

MALARIA CONTROL IN NIGERIA. WHAT ROLE CAN STRATEGIC COMMUNICATION PLAY?

BY CHUKWUOCHA, U.M., NWANKWO B.O., AMADI, A.N., ABANOBI O.C., NWOKW E.A., DOZIE I.N., NWOKE B.E., UKAGA C.N., ONWULIRI C.O.

1. Department of Public Health Technology, Federal University of Technology, Owerri, Imo State Nigeria.
2. Department of Microbiology, Imo State University, Owerri, Imo State, Nigeria.
3. Department of Animal and Environmental Biology, Imo State University, Owerri, Imo State, Nigeria.
4. Department of Biotechnology, Federal University of Technology, Owerri, Imo State Nigeria.

Abstract

The Abuja Declaration was signed by 50 Malaria - afflicted countries in April, 2000 and agreed to achieve the following targets by 2005;

- *60% of those suffering from malaria will have prompt access to appropriate and affordable treatment within 24 hours of onset of symptoms.*
- *60% of pregnant women and children under five will sleep under insecticide treated nets or use other appropriate and affordable means of protection from malaria.*
- *60% of pregnant women at risk of malaria, especially those in their first pregnancies, will access preventive intermittent treatment.*

Since then, the Roll Back Malaria (RBM) partnership has focused attention on resource mobilization, policy change, research, and health system strengthening. Up till date no significant success have been achieved. Relatively, less attention being paid to malaria communication may be a reason for this failure. Yet there is general agreement that, if the Abuja targets are to be met, communication is key. This article summarizes some of the communication challenges RBM has experienced in Nigeria and poses some ways in which strategic communication can help propel the country closer to the Abuja targets.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is essential for the proper management of the organization's finances and for ensuring compliance with applicable laws and regulations.

2. The second part of the document outlines the specific procedures that must be followed when recording transactions. This includes the requirement that all entries be supported by appropriate documentation, such as invoices, receipts, and contracts.

3. The third part of the document discusses the role of the accounting department in ensuring the accuracy and integrity of the financial records. It notes that the department is responsible for reviewing all transactions and for identifying any discrepancies or errors.

4. The fourth part of the document discusses the importance of maintaining the confidentiality of financial information. It notes that this information is often sensitive and that its disclosure could have significant negative consequences for the organization.

5. The fifth part of the document discusses the importance of regular audits of the financial records. It notes that these audits are essential for identifying any weaknesses in the internal control system and for ensuring that the records are accurate and complete.

6. The sixth part of the document discusses the importance of maintaining up-to-date financial statements. It notes that these statements are essential for providing a clear and accurate picture of the organization's financial performance to management and to external stakeholders.

7. The seventh part of the document discusses the importance of maintaining accurate records of all assets and liabilities. It notes that this is essential for ensuring that the organization's balance sheet is accurate and for identifying any potential risks to the organization's financial stability.

8. The eighth part of the document discusses the importance of maintaining accurate records of all income and expenses. It notes that this is essential for ensuring that the organization's profit and loss statement is accurate and for identifying any areas where costs can be reduced.

9. The ninth part of the document discusses the importance of maintaining accurate records of all tax payments. It notes that this is essential for ensuring that the organization is in compliance with applicable tax laws and for avoiding any penalties or interest charges.

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Introduction

Malaria is endemic to the poorest countries in the world, causing 400 to 900 million clinical cases and up to 2.7 million deaths each year (Breman, 2001). More than 90% of malaria deaths occur in sub-Saharan Africa, resulting in an estimated 3,000 deaths each day. Almost all the deaths are among children younger than 5. Other high-risk groups include women during pregnancy, non-immune travellers, refugees and other displaced persons, and people of all ages living in areas of unstable malaria transmission (WHO & UNICEF, 2003). In Nigeria, 50% of the population are thought to have at least one malaria attack yearly. A recent review shows an average of 35% malaria point prevalence in children under five years derived from country wide malaria surveys (NPC, 2005). The National Demographic and Health Survey of 2002 also concluded that malaria represents 20% of all hospital admissions with a case fatality rate of 18% attributed mainly to children and pregnant women (NPC 2002).

In highly endemic countries like Nigeria, malaria poses a serious danger to pregnant women and their unborn children. Malaria in pregnancy causes

maternal anemia, miscarriage, and low birth weight. In endemic countries, it is the leading cause of maternal mortality and one of the primary causes of neonatal deaths (Breman et al, 2001; WHO & UNICEF, 2003).

