can coordinate interface sessions between communities. because even if you keep your drainage and home clean and your neighbor doesn't, mosquitoes will breed in their house and come to yours. The same thing goes for the communities, especially in the municipality; if one community refuses to conduct drainage maintenance, those that do would not enjoy a mosquito-free environment. The respondents, however, claim that they are consoled by the fact that orange peels, used lubricants and *ota-pia-pia* are available to them to ward off mosquitoes. This is because pressurized insecticide sprays are expensive and mosquito coils are not very safe to use.

In the next chapter, findings from the document analysis and the qualitative process presented above will be discussed.

CHAPTER 4

CASE ANALYSIS

4.1 Introduction

The chapter is structured to relate the objectives of the study to its findings. The objectives are:

a) To determine why there has not being a significant drop in malaria figures in Nigeria,

b) To establish the role communication strategies play in planning interventions by NMCP,

c) To analyze the impact and limitations of existing communication strategies applied by NMCP

d) To explore what value - added alternative approaches to development communication can contribute towards successful interventions by NMCP?

4.2 Determining why there has not being a significant drop in malaria figures in Nigeria

It is established that there is very high rate and prevalence of morbidity and mortality in relation to malaria in Nigeria. Both the World Malaria Report and Malaria Indicator Survey highlight this. From the year 2000, when the 'golden objectives' were ratified at the Abuja Malaria Summit, to 2008 when the GMAP was introduced, Nigeria has not made appreciable progress in this regard.

4.2.1 Lack of institutional capacity

Lack of institutional capacity resulted in the poor design and implementation of communication programmes. In the documents of the agency, communication strategies made reference mainly to mass communication; at first, only Information, Education and Communication (IEC) materials were distributed to the public with the expectation that they will change the behavior of beneficiaries; in another report, and moving forward, a BCC strategy was developed but not effectively implemented, then an ACSM committee, made up of principally media practitioners was set up with branches in every state, but was not financed, in the end, none of these moves succeeded in making a remarkable difference. Comprehensive communication strategies would have included all communication processes and not just mass communication.

4.2.2 Centralization

From the interviews held with the RBM managers emerged another finding. It is clear that they only have executing and not planning authority; all the planning is done centrally at the RBM/NMCP headquarters and that explains their displeasure with the programme at some occasions. In Sokoto, state officials were unhappy with the joint polio - malaria campaign, which recorded project success in terms of coverage and mobilization, but led to a drop in the acceptability of polio immunization during post-campaign survey and in the subsequent year. It so happened that people expected free nets each time officials visited them, but the nets are not as available as the polio vaccine. The officials felt that if they were consulted, the two programmes would not have been merged.

4.2.3 Harmonizing policy with reality

The issue of abuse of government policy is a major challenge, which is a critical finding of this study. Drainages and waste disposal points keep changing with influential personalities developing properties on existing ones. In some cases, government provides alternatives, while in others it doesn't. This leaves residents with no option but to dispose their waste in available drainages, thereby blocking them and providing breeding grounds for mosquitoes. From an instance of direct observation, a drainage and a refuse dump were allocated to an influential person who has erected structures on them at Unguwa Uku in Kano. In this case, it has served as a disincentive to self help efforts. Renuka Berry (White, 1999: 240) argues that people are willing to take risks and to challenge the prevailing power structures when they see that their needs and those of their community are being addressed. They feel the need to have a voice in shaping their lives.

4.2.4 Lack of social research

Before now, the NMCP has not regularly conducted social research. Defined by Valek (2012) as '*the scientific study of society' which examines a society's attitudes, assumptions, beliefs, trends, stratifications and rules'*, Social Research provides a greater understanding of household and community dynamics and also provides baseline data for any intervention. Social research could clear the air over the following, which have the tendency to either accelerate or decelerate the rate of acceptance for an intervention by a community.

a) Average literacy in the community,
b) Level of poverty in the community,
c) Level of communal organization,

d) Communal unity,

e) Political leaning of the majority in contrast with the ruling government, and

f) Exposure to earlier or other programs.

The most active in the fight against malaria happen to be the younger and more enlightened members of the community; this was gleaned from the respondents. Social research could have provided a baseline for the stratification of the communication strategy to take care of all categories of targets. The first malaria survey was conducted in 2005 and it had shortcomings as it was conducted to evaluate the 2001-2005 country strategic plan rather than to come up with baseline data that could be utilized by the programme. The latest, Malaria indicator Survey 2010 was released in March 2012 and we wait to see how efficiently it would be utilized to ensure a better community buy-in for the interventions.

A lot of resources are expended on investigating the mosquito and malaria parasites while social factors in malaria are being neglected (Heggenhougen, Hackenthal & Vivek, 2003:5) even though there is some shift at the international level towards a social science approach. At community level, anthropological studies are being conducted to help understand people, their attitudes toward health and ill health, and their concept of an acceptable health care programme. "Doing qualitative research and understanding a community's beliefs and behaviour is critical to the success and sustainability of community based malaria programmes" (Heggenhougen, Hackenthal & Vivek, 2003:129).

4.2.5 Inefficient partner coordination

The last finding has to do with inefficient partner coordination. This was responsible for the chaos in Sokoto as a result of the Child Health Week of 2009, where an attempt to carry out the

suggestion of the GMAP, i.e. the integration of malaria communication activities with other health programs like the Expanded Program for Immunization (EPI), failed woefully as shown by the post-campaign survey. It can also be said that this inefficient partner coordination has led to disconnect in the Kano programme as the RBM office is not involved in designing and running of media messages. The donors who are responsible for the financing of the message do not involve the state offices. That is probably why some of these messages are run by non-Hausas in Hausa speaking areas, which clear negative repercussions. The RBM Manager confirmed that most of the jingles and other TV and Radio productions are donor-sponsored and therefore off their turf. He confirmed that they only conduct community dialogue sessions, which again are limited to selected opinion leaders in the community.

4.2.6 Between the mosquito and the human

One of the key reasons as identified by the World Health Organization (WHO) as responsible for this drawback is the "prevailing preference for examining mosquito behaviour rather than human behaviour' such that 'approaches that engage people are sometimes neglected to the detriment of malaria control efforts' (WHO/DCTD, 2002). Also, a study on the Malaria Journal, believes that social science knowledge and practice can contribute to a multidisciplinary approach to the fight against malaria, "yet few African social scientists are integrated into malaria control" (Ngalame, et al., 2004: 47). This is evident even in the employment of only medical personnel to run malaria projects and it also justifies why most of the researches on malaria control are conducted by medical and public health professionals, rather than social scientists or communications professionals. This could explain the non-inclusion of communication at the onset of the NMCP, thus causing the alienation of the primary beneficiaries of the interventions.

4.3 Establishing the role communication strategies play in planning interventions by NMCP

From the findings in this study, it is evident that communication strategies do play a significant role in the planning of the interventions of the NMCP. The challenge however, is whether they are effective enough to cause a difference in the outcomes of such interventions.

This study has established that GMAP, designed by the RBM to provide implementation guidelines, has provided a very useful global framework for the fight against malaria from which all nations could tap and domesticate; it also recognized communication as a key and indispensable component of malaria control. IEC materials and mass media messages, which serve to create awareness on new programmes on the one hand, and mobilization, which serves to attract buy-in on the other, were all shown to compliment dialogue. This is because beneficiaries can see and listen to messages, but they may not care to accept, let alone practice and sustain a new behavior as required by an intervention.

The GMAP even defined the terms relevant to communication in order to be expressly clear about what it meant; Communication for Social Change (CfSC) was defined as a participatory approach to engaging communities that focuses more on the client-identified end-actions in regard to the health intervention. The plan believes that there is consensus that communication programs need to combine the delivery of messages and other behavioral interventions, opportunities for dialogue, shared learning and consensus-building, to produce results.

GMAP has defined BCC as encapsulating the basic components of IEC, but starting with a focus on the key individual and group behaviors to be changed. It is said to employ a wider range of interventions beyond cognitive-based, knowledge transfer, while IEC is broadly defined as

providing knowledge to enable individuals, families, groups, organizations and communities to play active roles in achieving, protecting and sustaining their own health (GMAP, 2008: 210).

The fact that the GMAP carved out different roles for CfSC and BCC totally absolved it of the failure of some national programmes like that of Nigeria. CfSC deals primarily with interpersonal contact between clients and facilitators either as individuals or as groups and is key in the exchange between local knowledge and information brought in by the intervention, leading to an assimilation of new knowledge on both sides. On the side of the facilitators, they get to know the level at which to come in with their programme, the best process to adopt to win the hearts of the people and the best way to ensure sustainability. On the part of the clients, they get to appreciate the new knowledge, which obviously is higher in efficiency and effectiveness, and see it as a short cut to dealing with the problem they have been managing all their lives. They also learn to adopt the knowledge and adopt their own ways of acquiring the solutions without further recourse to facilitators.

