



Promoting Quality Malaria Medicines through SBCC

Lessons Learned and Considerations Moving Forward

September 2017



INTRODUCTION

The global community has made great strides in reducing morbidity and mortality in recent years—with the World Health Organization (WHO) reporting a 37 percent global decrease in malaria incidence and a 60 percent global decrease in malaria deaths between 2000 and 2015. Sustained funding and scale up of case management programs and commodities have contributed to this progress by increasing knowledge, attitudes and behaviors around three crucial interventions: testing with rapid diagnostic tests, demanding artemisinin-based combination therapy (ACT) as the first-line treatment and taking the full dose of treatment.

Impeding these efforts, however, is the continued availability and use of poor quality antimalarials.

Substandard, spurious, falsely-labeled, falsified and counterfeit (or SSFFC) antimalarials, for differing reasons, do not include enough active ingredient to treat the disease. This can not only result in treatment failure and death, but also waste health resources, create distrust in the healthcare system and contribute to growing levels of artemisinin resistance.

SSFFC medicines tend to fall into three categories (Kaur, et al., 2016):

- **Substandard:** Medicine that does not contain enough active ingredient due to unintentional errors caused in manufacturing.
- **Falsified:** Medicine that does not contain enough or any active ingredient due to intentional fraudulent manufacturing; it may carry a false reputation of its source or identity.
- **Degraded:** Medicine that does not contain enough active ingredient due to poor conditions, such as storage environments, handling or transportation (light, heat, humidity, etc.), weakening the original quantity. Stolen or diverted medicine is at risk of becoming degraded.

Antimalarial constitute the bulk of all SSFFC medicines—53 percent of substandard and 93 percent of falsified medicines (Hajjou, et al., 2015). It is estimated that SSFFC antimalarials were associated with 122,350 deaths in children under five years old among 39 sub-Saharan African countries (Renschler, et al., 2015).

Several global and national initiatives are working to address poor quality medicines, including regulation, supply chain and law enforcement system strengthening programs. However, such initiatives take time and consumers need more immediate protection against unsafe malaria medicines.

In response, the Health Communication Capacity Collaborative (HC3) partnered with the U.S President's Malaria Initiative (PMI) to create a global initiative focused on using social and behavior change communication (SBCC) to address the dangers posed by SSFFC antimalarial medicines and promote positive behaviors that will protect the public. As part of the initiative, HC3 developed an online **Promoting Quality Malaria Medicines through SBCC Implementation Kit** (I-Kit) to provide guidance to local stakeholders and program managers who are interested in designing and implementing targeted SBCC campaigns to respond to their specific medicine issue.

When this initiative began in 2015, HC3 conducted a literature review and held a global stakeholder meeting to learn how global and national projects had used SBCC to address SSFFC malaria medicines. The process revealed very few examples of evidence-based, strategically produced and evaluated SBCC activities upon which to base guidance. To fill this gap, HC3 worked with national malaria control programs and implementing partners on two demonstration projects in different malaria medicine environments: 1) a local SBCC campaign in Akwa Ibom, Nigeria and 2) a national campaign plan in Malawi. HC3's involvement in these campaigns has been incorporated into the I-Kit and lessons learned are documented in this brief.

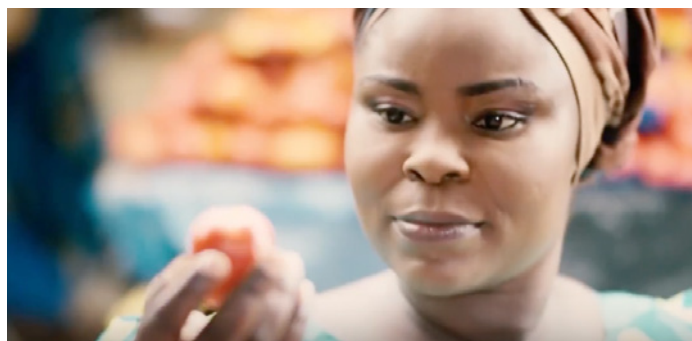
AKWA IBOM'S GOOD QUALITY MALARIA MEDICINES CAMPAIGN

With its large population of almost 170 million, an estimated 100 million malaria cases per year and weak in-country production of essential medicines, Nigeria is a target for SSFFC antimalarials. Consumers drive their availability and use by self-diagnosing fevers as malaria and buying medicines from patent and proprietary medicine vendors (PPMVs) and open drug markets.