Malaria is caused by infection with one of four species of *Plasmodium*: *Plasmodium falciparum*, *P.vivax*, *P.ovale* and *P.malariae*. *Plasmodium falciparum* causes the most serious disease and is responsible for over 95% of infections in sub-Saharan Africa (Brinkman U. 1999). Malaria parasites are transmitted through the bite of an infected *Anopheles* mosquito. Malarious mosquitoes bite between sunset and sunrise, usually during the night (Brawster and Greenwood, 2003).

Over the last two decades, morbidity and mortality from malaria have been increasing due to deteriorating health systems, growing drug and insecticide resistance, periodic changes in weather patterns, civil unrest, human migration, and population displacement (WHO & UNICEF, 2003). In Nigeria communication gap has added to this trend.

The Four RBM Strategies

Roll Back Malaria (RBM) recommends four strategies to reduce malaria morbidity and mortality (RBM website):

1. **Rapid, effective treatment of persons with malaria at home or in a health facility within 24 hours of onset of symptoms:** As 60% to 80% of malaria cases are treated in the community, efforts focus on ensuring that correct treatment is available at or near the home, through commercial drug vendors or community based drug distributors.
2. **Widespread use of insecticide-treated nets (ITNs) to limit human-mosquito contact:** In areas of sub-Saharan Africa with high levels of malaria transmission, regular use of an insecticide-treated bednet can reduce mortality in children less than 5 years of age by as much as 30% and has a significant impact on anemia. Similar or greater benefits have been achieved for pregnant women and in other regions.
3. **Prevention of malaria in pregnant women living in high transmission areas:** In areas in

which malaria is highly endemic, the incidence of low birth-weight (a leading cause of neonatal mortality) can be reduced by as much as half through use of intermittent preventive treatment (IPT) with drugs such as sulfadoxine-pyrimethamine (SP).

4. **Detection and appropriate response to epidemics within two weeks of onset:** Detection of epidemics requires timely, complete surveillance of malaria cases and monitoring of weather patterns. Reserve drug stocks, transport, and hospital capacity are needed to mount an appropriate response. In some epidemic zones, well-timed and targeted vector control activities have minimized the impact of epidemics.

RBM Communication Challenges

Strategically designed communication can play a key role in taking RBM to scale. Communication strategies are generally called for whenever there is a need to change awareness, knowledge, attitudes, social norms, skills or expectations (Shutell et al, 2003). Certainly, the RBM strategies call for all of these.

Experience in Nigeria, where malaria communication has typically lagged behind other RBM efforts, highlights communication challenges at individual, family, community, health delivery and policy levels (Shutell et al 2003). Some of the common communication challenges experienced in Nigeria are described below. While many of these challenges could be partially answered through other types of interventions - service, delivery, policy, monitoring and evaluation: or systems strengthening - all demand a communication response. Challenges are presented for each of the four RBM strategies; as well as a few that cut across all four strategies. These are outlined by Nchinda (2004) as follows:

1. Rapid, effective treatment of persons with malaria at home or in a health facility within 24 hours of onset of symptoms.

* *Poor symptom recognition - a knowledge and skills gap among child care-takers particularly in young, care takers sometimes have difficulty recognizing fever. Symptoms of complicated malaria such as convulsions and coma often are not associated with malaria, and malaria*

treatment may be withheld for children with these signs.

* *Complacency about malaria - a problem of public attitudes: In endemic areas, people get malaria several times each year and usually recover. Sometimes, with mild cases of malaria, fevers resolve without any treatment. As a consequence, parents often delay giving anti-malarials or seeking treatment from health facilities when their children have fever.*

* *Self-medication and poor treatment compliance - an issue of client and provider knowledge and skills: Malaria is often treated at home with herbs attacks of malaria. Sometimes, health workers and patent drug vendors treat patients with incorrect dosages or inappropriate drugs. In other cases, clients share their medicine with other family members, give the wrong dosages at the wrong times, or discontinue medication when they begin feeling better. Most often, clients do not know the appropriate medicines and dosages to request from vendors.*

* **Outdated malaria treatment guidelines - an advocacy issue:** Despite growing resistance to chloroquine, policy makers in a number of African countries have not yet revised drug treatment policies for a variety of reasons.

* **Poor regulation and quality of antimalarial drugs in private sector-an advocacy and information issue:** In many developing countries, patent medicine vendors sell recommended anti-malarials under a variety of brand names with varying efficacy. In some place, fake anti-malarial drugs are manufactured and sold. Clients and vendors have no way of knowing which brand names are effective and which are not. For example, Kenya only a handful of the SP brands sold over the counter meet government quality standards; but drug sellers and consumers do not have easy access to this manufacture and sale of ineffective brands.