4.4 Analyzing the impact and limitations of existing communication strategies applied by NMCP

After discussing the shortcomings of the campaign to fight malaria in Nigeria and the role of communication in the campaign, which is clearly defined by GMAP, it remains for us to analyze the impact of the strategies being employed by the NMCP or their limitation as the case may be. Literature review had been clear on the type of communication that the strategies contained. From inception, plans had included communication components, before Behavior change communication strategies were introduced. All were vertical in their approach.

4.4.1 Over - reliance on mass media

As observed by the GMAP, a major challenge of national programmes (page 211) is the over-reliance on mass media by programme managers, at the expense of participatory communication. This has been the practice and is one of the most important reasons why the fight to reorient the minds of Nigerians and encourage them into action against malaria has not been impactful.

All campaign documents of the NMCP studied for this research spent the communication budget on media, to design and place jingles, drama, road shows, site shows etc. A part of the budget could have been spared for horizontal communication and engagement. To officials of the NMCP, once announcements and relevant jingles were aired, IEC materials were distributed and the event was covered in the news, the communication component has been accomplished. This perspective has constituted a bottleneck and limited the ability of the communication strategies of the NMCP to make a difference.

In fact, findings from interview with the Sokoto RBM Manager indicate that household mobilization for a project was mistaken for dialogue as a few sample households were visited and offered words of explanation on the campaign, but did not invite any input from them. Dialogue with the communities was ostensibly left to ward health committees, who are not professionals and were not trained to perform such tasks.

4.4.2 Awareness creation and enforcement complement dialogue

GMAP has clarified that awareness creation complements dialogue and they should go hand in hand. Every dialogue session should be preceded by a publicity session; and afterwards, there will be the need to reinforce whatever dialogue ensued between the client and the facilitator, the facilitator as the initiator of the dialogue has to reinforce the dialogue process with some

reminders, some goading and even a bit of coercion. These would come, through constant mass media messages in the form of jingles, drama, documentaries, and community dialogues with influencers as well as advocacy with relevant enforcement officers like sanitary inspectors towards ensuring that mosquitoes are not allowed to breed. This enforcement is a very important collaborative action.

4.5 Exploring value - added alternative approaches to development communication and how they can contribute towards successful interventions by NMCP

From the review of literature, many concepts emerged to provide a platform that could be used in the design of effective communication strategies. These include models of participatory learning and action (PLA) including transect walks, community mapping, pair wise ranking, theatre for development, appropriate community mobilization strategies and processes like the Johari window. Using these in designing communication strategies will introduce social inclusion. One of the reasons for this social inclusion is the desire of individuals and communities for direct involvement in interventions.

4.5.1 Desire for direct involvement

Most of the respondents expressed their desire to have direct involvement and participation in the process of intervention. They were eager to find out how they can ensure that government provides proper waste disposal points and major drainages, as well as fix evacuation schedules. If possible, they would like to control the management of these drains and refuse points, provide community sanctions for breach of sanitation decisions, and above all be able to network within and between communities to ensure maximum enforcement. Once they can control the breeding of mosquitoes, their need for bed-nets and insecticides may drop, and these have temporary

impact and are expensive anyway. Here lies the real opportunity for behavior change as it relates to malaria control and prevention, which as at today has not been harnessed.

Proper dialogue with client communities, especially on drainage maintenance, could possibly have revealed;

a) That individual households at some point in time had tried to maintain clean compounds and drainages in order to avoid diseases including malaria,
b) That drainage maintenance in the home hardly reduces the population of mosquitoes where neighbours do not engage in the same practice,
c) That even when there is neighbourhood collaboration to control mosquitoes, they can fly in from other neighbourhoods and still infect people
d) That drainage maintenance can hardly succeed when the sludge in the drainage does not drain off; this could easily be the result of neighbours downstream not draining theirs,
e) That there is a multiplier effect to this negative practices such that whenever one segment of the community is infected with malaria, all others become prone to the infection.

The respondents in both Sokoto and Kano states indicated that malaria is not new to them; they were well aware of what it is and what it is capable of doing to man. The older respondents had many connotations to it like convulsion and body heat and still remember local herbs used for its treatment like Neem tree (Darbejiya) leaves, as well as the use of orange peels as mosquito repellent. The people were aware that the disease had been with them for thousands of years, as they confirmed during the various interview sessions; they also claimed to have learnt a lot on the disease through folklore; that could explain how generations have continued to survive the disease. The NMCP could have taken advantage of such indigenous knowledge to access the

hearts of the people. It is instructive that none of the respondents mentioned government as the source of their knowledge on malaria.

It is therefore expedient for facilitators to hand over the stick "letting local people make the maps out of local materials, provide their own interpretations of reality and of possible solutions, and take their own time. Most importantly, it reverses the status order; it gives ownership of the process to local people, since it is their map/chart/diagram, and they are doing the explaining and analyzing" (Banwell, 1997).

4.5.2 Sacrifices can only come from conviction

Another reason for social inclusion in implementing development programmes has to do with the need to convince communities to buy-in. It is only when they buy-in (are conscientized) that they will be willing to make sacrifices to ensure the success of the intervention.

While interviewing the local government focal persons from both states, self-help efforts were discussed in the communities; focusing on where, and to what extent it is practiced. Both in Sokoto and Kano, a few communities do collaborate to help themselves in malaria prevention, especially through drainage maintenance, purchase of sprays and refuse disposal; a lot more however, don't. The explanation given by the Tarauni LG official was that there is so much poverty in the communities to expect people to contribute their meager resources for community development. The issue therefore requires conviction and sacrifice, which can only be the product of public buy-in. This has been observed by WHO from the angle of a cost-benefit analysis;

WHO therefore advised officials to come up with a central communication objective which would guide people to understand and appreciate the value and benefit of the behaviours being

urged in relation to the cost involved in taking action (ibid). Facilitators must also find effective ways to design programmes which appeal to the beneficiary, but still impart useful and necessary information (Nair & White, 1993: 156).

This issue of cost may be relevant in many other respects like the seemingly far-fetched need to re-treat nets; this may be difficult when community members cannot afford or access retreatment kits. Other considerations that may discourage collaborative spirit may be suspicions over toxicity of the products and when the people lose enthusiasm after initial project implementation (Heggenhougen, Hackenthal & Vivek, 2003, chapter 6). It is therefore necessary that communication strategies focusing on bed net use, for example, need to take into consideration these many constraints and interact closely with communities to understand their perceptions of malaria and find appropriate ways to prevent it (Findings Malaria: 2).

Even if mosquito nets are practical and cheap, they can still fail with target communities. If the bed net is not perceived as an effective intervention people are more likely to misuse, sell, exchange, discard or transform it. In Africa mesh bed nets have been turned into wedding dresses, fishing nets and water filters (Bean, 2001). Bed nets can be too hot to sleep under in humid climates. They will also fail if the peak hours of biting occur when people are still awake (Choi *et al*, 1995: 377-382).

4.5.3 Demand Creation

The third reason for social inclusion is the need to create demand for the intervention amongst members of the community. No intervention can ever be self sustaining; so every intervention requires ownership by the community.

Interventions usually provide welcome transitions from what the people were used to in their local environment to what is presented to them from government; from orange peels to LLINs, and from herbs to hospital treatment. The main motivation for welcoming these interventions is because they were free; respondents confirmed this. Mass media and IEC messages could have been received by beneficiaries as reminders to come for the 'free meal'. There was therefore the need, as captured by Mehra *et al*, to interact with communities to identify interventions they will actually use. He also believed that "collective understanding of a problem and embarking on decision making on how to address it, needs to become part of community life and to be sustained" (Mehra *et al*, 1996).

The issue of behavioral change resulting from contact with officials seems to begin and end with the local people agreeing to use bed-nets and other interventions; a few of them claimed that they now keep cleaner environments to avoid breeding mosquitoes. What this proves is that many of the respondents acquired the new behavior required of them, but did not sustain it. The key to behavioral change, however, is not just the adoption of a required new behavior, but its sustained use (Airhihenbuwa & Obregon, 2000: 13). The participatory continuum also provided for a series of steps leading to behavior change, starting from co-option to compliance, consultation, cooperation, co-learning and collective action.

In the next chapter, the study will be concluded and a set of recommendations offered on how the NMCP can better conduct participatory and result-oriented communication activities.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study examined the communication strategies of the National Malaria Control Programme in Nigeria and found that they are diffusion-based and not participatory enough. These facts emerged from the data analysis conducted on the relevant documents of the agency, in-depth interviews with officials and field interviews with beneficiaries of the interventions. As a result, many findings were discovered which include inefficiency of the existing communication strategies, lack of capacity and a skewed template of activities.