The National Agency for Food and Drug Administration and Control (NAFDAC) is leading efforts to combat SSFFC malaria medicines through various activities, including: conducting routine drug quality assessments, ensuring that donated ACTs are procured through pre-approved vendors and launching a national hotline that lets the public anonymously report suspected medicines. NAFDAC also created the Mobile Authentication System (MAS), which lets consumers verify the quality of their medicine by texting a number found under a scratchpad on the medicine packet. However, a 2015 survey conducted by HC3 found that very few people knew how to verify the quality of their medicine and no one mentioned the MAS scratchpad. One key informant said that only about 17 percent of customers who buy Lonart® packets use the MAS scratchpad.

HC3 assisted the Nigeria Federal Ministry of Health's National Malaria Elimination Program and NAFDAC in designing an SBCC campaign aimed at protecting Nigerians from poor quality malaria medicines. The **Good Quality Malaria Medicines Campaign** was implemented and evaluated in Akwa Ibom State over a five-month period from April through August, 2016.

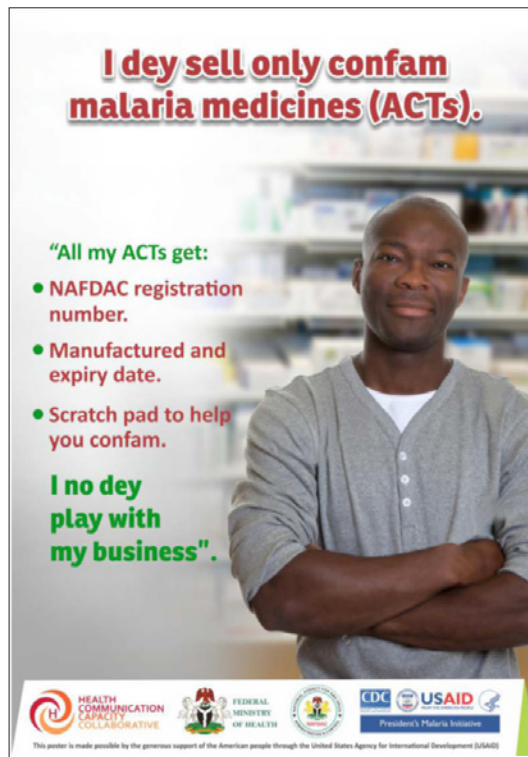
During a strategy design workshop, stakeholders identified three priority audiences: 1) consumers of malaria medicine, 2) PPMVs, and 3) decision-makers and leaders.



Screenshot of TV spot encouraging people to examine their medicine before purchasing it, as they do with their produce.

The campaign used several channels to reach these audiences, including trainings for journalists, PPMVs and community volunteers; two 60-second radio spots and one 60-second television spot; a booklet for consumers explaining what they should do to reduce their risk of buying SSFFC antimalarials; posters and stickers for PPMVs and pharmacists to display in their shops; and a fact sheet on SSFFC malaria medicines to be distributed to policymakers. Messages were designed to raise knowledge about the dangers of poor quality medicine, encourage rational drug use and promote existing mechanisms to verify medicine quality.

HC3 evaluated the Good Quality Malaria Medicine campaign by analyzing data from a 2015 household survey and 2016 Metrobus® Survey, as well as conducting follow-up interviews with the trained PPMVs and community volunteers.



Poster describing how to use MAS scratchpad and sticker for PPMVs to advertise quality medicine sold at their shops.

Of the 1,027 men and women interviewed for the Metrobus® Survey, the majority of respondents (78 percent) had heard information about how to confirm the quality of antimalarial medicine in the past three months. Most people either strongly agreed (80 percent) or somewhat agreed (17 percent) that poor quality medicines could cause serious health complications. Many people knew ways to ensure or confirm that malaria medicines were of good quality, including scratching the MAS scratchpad (62 percent) and checking for a NAFDAC number (61 percent) or manufacture and expiry date (54 percent) on the packet.

Encouragingly, the majority (72 percent) indicated that they would do something differently the next time they needed antimalarial medicines, with most people saying they would use the MAS scratchpad. This was a significant improvement from the baseline, in which no respondents mentioned the scratchpad. The analysis revealed a strong dose-response relationship, so the more sources people were exposed to, the stronger their knowledge or intention to act.