* **Changes in drug policies - an information, attitude and skill issues:** To combat growing drug

resistance, many countries are changing their malaria treatment policies. All cadres of health workers (including policy makers), patent drug vendors, and clients need to be informed of new policies, and reassured of the safety, effectiveness and rationale for the change. As with the introduction of any new drug, rumours and misconceptions can develop in the absence of information and education.

2. **Widespread use of insecticide-treated nets (ITNs) to limit human mosquito contact.**

* **Knowledge of malaria transmission - an issue for education and information:** Although most people know that malaria is spread through mosquitoes, many also believe that malaria can be transmitted in other ways. In many African countries, people believe that malaria can be spread by drinking dirty water, living in unclean surroundings, exposure to sun, witchcraft, or eating certain foods. Consequently, they do not believe they can prevent malaria by avoiding mosquito bites.

- *Complacency about malaria - a problem of public attitudes and information:* As discussed earlier, malaria is not considered a serious or deadly disease by many living endemic areas. Thus, the perceived disadvantages of sleeping under an ITN outweigh the perceived benefit of preventing malaria.
- *Poor uptake of insecticide treated bednets - a need for changes in care-taker and provider knowledge and attitudes, and community norms:* The use of ITNs available or the host is considered too expensive. Many people also think that sleeping under a net will be uncomfortable - they will be too hot and will have difficulties breathing. Others worry that the insecticide could be harmful, especially for babies and pregnant women. Many people, including some health workers and opinion leaders, are concerned about the safety of insecticides and are not convinced that ITNs are an effective or feasible way to prevent malaria.
- *Treating and retreating mosquito nets - a problem of public information and skills:* Less than half of the mosquito nets used in Africa have been treated with insecticides. Many people are unaware of the need for insecticide treatment. Few know how to treat their nets, how often to treat them, or where to get insecticides for treatment.
- *Preference for environmental vector control measures - a problem of public and provider attitudes and knowledge:* For years health workers have been educating communities to clear bushes and drain standing water for malaria prevention. Many health workers, opinion leaders and community members prefer these often ineffective practices to sleeping under ITNs.
- *Usage least likely among the most vulnerable - a need for changes in attitudes and knowledge:* In many countries, urban-dwellers and higher income men are most likely to sleep under ITNs. Pregnant women, children under five years of age, and the rural poor are less likely, although they are more vulnerable to malaria.
- *Ineffective advocacy for policy changes by Malaria Control Programmes in Ministries of*

Health - an issue for advocacy and attitude change: To make ITNs more affordable, governments should reduce tariffs and taxes on importation. Unfortunately, malaria control Programmes often sit far down in the Ministry of Health hierarchy and do not have the clout or authority to advocate effectively for such policy changes or ensure that the government enacts new policies once agreed upon.

3. Prevention of malaria in pregnant women living in high transmission areas

* ***IPT is standard policy in only a few countries - a need for advocacy:*** There is no policy in Nigeria for IPT during pregnancy. Therefore, policy makers need to seriously consider the impact of malaria in pregnancy and the benefits and feasibility of IPT.

* **Malaria control interventions for pregnant women need to be embedded in antenatal care:** To effectively promote IPT and ITN use among pregnant women, Malaria Control Programmes need to work in close

collaboration. Antenatal care needs to include client education about malaria; and women need to be encouraged to attend antenatal care early during pregnancy.

* ***Worries about the safety of SP during pregnancy - an issue of knowledge and attitudes:*** In many places, health workers as well as pregnant women are concerned that SP and the insecticides used to treat mosquito nets may harm the woman or her baby.

* ***Poor appreciation of the rationale for IPT - a problem of information and attitudes:*** Policy makers, health workers and clients often do not understand why pregnant women should take SP when they have no symptoms of malaria. Few know that malaria can be asymptomatic; so IPT is sometimes viewed as a waste of medicine that could be better used to treat people who are sick.

4. Detection and appropriate response to epidemics within two weeks of onset.

- * **Over-reporting of epidemics - an advocacy issue:** Reports of epidemics are sometimes not properly investigated before responses are initiated, leading to unnecessary wastage of human and material resources. Often, the decision to report epidemics is politically motivated and made without advise from Malaria Control Programmes.
 - * **Need for rapid dissemination of information:** Health workers, community leaders, and the general public need to be notified immediately of malaria epidemics, how to prevent malaria, symptom recognition, and how to treat it appropriately.
 - * **Community involvement:** In some epidemic-prone areas, indoor residual spraying is initiated to prevent outbreaks. To successfully cover the requisite 80% of households, community leaders need to understand, support and advocate for the exercise among community members.
- 5. Cross-cutting challenges**
- ❖ **Ineffective advocacy and communication skills among**

Malaria Control Programmes: Although malaria programmes are generally well-funded, they are sometimes buried deep inside Ministry of Health bureaucracies, with little direct influence over policies and strategic decisions which could improve the control of malaria (eg. Home management, prepackaged drugs, treatment guidelines, ITNs, IPT, etc.