In order to achieve its objectives, this study has confirmed that communication strategies play a key role in planning development interventions; but that these communication strategies need to be very effective to succeed. At the NMCP, it became clear that the strategies were not playing up to speed in malaria control efforts as they had limited penetration and required buy-in levels. In order to improve on this, the study proffered the inclusion of alternative approaches that add value to existing communication strategies, which can contribute towards successful interventions by NMCP.

In doing this therefore, the study suggested a template that encapsulates both diffusion and participatory approaches and offered recommendations on the way forward if the goals of the agency in the control of malaria in Nigeria are to be achieved. What remains is for the agency to utilize the findings and recommendations in moving forward.

5.2 Recommendations

For the success of any programme to control or eradicate malaria by the NMCP, there is the need to address the findings of this study as outlined in chapter four. These are:

5.2.1 Need to comply with provisions of RBM's Global Malaria action plan, which has provided the direction required for success. Other nations that adhered to this plan are getting results from its domestication

5.2.2 Need to focus more on human behavior rather than mosquito behaviour; the NMCP need to concentrate more on social research, rather than research on the mosquito alone, to have a greater understanding of household and community dynamics. This they can do by spending more on social research by investigating human behavior and its dynamics in relation to the breeding of mosquitoes. They must also do away with the notion that only medical personnel should be engaged for jobs or assignments in malaria control. This is a general practice with all malaria partners. Job adverts always request for medical or public health qualifications and not communication credentials, even when the jobs are for communication roles. Round pegs must be put in round holes.

5.2.3 Improve on institutional capacity, lack of capacity resulted in the poor design and implementation of communication programmes. As a corollary to the last recommendation, when people who are not competent to handle communication programmes are saddled with such technical responsibility, it ends up manifesting as ineffectiveness on the part of the organization, as the implementers and the supervisors share in the lack of professional knowledge and will bask in it. The organization must as a matter of urgency review its employment guidelines to allow communication professionals run their communication

campaigns and advice their partners to do so as well. This will help towards overall organizational efficiency.

5.2.4 The state and local offices need to be more involved in campaign planning: The state and local offices of the NMCP have complained that they do not have an input in the design or production of communication materials. This is serious, considering they are the gatekeepers of culture in the malaria campaign. The practice of partners financing campaign messages and materials production has led to dissatisfaction on the part of some communities, who feel the messages produced were out of touch with cultural sensitivity. The organization must therefore make it a policy that the state offices be involved in every part of a communications campaign, especially for jingles and drama.

5.2.5 Need for direct community participation: Most of the respondents expressed their desire to have some direct involvement and participation in the process of intervention. My interviews revealed that though the people would like to be involved, they were not. The facilitators believed that the people needed information and education and therefore they spoon-fed them. Certain issues as listed in chapter three could easily have been discussed with rich input from the communities with overall positive impact on the campaign. The organization should therefore engage the people more on their campaigns.

5.2.6 Awareness creation is an integral part of any communication program at three stages; at the onset, to sensitize and mobilize the citizens; during the project to sustain the interest, and after to reinforce the key issues. Over-reliance on mass media by programme managers at the expense of participatory communication has been the practice; this needs to stop. Communication should involve both the disseminative and the dialogic approaches.

Dissemination of messages help create awareness and in sensitizing the target groups while engaging the people leads to sustained behavior change, with outcomes being more manifest.

5.2.7 Designing a template for effective communication strategy for malaria control: It is recommended that the NMCP should design an effective communication strategy in order to achieve the goal for which it was set. Such a strategy must have all the necessary ingredients to motivate individuals and communities towards change, and must lead to a new behavior that is manifest, sustained and that leads to a social change in a beneficiary community; such a strategy must include participatory communication. Participatory models could be used in a communication strategy at different stages. At the diagnostic level, transect walks, the Johari window and community mapping can easily apply, while at the problem solving stage, forum theatre is recommended to engage the people in proffering solutions, which could be prioritized through pair wise ranking. A detailed template for use is provided below:

i. Transect Walks - After gaining access into a community, facilitators need to move around the community and meet people, speak with them and have a feel of the

importance that they attach to the problem at hand. Questions like; like those asked in the field interviews of this project. It is not all the time that communities see interventions like facilitators do.

ii. Using the Johari window, which portrays the ideal relationships in knowledge sharing between facilitators and the indigenous people to create a common/public space, establish dialogue, and build trust among key stakeholders (see page);.

iii. Community mapping - members of the community will pen their drainages, pools, important ditches, clinics, mosques and churches etc. which will enable the outsiders to begin to see a community through the eyes of the local people

iv. Pair wise ranking - having identified the exact issues that contribute to the perpetuation of the malaria problem, ranking/scoring activities provide a way for community members to weigh up/rate/ prioritize items or issues either relative to one another or according to criteria. An example is provided below;

v. Forum Theatre - to achieve a successful community mobilization, the most recommended communication approach is Forum Theatre as it provides for direct engagement of members of the community, where they make inputs by suggesting different actions for the actors to carry out on-stage in an attempt to change the outcome of what they were seeing. In a malaria campaign where sanitation and insecticide spraying are the target, the play may present the various actions of households that lead to accumulation of stagnating water, leading to sleeplessness in the house and sickness thereafter.

vi. Communication Action Plan - must be drawn after all preliminary investigations and activities to design a communication objective, to include people (target audiences), who are engaged in the needed change, activities planned, resources needed (both human and financial), party responsible for each activity, and timeframe as well as a column about indicators to assess outputs and outcomes can be added to facilitate monitoring of the activities.

X	Blocked Drains	Open wells	Blocked channels	Stagnant pool	Stagnant ditches	Dirty compounds	Total points
BD	-	BD	BC	SP	BD	DC	2
OW	BD	-	BC	SP	SD	DC	0
BC	BC	BC	-	SP	BC	BC	4
SP	SP	SP	SP	-	SP	SP	5
SD	BP	OP	BC	SP	-	DC	0
DC	DC	DC	BC	SP	DC	-	3

Table 4: Pair wise ranking for engagement on IRS

AUDIENCE/ STAKEHOLDERS	ACTIVITIES	RESOURCES	PARTY RESPONSIBLE	TIMEFRAME	INDICATORS
Family heads in Gagi Village (primary), family members (secondary) and community leaders (tertiary)	cleaning of compounds	Physical labour by families	Heads of households	First week	Free- flowing drainages and drained ditches within residences, mosquito-free homes
	spraying and fogging of compounds	Cost of fog and spray chemicals	Heads of households	First week	Free- flowing drainages and drained ditches within residences, mosquito-free homes
	Clearing neighbourhood drainages	Community self-help labour	Community leaders	Second week	within the community and in-between communities;
	Fogging and spraying neighbourhood drainages with insecticides	Cost of fog and spray chemicals	To be handled by community/ facilitators	Second week	All sectors in village maintain free-flowing drainages, no breeding grounds for mosquitoes
	Clearing of blocked water channels	Community self-help labour	Community leaders	Third week	Free-flowing water channels
	Fogging and spraying of water channels	Cost of fog and spray chemicals	Community leaders	Third week	Channels free of mosquito larva
	Fogging the village pool	Cost of fog and spray chemicals	Community leaders	Fourth week	Village pool free of mosquito larva
	Filling puddles and ditches with sand	Community self-help labour	Community leaders	Fourth week	No water retaining puddles in village
	Providing covers for both residential and community wells	Cost of production and installation of well covers	Heads of households	Fourth week	All wells are covered, no access for mosquitoes

Table 4 Communication plan for engagement on IRS

vii. Monitoring and Evaluation - for a communication strategy on the fight against malaria to be effective, monitoring and evaluation template must be designed to be well designed and must take place at three stages. This ;

d) During the design stage – develop an understanding of stakeholder awareness and attitude towards the issue, this is best achieved through baseline surveys,
e) During implementation – we must verify that planned activities actually take place, and their effectiveness is regularly and closely monitored to enable planners alter approaches as needed,
f) After implementation – draw conclusion as to whether the strategy delivered on the objectives and/or assess what went wrong in case of failure.

5.3 Contribution to knowledge

This study has established a direct relationship between the inability of the National Malaria Control Programme to achieve a reduction in the rate of morbidity and mortality on malaria in Nigeria and the application of ineffective communication strategies. In view of this, therefore, the study recommends the inclusion of participatory approaches in the design and implication of communication strategies for them to be effective. The study has also provided justification for further discourse on the use and indispensability of participatory approaches to the success of development interventions, which in turn would necessitate wide, varied and case-based intellectual commentary on the mileage that can be achieved by going beyond dissemination of information to dialogue with beneficiaries in order to not only conscientize but to empower the receiver communities towards self-mobilization and agency.