The successes and lessons learned from this campaign were incorporated into the second demonstration project in Malawi.

MALAWI'S PROMOTING QUALITY MALARIA MEDICINES CAMPAIGN PLAN

Over the past five years, Malawi has identified several issues with the quality and availability of malaria medicine in the country and has been actively working to counter SSFFC malaria medicines through a variety of system strengthening activities. However, little has been done to improve consumer awareness. In 2016, PMI Malawi invited HC3 to assist the Ministry of Health in developing a communication campaign plan to address its malaria medicine issue.

Many people in Malawi get treatment for malaria in government health facilities, where artemether/lumefantrine (or LA) is free of charge and considered to be of good quality. However, it is also common for people to believe they can tell when they have malaria and self-treat from the informal, unregulated market. In addition, many people do not finish their full dose of medicine, saving doses for another time or person.

While Nigeria's primary poor quality antimalarial issue is substandard medicine, Malawi struggles with degraded medicine, caused by the widespread prevalence of good quality medicine being diverted from the regulated public sector and into the informal and private sector. Such theft not only weakens the supply chain, but also the effectiveness of the medicine, as the conditions under which diverted medicine is stored (heat, humidity, dampness, etc.) puts it at risk for deterioration. Social norms influence medicine theft, as petty corruption is normalized and very few people report suspected stolen medicine due to a culture of silence.

During a campaign planning workshop, stakeholders identified three target audiences for a future campaign: 1) consumers of malaria medicines, 2) health providers who treat patients for fever and malaria and 3) traditional and community leaders.

Much like the Akwa Ibom strategy, the Malawian campaign plan was designed to raise awareness about the issue of poor quality malaria medicines and promote rational drug use. The campaign aimed to inspire audiences to view medicine diversion as something greater than petty theft and encourage them to take action. The plan encouraged consumers to report stolen medicine and participate in community efforts aimed at monitoring public-sector medicines and preventing theft. After seeing the campaign, traditional leaders would be driven to lead efforts to increase accountability, and health providers would take steps to prevent and denounce pilferage. The Ministry of Health is currently seeking funding to implement the campaign.

More information about the Akwa Ibom and Malawian case studies may be found in the I-Kit at <https://sbccimplementationkits.org/quality-malaria-medicines>.



Malawian community in front of sign advertising that quality LA is free at the nearby health clinic.

LESSONS LEARNED

Throughout this work, HC3 identified several lessons and considerations for using SBCC to promote good quality malaria medicines, including:

- **Emphasize the presence of good quality medicine and calls to action.** The global community has been working for some time to generate demand for and use of ACTs. As such, it is important that SBCC messages focus on the availability of good quality medicines and the proactive steps that consumers can take to confirm medicine quality, so as not to cause distrust in the health care system and backtrack on the progress made. Programmers should only target audiences that are in a position to take action. Advocacy techniques should be used for actions beyond the audiences' control.
- **SBCC solutions vary depending on the type of poor quality malaria medicine.** The solutions to reduce the presence of substandard medicine may focus on strengthening manufacturer and border control oversight. Reducing the presence of medicine that is degraded due to diversion may require activities that strengthen the supply chain or legal systems. Formative research can help determine what the priority problem is.
- **Collaborating with diverse partners early in the program development process helps to build a comprehensive understanding of the situation and to identify gaps and opportunities.** Additionally, partnering with existing efforts can increase the sustainability and reduce the costs of SBCC activities. After implementing a targeted SBCC intervention, consider incorporating quality medicine messages into larger malaria case management or SBCC programs.
- **Develop programs around how populations are actually behaving—not just how they ideally behave.** Reviewing data from national surveys may help identify trends, but it can also leave knowledge gaps as questions are often based on best practices. Key informant interviews and observation may reveal how people are actually behaving.
- **Consider applying these lessons beyond malaria.** Quality medicine issues go beyond antimalarial medicines, as there are markets of SFFC medicines for other life-saving medicine and commodities (e.g., tuberculosis and HIV treatment and diagnostic tests). Consider incorporating these lessons learned into other health topics or into the larger health system. Make sure to document your efforts to expand on the growing body of evidence for SBCC addressing poor quality medicines.



A pharmacist examines available medicines in Malawi. © 2013 SC4CCM/JSI, Courtesy of Photoshare.

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