❖ **Often conflicting information and advice about malaria provided through other health programmes:** Malaria communication efforts need to be integrated with reproductive, maternal and child health programmes, with environmental, school, and community health programmes, and with commercial manufacturers and importers of nets, insecticides and drugs. Key messages, information and communication strategies to support malaria initiatives, policies and guidelines are best developed and implemented in partnership with a variety of public and private stakeholders. Unfortunately, true collaboration

and partnership is often hindered by competition and mistrust.

- ❖ **Low status and poor appreciation for health communication among malaria experts:** Most Malaria Control Programmes (MCPs) are managed by doctors with little or no training in communication. Usually, the health educators posted to MCPs are not doctors and are considered junior to other medical staff. As a result, health educators are often too low in status to effectively coordinate and mobilize support for national malaria communication strategies.
- ❖ **Strategic communication requires time and resource allocation:** Often, communication planning begins after other malaria interventions are advanced. In many cases, Malaria Control Programmes budget inadequate time and financial, human and material resources for malaria communication.
- ❖ **Malaria communication is rarely evaluated:** Very few studies have looked at the impact of various malaria communication strategies. Thus there is little evidence showing that communication can

effectively influence malaria practices. There is also little known about the relative effectiveness of various communication strategies on malaria control.

The Role of Communication in Malaria Control

To meet the Abuja RBM targets, communication needs to be fully integrated into the broad spectrum of malaria interventions and not seen as an isolated intervention, an after-thought or add-on. With adequate time and resources, strategically designed communication can play an important role in scaling up prevention and control efforts at the individual/household, community, health delivery, decentralized and national levels.

According to Sachs (1999) Malaria communication should be integrated with other health education and communication efforts. Malaria control programmes need to balance malaria-focused and integrated communication approaches. For example, after initial introduction through focused communications, malaria control in pregnancy should become an integral part of reproductive and maternal

health communication. Likewise, information and education about home management of malaria in children should become part of integrated management of childhood illnesses (IMCI) communication (Snow and Marsh 2001).

Communication efforts should be strategically designed from an audience perspective to address the social and contextual environment as well as individual behaviours and knowledge. The coordinated use of interpersonal communication, community mobilization, advocacy and mass media have been effective in a variety of other public health agendas. Integrating strategic communication approaches and service delivery can enhance utilization of services and improve client compliance.

In fact, the integration of community based distribution of anti-malarials and malaria information and education has been documented to reduce under-five mortality by 41 % in one Ethiopian programme (Marsh & Kachur, 2002; WHO & UNICEF, 2003).

As with HIV/AIDS, malaria communication will be more effective when a multi-sectoral approach is

adopted. Labour, agriculture, education, and gender are all affected by and can play significant roles in malaria control. For example, in places such as Kenya where most school children purchase their own drugs for treatment of fevers, schools present an excellent venue for teaching children about appropriate and effective malaria treatment (Marsh and Kachur, 2002). Likewise, in Nigeria, where workers miss an estimated 42 work days each year due to malaria, employers often welcome workplace prevention programmes (NLC, 2002).

Communication is essential to advocacy, communicating policy changes, home based management, improving the quality of health care, creating demand for malaria services and products, changing household practices, and mobilizing communities for malaria control.

Advocating for Malaria Prevention and Control

Particularly in the areas of malaria in pregnancy, home management, drug policy, epidemic-preparedness and prevention, there is need in Nigeria to introduce policies and programs that are technically sound and feasible. In order to do this, it is essential to reach out to policy makers and other influential

people and win their active support for RBM-recommended malaria control strategies. This will require evidence-based and compelling arguments that speak to the interests, concerns and needs of this unique audience.

Effective advocacy among influential individuals and groups can also help address some of the underlying societal and environmental factors that influence individuals' ability to take action, either in terms of prevention or treatment (eg. Exempting ITNs from import taxes; reclassifying anti-malarial drugs so they can be legally dispensed by patent drug vendors and community based workers; and organizing rotating funds for purchasing ITNs, Sachs 1999).