5.4 Conclusion

This work set out to understudy the communication strategies of the NMCP and how they have impacted on the fight against malaria in Nigeria. Literature review had manifested the preponderant use of vertical communication approaches and a gap in the use of participatory approaches, while appropriate methodology was used to investigate the position, which was found to be a challenge militating against achieving a reduction in malaria cases in Nigeria. Appropriate were also given as to how this problem can be mitigated, especially through an inclusive communication strategy.

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Appendix 1

Interview with Dr. Aminu Shehu, Sokoto state RBM Manager

1. Could you tell me the main function of your office?
    a. The Sokoto RBM office manages malaria activities in the 23 local governments areas of the state
2. What are these activities?
    a. We manage the conduct of malaria treatment in the state hospitals, especially to pregnant women and children under 5, we also manage interventions like the IPT for pregnant women, the conduct of Rapid Diagnostic Tests, and Insecticide Spraying and the distribution of LLINs
3. Are these activities regular?
    a. Some are regular like the RDT and IPT and the free treatment we offer small children. In every local government, 10 health centres/hospitals provide these services for free. The IRS, for example is mainly organized by the local governments and managed by the LG RBM officers. As for the LLINs, we distribute when we get them from the federal government or donors
4. How regular do you receive donor materials?
    a. Not very, we received 1.6 million nets during the 2009 campaign, which ran jointly with the polio campaign, we are yet to receive more
5. Tell me about the campaign
    a. It is a state-wide campaign covering the 23 local governments. Distribution of LLINs were tied to polio immunization and the number of vaccinated children will translate to the number of netcards given to each family, which eventually will translate to the number of LLINs each family got. It so happened that the families that refused polio vaccination were denied the LLINs. In some cases, families that do not have children to be immunized are given, while in other cases they were not. I can safely say that the programme, despite its challenges

has succeeded. The post campaign survey indicated that there was 80% coverage and 40% utilization.

6. How was the distribution conducted?
    a. The project was titled child health week. In the first week, in the first week, there was polio immunization and household mobilization for LLIN, which was followed by the netcard distribution. In the second week, the nets were distributed to those with cards
7. Did this project have any communication component?
    a. Yes, there were jingles running on the radio and television regularly to sensitize people about the project
8. What were the household mobilizers actually telling the people?
    a. They mobilized them to allow their children to be immunized so that they can get LLINs. But even before the commencement of the project, some proactive ward health committees have done a lot of mobilization for us
9. What are these committees like?
    a. Every ward in the state has a health committee made up of public opinion leaders; they serve as an interface between the people and health establishment in the ward, organizing home visits and lectures where necessary to sensitize people on various health issues. People who have complaints and suggestions or calls for government action route them through the committees.
10. So at no point in the project were the people engaged other than to receive immunization and nets?
    a. The purpose of the programme was to immunize and distribute only, but if they had questions we responded to them
11. Did you get any cases of rejection of the nets?
    a. No, but there was a village in Bodinga Local Government were a woman died after using the net and the nets were suspected to contain some killer substances. The people of the village made a bonfire of all their nets.

12. The post survey assessment you spoke about earlier, what were its findings beyond the figures given?
    a. The most important one was in 2010 after the subsequent polio immunization exercise, in many places; people refused the immunization unless they were given nets.
13. When will the next distribution take place?
    a. It will take place 5 years after 2009. That should be 2014
14. Is your office conducting any demand creation campaigns for the nets in the mean time?
    a. No, but it is a good idea.

Appendix 2

Interview with Alhaji Nasiru, the RBM focal person, Sokoto South Local Government

1. Do you remember the 2009 polio/LLIN campaign
    a. Yes, I was involved
2. How would you rate it?
    a. It was partially successful
3. What would you do differently if given the chance?
    a. I would run a malaria campaign separate from any other campaign and would suggest for the conduct of a survey of households before this kind of project, so that each household is captured
4. Why?
    a. Because it seemed WHO sponsored the polio bit and they dominated the project. They did not allow us to distribute the nets, which were quite adequate to go round, but we gave to only to those who allowed their children to be immunized. What of those who refused? What has polio got to do with malaria, what of those who don't have children under 5? Many households were also left out because they were not captured
5. So people welcome LLINs
    a. Yes they do. People have tried it and are satisfied with its success. That was why they were expecting it. When we refused to give it to them, most of them ran away from the next polio immunization. It was not a good idea.
6. Has your office conducted IRS recently?
    a. Yes, we did in the local government in September and it was very successful. I have already suggested a follow up soon, but the funds are not available
7. Do you suggest to the people to collaborate and do their sprays and not wait for your office?

    a. There are a few places that do that, some even buy malaria drugs and donate to the hospitals. When it comes to contributing money, it is not always easy even if you put up a suggestion.

8. How often do you visit the people to discuss malaria
    a. I am a household name in the local government; there is no ward that I don't visit. I am a regular face even during informal events
9. During your engagement with them do they tell you how difficult it is to control mosquitoes on their own, like the maintenance of dirty drainages and difficult neighbours who would not agree to clean their surroundings and the like?
    a. It is true, and this seems to make it difficult for them to work together to help themselves.
10. Do you think you need some kind of training that will enable you to help the people to organize and help themselves, rather than wait for government all the time?
    a. I am sure that will help my job
11. When is the peak period for malaria in your local government?
    a. It's during the rainy season up to harvest period. After this period, the malaria problem drops and is only accentuated by stagnant drainages
12. Do health centres in your area keep a record of malaria cases?
    a. Yes, they do. I file for each health centre and return to the state office each month
13. Would you say the figures are credible?
    a. I believe they are

Appendix 3

Questionnaire for respondents

1. Name:
2. Age:
3. Address:
4. What do you know about malaria?
    a.
5. What causes it?
    a.
6. How do you prevent it?
    a.
7. Where/ how did you get your information
    a.
8. How do you treat malaria cases
    a.
9. Do you take malaria cases to hospital
    a.
10. What do pregnant women take for malaria
    a.
11. How far are you to a health centre
    a.
12. Do you use bednets, why
    a.
13. Are you aware of any malaria drugs, name them
    a.
14. Which organizations relate with you on malaria
    a.
15. What did you learn from them
    a.
16. Is there any behavior change you acquired from meeting them
    a.
17. What do you now do differently
    a.
18. What would you prefer they do to you when next they come
    a.
19. How involved were you when they visit?
    a.
20. Were your opinions sought as to how best to curb malaria?
    a.
21. Does your community perform self-help activities in your locality?

a.

22. Did you offer free advice to the officials?

a.

23. Were your free suggestions accepted

Appendix 4

Field Interviews with respondents in Sokoto State

The following are field interviews conducted at Gagi, a village outside Sokoto city and Kofar Aliyu Jodi, A settlement within Sokoto City. Interviews were conducted in Hausa language, but translated to English for the purpose of this work. Out of the 10 that were conducted in each of the locations, five are reproduced below. Respondents were randomly selected from different age groups; all were married and therefore had homes and families.

Field interviews at Gagi village

1. Name: **Haruna Muhammad Gagi**
2. Age:52
3. Address: Gagi Village
4. What do you know about malaria?
    a. Malaria is a disease that leads to heating up of the body and comes with body pains. Sometimes it leads to vomiting
5. What causes it?
    a. It is caused by mosquito bites, that is why it is called 'fever of mosquito bites'
6. How do you prevent it?
    a. By avoiding mosquitoes though mosquito coils, pressurized sprays
7. Where/ how did you get your information
    a. Malaria has been there before I was born and these things are common knowledge
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes, regularly
10. What do pregnant women take for malaria
    a. Don't know the name of the drug
11. How far are you to a health centre
    a. It is in this village
12. Do you use bednets, why
    a. My family does but I don't because I wasn't given
13. Are you aware of any malaria drugs, name them
    a. There are many but I know the name of only chloroquine
14. Which organizations relate with you on malaria
    a. the clinic committee and also the local government
15. What did you learn from them
    a. That malaria kills people and that we should sleep inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. I go to the hospital as they advised

17. What do you now do differently
    a. I don't give my family local medicine anymore, I only take them to the hospital
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly as they did some months ago
19. How involved were you when they visit
    a. Not involved, they lecture us and we listen
20. Were your opinions sought as to how best to curb malaria
    a. No need for that, as the government is the one that provide the drugs at the clinic and does the spraying, what can villagers do?
21. Did you offer free advice to the officials
    a. There was a time they came and they gave nets to only those who agreed for their children to receive polio immunization. I advised them to just give every family they visited
22. Were your free suggestions accepted
    a. No, they were not

1. Name: **Ibrahim Marafa**
2. Age: 40
3. Address: Gagi Village
4. What do you know about malaria?
    a. Malaria is a disease that leads to heating up of the body and comes with body pains.
5. What causes it?
    a. It is caused by mosquitoes
6. How do you prevent it?
    a. By killing mosquitoes with chemicals (pia pia)
7. Where/ how did you get your information
    a. My neighbor uses the same thing and it is cheap. With N20 you can spray the house for 3 days
8. How do you treat malaria cases
    a. I have not had malaria case in a long time, but when I do whether it is me or my family we will go to the clinic
9. Do you take malaria cases to hospital
    a.
10. What do pregnant women take for malaria
    a. Don't know the name of the drug
11. How far are you to a health centre
    a. It is in this village
12. Do you use bednets, why
    a. I wasn't given

13. Are you aware of any malaria drugs, name them
    a. I don't know
14. Which organizations relate with you on malaria
    a. I cant remember any, only jingles from the radio
15. What did you learn from them
    a. That malaria kills people and that we should sleep inside bednets.
16. Is there any behavior change you acquired from the jingles
    a. I wasn't given the net so I cannot do what they asked
17. What do you now do differently
    a.
18. What would you prefer the officials do to your village in case they come
    a. I would like them to help us spray the community regularly
19. How involved were you when they visited
    a. They only sprayed the village and left
20. Were your opinions sought as to how best to curb malaria
    a. No need for that, as the government is the one that provide the drugs at the clinic and does the spraying, what can villagers do?
21. Did you offer free advice to the officials
    a. no
22. Were your free suggestions accepted

1. Name: **Muhammad Bandado**
2. Age: 55 years
3. Address: Gagi Village
4. What do you know about malaria?
    a. It used to be seen as possession by witches or convulsion, now we see it for what it is, a disease that leads to heating up of the body and comes with body pains. Sometimes it leads to vomiting. It is more common during rainy season
5. What causes it?
    a. It is caused by mosquito bite
6. How do you prevent it?
    a. By avoiding mosquitoes though mosquito coils, anti mosquito spays and use of mosquito nets
7. Where/ how did you get your information
    a. We grew up knowing Malaria. It is part of our lives.
8. How do you treat malaria cases
    a. Usually we try our herbs first, if they fail, we go to hospital.
9. Do you take malaria cases to hospital
    a.
10. What do pregnant women take for malaria
    a. I don't know
11. How far are you to a health centre

a. It is close

12. Do you use bednets, why
    a. My children do. It keeps the mosquitoes out
13. Are you aware of any malaria drugs, name them
    a. I don't know
14. Which organizations relate with you on malaria
    a. I think they are from government
15. What did you learn from them
    a. That we should use bednets for protection
16. Is there any behavior change you acquired from meeting them
    a. I go to the hospital when any member of my family has malaria, but I still trust my local herbs
17. What do you now do differently
    a. At least i take them to the hospital
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly as they did some months ago
19. How involved were you when they visited
    We listened to what they had to say, some people asked them questions but I didn't
20. Were your opinions sought as to how best to curb malaria
    a. No, they did not
21. Did you offer free advice to the officials
    a. no
22. Were your free suggestions accepted

1. Name: **Muhammad Tambari**
2. Age: 30
3. Address: Gagi Village
4. What do you know about malaria?
    a. Malaria makes the body hot and comes with pains in the joints. Sometimes it leads to vomiting
5. What causes it?
    a. It is caused by mosquito bites
6. How do you prevent it?
    a. By killing mosquitoes with pia pia (chemical)
7. Where/ how did you get your information
    a. From friends and neighbours, even my wife seems to know as she sometimes burn orange peels to repulse mosquitoes
8. How do you treat malaria cases
    a. We go to the hospital when we have it

9. Do you take malaria cases to hospital
    a. Yes,
10. What do pregnant women take for malaria
    a. I have a pregnant wife and they give her IPT at the clinic
11. How far are you to a health centre
    a. It is in this village
12. Do you use bednets, why
    a. Yes I do, it allows my family to sleep well and stay protected
13. Are you aware of any malaria drugs, name them
    a. Chloroquine, coartem and paracetamol
14. Which organizations relate with you on malaria
    a. We have a clinic committee here in the village and they sometimes go round to talk to us about polio, malaria, measles and the like
15. What did you learn from them
    a. That malaria kills and that we should sleep inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. I go to the hospital as they advised and I keep my surrounding clean
17. What do you now do differently
    a. I only take my family to the hospital and I don't allow water to collect in my house
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly
19. How involved were you when they visited
    a. Not involved, they spoke to us and we listened
20. Were your opinions sought as to how best to curb malaria
    a. The government is the one that provide the drugs at the clinic and does the spraying,
21. Did you offer free advice to the officials
    a. Yes, that they should provide free drugs also to men as they do for women and children
22. Were your free suggestions accepted
    a. They said it was impossible to give everybody free drugs

1. Name: **Usman Umar**
2. Age: 28 years
3. Address: Gagi Village
4. What do you know about malaria?
    a. Malaria is a disease that leads to high body temperature and joint pains and vomiting
5. What causes it?
    a. It results from mosquito bites,
6. How do you prevent it?
    a. By killing mosquitoes with insecticides

7. Where/ how did you get your information
    a. We grow up with information on Malaria
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes, regularly
10. What do pregnant women take for malaria
    a. I don't know the name of the drug
11. How far are you to a health centre
    a. Trekking distance
12. Do you use bednets, why
    a. Yes, we do in my house
13. Are you aware of any malaria drugs, name them
    a. The one they are always mentioning on the radio is ACT
14. Which organizations relate with you on malaria
    a. the clinic committee in this village
15. What did you learn from them
    a. That malaria kills and that we should sleep inside the mosquito nets. They also adviced us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. I go to the hospital as they advised
17. What do you now do differently
    a. I keep my environment clean always and use the nets at night
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly. The last session was very useful
19. How involved were you when they visit
    a. I was not involved,
20. Were your opinions sought as to how best to curb malaria
    a. No
21. Did you offer free advice to the officials
    a. no
22. Were your free suggestions accepted
    No

Field interviews conducted at Kofar Aliyu Jodi

1. Name: **Isa Usmanu**
2. Age: 45
3. Address: Kofar Aliyu Jodi
4. What do you know about malaria?

    a. Malaria heats up the body and demobilizes its victim. He is unable to do any work but it can heal within a week of hospital treatment
5. What causes it?
    a. It is caused by mosquitoes that breed in stagnant waters. When they bite people, they give them malaria
6. How do you prevent it?
    a. By avoiding mosquitoes through the use of insecticides
7. Where/ how did you get your information
    a. I first learnt of malaria at school
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes, regularly
10. What do pregnant women take for malaria
    a. They are given IPT to protect them and the unborn baby
11. How far are you to a health centre
    a. It is in this village
12. Do you use bednets, why
    a. My family and myself we all use it as it protect us from mosquitoes
13. Are you aware of any malaria drugs, name them
    a. Fansidar, Coartem, Metakelfin
14. Which organizations relate with you on malaria
    a. The government officials
15. What did you learn from them
    a. That malaria kills people and that we should sleep inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. I and my family go to the hospital anytime we have it, and my wife takes IPT during ante-natals
17. What do you now do differently
    a. I ensure that I and my family use the nets
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly
19. How involved were you when they visit
    a. No one was involved, they spoke and we listened
20. Were your opinions sought as to how best to curb malaria
21. Not really
22. Did you offer free advice to the officials
    a. no
23. Were your free suggestions accepted

1. Name: **Aminu D. Yauri**
2. Age: 50
3. Address: Kofar Aliyu Jodi
4. What do you know about malaria?
    a. When mosquitoes bite someone, they get malaria
5. What causes it?
    a. It is caused by mosquito bites
6. How do you prevent it?
    a. By killing mosquitoes
7. Where/ how did you get your information
    a. It is common knowledge
8. How do you treat malaria cases
    a. Before, I use herbs, but now I take my family to hospital when they have it
9. What protection do pregnant women take for malaria
    a. They are given drugs to protect them and the pregnancy
10. How far are you to a health centre
    a. I am closer to the specialist hospital. That is where I attend
11. Do you use bednets, are they useful
    a. We all use it as it protect us from mosquitoes
12. Are you aware of any malaria drugs, name them
    a. I know of ACT that is the one that is always mentioned on the radio jingles
13. Which organizations relate with you on malaria
    a. The government officials
14. What did you learn from them
    a. The dangers of malaria and the need to sleep inside bednets. They also advice us to go to the clinic when we are infected
15. Is there any behavior change you acquired from meeting them
    a. I and my family go to the hospital anytime we have it
16. What do you now do differently
    a. I ensure that I and my family use the nets
17. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly
18. How involved were you when they visit
    a. No one was involved, they spoke and we listened
19. Were your opinions sought as to how best to curb malaria
20. Not really
21. Did you offer free advice to the officials
    a. no