Religious, health, political, commercial, traditional and community leaders, through their positions of power and respect, can make malaria a public issue and support recommended prevention and control practices, helping to overcome barriers to adoption, acting as role models, and changing community-norms around treatment seeking and prevention. Advocacy efforts can equip these influential individuals with malaria information and create opportunities for them to address their constituencies,

whether through mass media or group forums (Campbell 2006).

Carefully planned advocacy campaigns can help to make Malaria Control Programmes more effective in the country. Through advocacy, the Federal and State Ministries of Health reposition Malaria' Control Programmes so they are better able to influence policy, provide effective guidance for malaria control strategies, and monitor and evaluate implementation. Within Malaria Control Programmes, advocacy can convince medical experts of the need for strategic communication, appreciation for the communication process, can improve time and resource allocations for malaria communication, and can improve the status of health educators (Campbell, 2006).

Communicating Policy Changes

In this era where many countries are adopting new malaria treatment policies, Nigeria should not be left out. New guidelines need to be communicated to health providers and drug vendors in both the formal and informal sectors (Sachs 1999). The public also needs to be informed and educated about changes in malaria treatment policies,

thus preventing public fears and backlash against new anti-malarial drugs (Elema 2001). Well developed communication strategies can also improve acceptance of and compliance with drug regimens, systems, private sector and community (Elema 2001).

Information, education and communication for health providers clients and influencers is also essential to effectively introduce new initiatives such as home management by community based providers or patent drug vendors, and IPT for antenatal clients (Fulan and Gernard, 2004)

Improving the Quality of Client-Provider Interactions

Equipping providers - facility, community-based, and non-formal vendors with interpersonal communication skills and malaria information so they can effectively interact with their clients is essential (Elema, 2001). Too often, providers lack guidelines and other job aids, client education materials, and/or the interpersonal skills to do this. While logistics and technical training and supervision are essential ingredients to the safe and effective delivery of malaria related services, so are the communication tools that support service

delivery (Fulan and Gernard, 2004). It is through effective communication that service providers can best influence treatment compliance and effectiveness.

Communication programs can also contribute to a reduction in anti-malarial drug resistance by changing health workers' and drug vendors prescription practices (Campbell 2006). This may entail short orientation courses for health workers and simple job aids that serve as reminders of treatment schedules for various age groups.

Creating Demand for Malaria Services and Products

Providing malaria treatment through community based providers and selling subsidized ITNs through a voucher system will not automatically increase appropriate treatment or ITN use unless such initiatives are coupled with active communication (Brinkmann et al, 1998). This may take the form of branding and media promotion; referrals through health services; community mobilization activities; or a combination of the three. Demand creation involves more than informing people about products or services. It involves understanding the audience's socio-psychological environment and designing messages and

materials that inform, educate and motivate audiences within the context (Fulan and Gerard, 2006).

Changing Household Practices

Communication through a variety of channels is the best way to change individual and community attitudes and practices that act as barriers to effective malaria control. Through multi-channel communication, including interpersonal, community, electronic and print media, malaria programs can according to Brinkman, (1999).

- Create a sense of urgency among parents and guardians about fevers in under-five year olds so that appropriate treatment is initiated within 24 hours.
- Prepare parents and guardians of young children to recognize and treat fevers promptly and correctly at home.
- Make IPT during pregnancy a normal and safe practice.
- Convince the public of the safety of ITNs for children and pregnant women.

Mobilizing Communities for Malaria Control

By stimulating community dialogue about malaria, communities can assess their own

malaria situation and come up with relevant solutions. Communities can be mobilized to establish drug revolving funds; to organize periodic net re-treatment; to organize transportation for children with complicated malaria; and to select community members for training as drug distributors (Bremann et al 2001). Through community education and dialogue, ITN use, IPT, and immediate appropriate treatment of malaria can become social norms (Vudule, 1996). Communities can also take a more active role in regulating the activities of service providers, whether community-based volunteers, non-formal vendors, or health workers.

Conclusion

Communication gap has contributed significantly to the failure in delivering the RBM objectives in Nigeria. This is evident in the ineffective planning, implementing, monitoring and evaluation of interventions as well as non-compliance to control strategies. Community level communication can engage the most vulnerable people in strategies to prevent and treat malaria.

Effective communication activities should combine appropriate local channels of communication (both interpersonal and

media). Choice of terminology is also critical in developing effective communication intervention in malaria control that relate to local people. Participatory communication strategies should be incorporated in every malaria control effort in the country no matter the cost. The cost of controlling malaria, as expensive as it may be cannot outweigh the benefits when morbidity, mortality, pain and suffering and the economic consequences of malaria are taken into consideration.

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