1. Name: **Bello Hassan**
2. Age: 38
3. Address: Kofar Aliyu Jodi
4. What do you know about malaria?

a. Malaria raises the body temperature and demobilizes its victim. He is unable to do any work. It is prevalent mostly during rainy season

5. What causes it?
    a. It is caused by mosquitoes that breed in stagnant waters. When they bite people, they give them malaria
6. How do you prevent it?
    a. Through the use of insecticides
7. Where/ how did you get your information
    a. From even the radio
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes
10. What do pregnant women take for malaria
    a. They are given drugs to protect them and the unborn baby
11. How far are you to a health centre
    a. It is in this community
12. Do you use bednets, why
    a. The children use it and it protects them from mosquitoes
13. Are you aware of any malaria drugs, name them
    a. ACT
14. Which organizations relate with you on malaria
    a. The government officials
15. What did you learn from them
    a. The dangers of malaria to the people and what we should do to protect ourselves like sleeping inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. Sanitation is the most important
17. What do you now do differently
    a. I ensure that I and my family use the nets
18. What would you prefer they do to you when next they come
    a. Spraying the community regularly is important
19. How involved were you when they visit
    a. No I was not involved,
20. Were your opinions sought as to how best to curb malaria
    a. Not really
21. Did you offer free advice to the officials
    a. No

1. Name: **Sahabi Dodo**
2. Age: 55
3. Address: Kofar Aliyu Jodi

4. What do you know about malaria?
    a. Malaria is an old disease right from the days of our forefathers. They use to cure it with herbs, but today, one has to go to the hospital to get cured.
5. What causes it?
    a. It is caused by mosquitoes that breed in stagnant waters.
6. How do you prevent it?
    a. By avoiding mosquitoes through the use of insecticides
7. Where/ how did you get your information
    a. I knew from my childhood
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes, regularly
10. What protection do pregnant women take for malaria
    a. They are given drugs to protect them and the unborn baby
11. How far are you to a health centre
    a. It is in this community
12. Do you use bednets, why
    a. My family uses it as it protect us from mosquitoes
13. Are you aware of any malaria drugs, name them
    a. I don't ask their names
14. Which organizations relate with you on malaria
    a. The government officials
15. What did you learn from them
    a. That malaria kills people and that we should sleep inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
    a. May be when they told us to keep our environment clean, I try to do that
17. What do you now do differently
    a. I ensure that I and my family use the nets
18. What would you prefer they do to you when next they come
    a. I would like them to help us spray the community regularly
19. How involved were you when they visit
    a. No one was involved, they spoke and we listened
20. Were your opinions sought as to how best to curb malaria
    a. Not really
21. Did you offer free advice to the officials

1. Name: **Malami mai Tipa**
2. Age: 60
3. Address: Kofar Aliyu Jodi
4. What do you know about malaria?

a. It increases the body temperature and demobilizes its victim. He is unable to do any work and has to be taken to hospital for quick recovery

5. What causes it?
    a. It is caused by mosquitoes that breed in stagnant waters. When they bite people, they give them malaria
6. How do you prevent it?
    a. By avoiding mosquitoes through the use of insecticides and mosquito nets
7. Where/ how did you get your information
    a. Right from school and the jingles on the radio are also a constant reminder
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    a. Yes
10. What protection do pregnant women take for malaria
    a. They are given drugs during ante natals to protect them and the unborn baby
11. How far are you to a health centre
    a. I prefer the specialist hospital, it is better as they have many doctors
12. Do you use bednets, why
    a. My family members use it as it protect us from mosquitoes
13. Are you aware of any malaria drugs, name them
    a. Fansidar, ACT, they don't like chloroquine anymore
14. Which organizations relate with you on malaria
    a. The government officials do and also the health committee
15. What did you learn from them
    a. That malaria is dangerous and that we should sleep inside bednets. They also advice us to go to the clinic when we have it
16. Is there any behavior change you acquired from meeting them
17. I and my family go to the hospital anytime we have it
18. What do you now do differently
    a. I ensure that I and my family use the nets
19. What would you prefer they do to you when next they come
    a. To distribute more nets to us and help us spray the community regularly
20. How involved were you when they visit
    a. No one was involved, they spoke and we listened
21. Were your opinions sought as to how best to curb malaria
    a. Not really
22. Did you offer free advice to the officials
    a. Yes, for them to give us more nets for those of us that got only one
23. Were your free suggestions accepted

    They promised that there would be other distribution sessions

Appendix 5

Interview with Danladi Tanko, the Deputy RBM Manager, Kano state

1. Could you tell me the main function of your office?
    a. The office was established in all states to coordinate and implement malaria activities and ensure synergy between the efforts of the federal, state, local governments and the various partners with a view to achieving the golden objectives.
2. What are these activities?
    a. We distribute and propagate the use of LLINs, provide drugs of choice for treatment as a result of loss of potency of chloroquine, embark on environmental control measures and communication.
3. Are these activities regular?
    a. Some are regular like the RDT and IPT and the free treatment we offer small children. The IRS is mainly organized by the state government through REMASAB and this is now becoming more regular as N10m is spent monthly by the state government. As for the LLINs, the state government has been very encouraging as they spend millions of naira to purchase and distribute them regularly. We also receive supplies from the federal government and donors. There are also publicity materials and radio and TV programmes and jingles. These are mostly sponsored by the development partners.
4. What input does your office have in the media campaign?
    a. Well, we are not involved in that because they design their programmes, whether it is drama or jingle and pass it for possible vetting by HECTIC before they put it on air.
5. How would you assess the success of your office?
    a. As far as I am concerned, we are successful in the way we carry out our assignments. We have action plans which we follow to the latter and our local RBM offices are also up and doing.

6. Since you don't have any input in the media campaigns, how do you see the issue of communication with your clients, the public?
    a. We have our own way and that is the community mobilization, in which we gather selected members of a community and discuss malaria issues with them and they in return will communicate with their people and supervise and enforce selected practices
7. Would you say the community mobilization is successful?
    a. Yes, this is because the group we meet is like a standing committee in every community made up of public opinion leaders; they serve as an interface between the people and government on health matters , organizing home visits and lectures where necessary to sensitize people on various health issues. Whenever we communicate with the committee, they carry our messages across.
8. Is there any strategy in place to ensure that the people accept the decisions of these committees?
    a. That is the tradition and it was initiated by the National RBM office for the whole country. You cannot speak with the whole community, so you have to do it through a selection of the most important personalities. Community members always take directives from superior authorities.
9. Let us go back to the issue of nets. Would you say they are now accepted as a means of malaria prevention?
    a. Yes of course, whenever we go out for distribution, people are always eager to get the nets. Though sometimes people sell them to others, at least they are circulating among the public
10. What of in the event that people may have to buy them? Do you still believe the enthusiasm would remain the same?
    a. Well, not necessarily, it is possible that people may prefer it when it is free.
11. So don't you think it would be wise to begin a kind of demand creation programme for the nets?

a. That would be a good idea, but the radio and TV messages always do advise the people to buy nets.

12. Some experts believe that radio and TV messages hardly lead to behavior change
    a. Behavior change occurs over a long period of time so one cannot say whether it has occurred on the issue of the use of nets, unless a research is carried out.

Appendix 6

Interview with Alhaji Mahmud, RBM focal person, Tarauni Local Government, Kano State

1. Do you remember the 2009 polio/LLIN campaign
    a. Yes, I was involved
2. How would you rate it?
    a. It was partially successful
3. What would you do differently if given the chance?
    a. I would run a malaria campaign separate from any other campaign and would suggest for the conduct of a survey of households before this kind of project, so that each household is captured
4. Why?
    a. Because it seemed WHO sponsored the polio bit and they dominated the project. They did not allow us to distribute the nets, which were quite adequate to go round, but we gave to only to those who allowed their children to be immunized. What of those who refused? What has polio got to do with malaria, what of those who don't have children under 5? Many households were also left out because they were not captured
5. So people welcome LLINs
    a. Yes they do. People have tried it and are satisfied with its success. That was why they were expecting it. When we refused to give it to them, most of them ran away from the next polio immunization. It was not a good idea.
6. Has your office conducted IRS recently?
    a. Yes, we did in the local government in September and it was very successful. I have already suggested a follow up soon, but the funds are not available
7. Do you suggest to the people to collaborate and do their sprays and not wait for your office?

    a. There are a few places that do that, some even buy malaria drugs and donate to the hospitals. When it comes to contributing money, it is not always easy even if you put up a suggestion.

8. How often do you visit the people to discuss malaria
    a. I am a household name in the local government; there is no ward that I don't visit. I am a regular face even during informal events
9. During your engagement with them do they tell you how difficult it is to control mosquitoes on their own, like the maintenance of dirty drainages and difficult neighbours who would not agree to clean their surroundings and the like?
    a. It is true, and this seems to make it difficult for them to work together to help themselves.
10. Do you think you need some kind of training that will enable you to help the people to organize and help themselves, rather than wait for government all the time?
    a. I am sure that will help my job
11. When is the peak period for malaria in your local government?
    a. It's during the rainy season up to harvest period. After this period, the malaria problem drops and is only accentuated by stagnant drainages
12. Do health centres in your area keep a record of malaria cases?
    a. Yes, they do. I file for each health centre and return to the state office each month
13. Would you say the figures are credible?
    a. I believe they are

Appendix 7

Field interviews conducted at Kano.

The following are field interviews conducted at Unguwa Uku, a suburb of Kano and Kumbotso, a village on the fringes of the metropolis. Interviews were conducted in Hausa language, but translated to English for the purpose of this work. Out of the 10 that were conducted in each of the locations, five are reproduced below. Respondents were randomly selected from different age groups; all were married and therefore had homes and families.

Field interviews conducted at Unguwa uku

23. Name: **Abdullahi Tarauni**
24. Age: 55
25. Address: Unguwa uku
26. What do you know about malaria?
    a. Malaria is a disease that affects a large number of people in Nigeria; it has succeeded in killing many people, especially children under 5. That is why mothers are advised to prevent their children from mosquito bites.
27. What causes it?
    a. It is caused by mosquito bites.
28. How do you prevent it?
    a. One can protect oneself from mosquitoes
29. Where/ how did you get your information
    a. Everyone knows about Malaria; it is not a new disease. We get reminded of it when our family members get infected.
30. How do you treat malaria cases
    a. I take my family to hospital when they have it
31. Do you take malaria cases to hospital
    a. Yes, I always do
32. What do pregnant women take for malaria
    a. I think it is called SP or something. They take it when they go for ante-natals
33. How far are you to a health centre
    a. It is quite close to me
34. Do you use bed nets, why?
    a. Yes, my whole family does. I bought nets for my whole family
35. Are you aware of any malaria drugs? name them
    a. These days it is either metakelfin or ACT that are actually effective
36. Which organizations relate with you on malaria
    a. the local RBM office comes round sometimes
37. What did you learn from them
    a. That we should sleep in bed nets, clean our surroundings and drain our water collection points.

38. Is there any behavior change you acquired from meeting them
    a. It is just a reminder, not something new. So when they visited us the last time, I remembered to sanitize my house.
39. What do you now do differently as a result of your contact with the officials
    a. I can't say I do anything differently
40. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community regularly.
41. How involved were you when they visit?
    a. Involved? It was not an exchange, it was a lecture.
42. Were your opinions sought as to how best to curb malaria
    a. I don't remember that happening.
43. Does your community perform self-help activities in your locality?
    a. honestly, not anymore. Government is making nonsense of our efforts as the main channels that convey dirt out of our locality has been blocked by a building constructed by an influential person. That makes it impossible for the drains to exit our location.
44. Did you offer free advice to the officials
    a. I don't think that was necessary since they didn't ask
45. What would you have suggested to the officials in the fight against malaria?
    My concern is to enforce people to keep their drainages clean and get those who don't punished; that way, those who are clean can have value for the time and resources they expend in keeping their own environments clean.

1. Name: **Jamilu Nasiru**
2. Age: 40
3. Address: Unguwa uku
4. What do you know about malaria?
    a. Malaria is a disease that kills people through mosquito bites.
5. What causes it?
    b. It is caused by mosquito bites.
6. How do you prevent it?
    c. Using mosquito coils, repellents and nets
7. Where/ how did you get your information
    d. Through the media
8. How do you treat malaria cases
    e. I take my family to hospital when they have it
9. Do you take malaria cases to hospital
    f. Yes, I always do
10. What do pregnant women take for malaria
    g. I don't know the name, they are given when they go for ante-natals
11. How far are you to a health centre
    h. Not very far.

12. Do you use bed nets, why?
    i. Yes, my whole family does. I need to protect them
13. Are you aware of any malaria drugs? name them
    j. I know ACT
14. Which organizations relate with you on malaria
    k. the RBM office does
13. What did you learn from them
    l. That we should sleep in bed nets and clean our surroundings
15. Is there any behavior change you acquired from meeting them
    m. Not really.
16. What do you now do differently as a result of your contact with the officials
    n. I can't say I do anything differently
17. What would you prefer they do to you when next they come?
    o. I would like them to help us spray the community regularly.
18. How involved were you when they visit?
    p. I wasn't
19. Were your opinions sought as to how best to curb malaria
    a. No
20. Does your community perform self-help activities in your locality?
    a. not regularly
21. Did you offer free advice to the officials
    q. No, I didn't
22. What would you have suggested to the officials in the fight against malaria?
    My suggestions are for my own home alone. Government should take care of its own responsibilities.

1. Name: **Abdulhadi yusuf**
2. Age: 38
3. Address: Unguwa uku
4. What do you know about malaria?
    a. Malaria is a killer disease. Most people don't seem to know but it kills
5. What causes it?
    a. It is caused by mosquito bites.
6. How do you prevent it?
    a. I use mosquito coil every night to protect my family
7. Where/ how did you get your information about malaria?
    a. Everyone knows about Malaria and government is always using media to tell us how bad it is.
8. How do you treat malaria cases
    a. I take my family to hospital when they have it
9. Do you always take malaria cases to hospital
    a. Yes, I always do

10. What do pregnant women take for malaria
    a. She takes it at the clinic during her ante-natals
11. How far are you to a health centre
    a. It is a trekking distance from my house
12. Do you use bednets, why?
    a. Yes, I have one for my two children, my wife was given at the clinic. It protects them from the mosquitoes
13. Are you aware of any malaria drugs? name them
    a. I can use any one of them. No need to know their names
14. Which organizations relate with you on malaria
    a. the local government officials (RBM)
15. What did you learn from them
    a. That we should sleep in bednets, clean our surroundings and drain our water collection points.
16. Is there any behavior change you acquired from meeting them
    a. They remind us to sleep under bednets.
17. What do you now do differently as a result of your contact with the officials
    a. I can't say I do anything differently
18. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community regularly.
19. How involved were you when they visit?
    a. I was not Involved, just briefed
20. Were your opinions sought as to how best to curb malaria
    a. No .
21. Does your community perform self-help activities in your locality?
    a. people don't seem to bother anymore, but I will remind me anguwa, may be we need to begin to do sanitation.
22. Did you offer free advice to the officials
    a. No.
23. What would you have suggested to the officials in the fight against malaria?
    For them to do more spraying in the community.

1. Name: **Aliyu Suleiman**
2. Age: 46
3. Address: Unguwa uku
4. What do you know about malaria?
    a. Malaria is a disease that kills many Nigerians. It seems to be getting too rampant now. Nearly every family suffer from the disease.
5. What causes it?
    a. It is caused by mosquitoes.
6. How do you prevent it?
    a. Whether by fleeting the rooms or using coils or using mosquito nets

7. Where/ how did you get your information
    a. We all know about malaria right from childhood
8. How do you treat malaria cases
    a. I buy drugs from the pharmacy
9. Do you take malaria cases to hospital
    a. Yes, when the drugs don't seem to work
10. What do pregnant women take for malaria
    a. They are given at the clinic, I don't know what it is called
11. How far are you to a health centre?
    a. It is close to my house
12. Do you use bednets, why?
    a. Some of my children do. It is good for them
13. Are you aware of any malaria drugs? name them
    a. The present one that is recommended is called ACT
14. Which organizations relate with you on malaria
    a. the local RBM office
15. What did you learn from them
    a. That we should sleep in bednets, clean our surroundings and drain our water collection points.
16. Is there any behavior change you acquired from meeting them
    a. It's a matter of having money and time, I don't have grown up children who can do some of these things for me. So it is when I can afford that I clean my surroundings.
17. What do you now do differently as a result of your contact with the officials
    a. No
18. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community regularly.
19. How involved were you when they visit?
    a. Not really
20. Were your opinions sought as to how best to curb malaria
    a. no
21. Does your community perform self-help activities in your locality?
    a. Not always
22. Did you offer free advice to the officials?
    a. They didn't ask
23. What would you have suggested to the officials in the fight against malaria?
    Let them spray our communities regularly.

1. Name: **Muntari Sani**
2. Age: 30
3. Address: Unguwa uku
4. What do you know about malaria?
    a. It is a disease that affects a large number of people.

5. What causes it?
    a. It is caused by mosquitoes
6. How do you prevent it?
    a. Many ways nets, and mosquito coils especially effective
7. Where/ how did you get your information
    a. Everyone knows about Malaria
8. How do you treat malaria cases
    a. The pharmacy
9. Do you take malaria cases to hospital
    a. Yes, when it gets very serious
10. What do pregnant women take for malaria
    a. They are given SP when they go for ante-natals
11. How far are you to a health centre
    a. Not very far
12. Do you use bednets, why?
    a. Yes, my whole family
13. Are you aware of any malaria drugs? name them
    a. Fansidar, Metakelfin, ACT
14. Which organizations relate with you on malaria
    a. the local RBM office
15. What did you learn from them
    a. That we should sleep in bednets and clean our surroundings
16. Is there any behavior change you acquired from meeting them
    a. At least they remind us how to protect ourselves
17. What do you now do differently as a result of your contact with the officials
    a. I remember to clean my house and drains always
18. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community regularly.
19. How involved were you when they visit?
    a. It was a always a lecture
20. Were your opinions sought as to how best to curb malaria
    a. not really
21. Does your community perform self-help activities in your locality?
    a. Not much these days
22. Did you offer free advice to the officials
    a. They didn't ask
23. What would you have suggested to the officials in the fight against malaria?
    They should spray the community more, spraying our houses is never enough to kill all the mosquitoes in the community

Field interviews conducted at Kumbotso village, Kano

Name: **Sani Isa**

46. Age: 45
47. Address: Kumbotso village
48. What do you know about malaria?
    a. Malaria is a disease that is very deadly
49. What causes it?
    a. It is caused by mosquitoes.
50. How do you prevent it?
    a. Protecting myself from mosquitoes
51. Where/ how did you get your information
    a. Through regular radio and TV jingles and programmes
52. How do you treat malaria cases
    a. I take my family to hospital when they have it
53. Do you take malaria cases to hospital
    a. Yes, I do
54. What do pregnant women take for malaria
    a. I can't recall the name of the drug
55. How far are you to a health centre
    a. It is close to my place
56. Do you use bed-nets, why?
    a. Yes, my household does
57. Are you aware of any malaria drugs? name them
    a. Fansidar, Metakelfin, Chloroquine and ACT
58. Which organizations relate with you on malaria?
    a. The RBM officer used to come with the spray team
59. What did you learn from them
    a. They spray our houses and drains once or twice a year
60. Is there any behavior change you acquired from meeting them
    a. No.
61. What do you now do differently as a result of your contact with the officials
    a. After the visit, I continue to fleet my house
62. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community more regularly.
63. How involved were you when they visit?
    a. Involved? No.
64. Were your opinions sought as to how best to curb malaria
    a. I don’t remember that happening.
65. Does your community perform self-help activities in your locality?

a. yes, especially young people

66. Did you offer free advice to the officials
    a. They didn't ask
67. What would you have suggested to the officials in the fight against malaria?
    They should provide alternative to the nets as sometimes they get too hot for comfort.

Name: **Lawal Awaisu**

68. Age: 30
69. Address: Kumbotso village
70. What do you know about malaria?
    a. It is a killer disease that is so rampant in our society today
71. What causes it?
    a. It is caused by mosquitoes.
72. How do you prevent it?
    a. Protecting myself from mosquitoes through bed nets and mosquito coil
73. Where/ how did you get your information
    a. Through regular radio and TV jingles and programmes
74. How do you treat malaria cases
    a. I take my family to hospital when they have it
75. Do you take malaria cases to hospital
    a. Yes, I do
76. What do pregnant women take for malaria
    a. I don't know
77. How far are you to a health centre
    a. It is close to my place
78. Do you use bed-nets, why?
    a. Yes, my wife does with the children
79. Are you aware of any malaria drugs? name them
    a. Chloroquine and ACT
80. Which organizations relate with you on malaria?
    a. The RBM officer used to come and spray the village to kill mosquitoes
81. What did you learn from them
    a. The spay helps kill mosquitoes for sometime before they come back.
82. Is there any behavior change you acquired from meeting them
    a. No.
83. What do you now do differently as a result of your contact with the officials
    a. I wish the community can contribute money to continue the sprays
84. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community more regularly.
85. How involved were you when they visit?
    a. No.
86. Were your opinions sought as to how best to curb malaria

a. No

87. Does your community perform self-help activities in your locality?
    a. No
88. Did you offer free advice to the officials
    a. They didn't ask
89. What would you have suggested to the officials in the fight against malaria?
    They should distribute more nets

Name: **Musbahu Salisu**

24. Age: 42
25. Address: Kumbotso village
26. What do you know about malaria?
    a. Malaria is a disease
27. What causes it?
    a. It is caused by mosquitoes.
28. How do you prevent it?
    a. From time to time I make sure my family take traditional mixtures, I also take my family to the clinic whenever they are affected.
29. Where/ how did you get your information about malaria?
    a. Through the radio
30. How do you treat malaria cases
    a. I take my family to hospital when they have it
31. So you always take malaria cases to hospital?
    a. Yes, I do
32. What do pregnant women take for malaria
    a. I don't know
33. How far are you to a health centre
    a. It is there in the village
34. Do you use bed-nets, why?
    a. Yes, they gave my wife one at the clinic
35. Are you aware of any malaria drugs? name them
    a. I don't know their names
36. Which organizations relate with you on malaria?
    a. The local government officials
37. What did you learn from them
    a. They come and tell us to use nets, but they don't have enough to go round
38. Is there any behavior change you acquired from meeting them
    a. No.
39. What do you now do differently as a result of your contact with the officials
    a. What is there to learn? They don't bring enough nets
40. What would you prefer they do to you when next they come?
    a. They should give everybody enough nets.

41. How involved were you when they visit?
    a. The community leaders call us whenever they come, and we listen to them
42. Were your opinions sought as to how best to curb malaria
    a. No
43. Does your community perform self-help activities in your locality?
    a. Yes
44. Did you offer free advice to the officials
    a. No
45. What would you have suggested to the officials in the fight against malaria?
    I want more nets for the community and they should also come and spray our homes more often.

Name: **Kabiru Rabiu**

24. Age: 39
25. Address: Kumbotso village
26. What do you know about malaria?
    a. It is a terrible disease that disturbs the whole community
27. What causes it?
    a. It is caused by mosquitoes.
28. How do you prevent it?
    a. By protecting yourself from mosquitoes
29. Where/ how did you get your information
    a. I already know about malaria
30. How do you treat malaria cases
    a. I buy drugs from the chemist
31. Do you take malaria cases to hospital
    a. Yes, when the drugs from the chemist don't work
32. What do pregnant women take for malaria
    a. They take the same drugs as everyone else
33. How far are you to a health centre
    a. It is close to my home
34. Do you use bed-nets, why?
    a. No, I wasn't given any
35. Are you aware of any malaria drugs? name them
    a. They are just malaria drugs. Whenever I ask, they give me some
36. Which organizations relate with you on malaria?
    a. People from the local government
37. What did you learn from them
    a. They spray our houses sometimes
38. Is there any behavior change you acquired from meeting them
    a. No.
39. What do you now do differently as a result of your contact with the officials

a. Why should I have any change because they come to spray my home?

40. What would you prefer they do to you when next they come?
    a. I would like them to help us spray the community more regularly.
41. How involved were you when they visit?
    a. No. I gave them permission and they sprayed my house
42. Were your opinions sought as to how best to curb malaria
    a. I don't remember that happening.
43. Does your community perform self-help activities in your locality?
    a. sometimes
44. Did you offer free advice to the officials
    a. They didn't ask
45. What would you have suggested to the officials in the fight against malaria?
    They should spray the community more.

Name: **Ubale Tukur**

24. Age: 29
25. Address: Kumbotso village
26. What do you know about malaria?
    a. Malaria affects the whole community. It kills especially children
27. What causes it?
    a. It is caused by mosquitoes.
28. How do you prevent it?
    a. Protecting myself using orange peels and coils
29. Where/ how did you get your information
    a. Through the radio
30. How do you treat malaria cases
    a. We have a chemist in the village
31. Do you take malaria cases to hospital
    a. When it is serious
32. What do pregnant women take for malaria
    a. I don't know the name of the drug
33. How far are you to a health centre
    a. It is close to my place
34. Do you use bed-nets, why?
    a. Yes, they gave my wife twice, so we use one and the boys use one
35. Are you aware of any malaria drugs? name them
    a. Paracetamol and others
36. Which organizations relate with you on malaria?
    a. The local government people
37. What did you learn from them
    a. They spray our community

38. Is there any behavior change you acquired from meeting them
    a. No.
39. What do you now do differently as a result of your contact with the officials
    a. After the visit, I continue to keep my house clean
40. What would you prefer they do to you when next they come?
    a. They should spray the community more regularly.
41. How involved were you when they visit?
    a. Yes. When last they came we all did sanitation in our houses.
42. Were your opinions sought as to how best to curb malaria
    a. no
43. Does your community perform self-help activities in your locality?
    a. yes, but not always
44. Did you offer free advice to the officials
    a. They are the professionals
45. What would you have suggested to the officials in the fight against malaria?
    Nothing.