Malaria

CORE STORIES FROM THE FIELD

Bringing Down "Mosquito Fever"

How NGOs Promote Home-Based Treatment of Malarial Fever in Uganda

Malaria and Childhood Illness
NGO Secretariat (MACIS) / Uganda

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CORE

The **CORE Group,** a membership association of international nongovernmental organizations (NGOs) registered in the United States, promotes and improves the health and well being of children and women in developing countries through collaborative NGO action and learning. Collectively, its member organizations work in more than 140 countries, supporting health and development programs.

The **CORE Malaria Working Group** assists CORE member organizations and others to improve malaria prevention and case management programs through the following country-level activities: 1) establishment of NGO secretariats to enhance partnerships and collaborative action, 2) organization of workshops for learning and dissemination, and 3) documentation of innovative practices and lessons learned.

The Malaria and Childhood Illness NGO Secretariat **(MACIS)** was established with support from CORE in August 2003 to: 1) Establish and strengthen the coordinating mechanism for nongovernmental and community-based organizations to support the global Roll Back Malaria (RBM) campaign and Integrated Management of Childhood Illness (IMCI); 2) Mobilize additional resources to support partner activities; 3) Improve documentation and dissemination of best practices for scaling up IMCI/RBM initiatives; and 4) Improve coordination between the Ministry of Health, districts and NGOs through improved communication among stakeholders. For more information, contact MACIS Coordinator Enid Wamani at e-mail: enidngosec@africaonline.co.ug.

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Acronyms and Terms

AMREF	African Medical and Research Foundation
IMCI	Integrated Management of Childhood Illness
IPT	intermittent presumptive treatment
ITN	insecticide-treated bed net
MACIS	Malaria and Childhood Illness NGO Secretariat
NGO	nongovernmental organization
RBM	Roll Back Malaria
UMPP	Uganda Malaria Partnership Programme
WHO	World Health Organization

Introduction

Malaria kills more children than any other disease in Uganda.[1] Early, effective treatment is critical if this situation is to be reversed, but fewer than half of Ugandans live within five kilometers of a formal health care facility.[2] Up to 80% of Ugandans treat malaria at home, but often with inappropriate drugs or incomplete dosages.[1,2] Others seek treatment from traditional healers. The consequences of delaying effective treatment can be death, disability, and drug resistance.[3]

Home-based management of fever due to malaria is a simple and effective response to this problem. It teaches mothers to identify the signs and symptoms of malaria and provides them with easy access to appropriate drugs. In Uganda, pre-packaged antimalarial medications are made available through volunteer drug distributors. Each packet of drugs, called a "Homapak," contains enough chloroquine and sulfadoxine-pyrimethamine to treat one episode of malaria in a child five years old or under.

Training mothers to treat childhood fevers with antimalarial medications reduced under-five mortality by 40% in Ethiopia. In Burkina Faso, early home treatment of malaria with pre-packaged drugs decreased severe malaria morbidity in children by 53%. On Africa Malaria Day in April 2002, Uganda became the first country to implement a large-scale program for home-based management of malarial fever.[4] This is currently the nation's official malaria treatment policy.

CORE's Uganda Secretariat

The Malaria and Childhood Illness NGO Secretariat (MACIS) was established with support from the CORE Group to strengthen coordination among nongovernmental organizations (NGOs) in Uganda and improve collaboration among these organizations, community-based agencies, and the Ministry of Health. MACIS is composed of CORE-affiliated NGOs* and other key players in Roll Back Malaria** and Integrated Management of Childhood Illness (IMCI) activities in Uganda.

Three member organizations — African Medical and Research Foundation (AMREF)/Uganda, Uganda Red Cross Society, and Africare Uganda — work with the Ministry of Health through the Uganda Malaria Partnership Programme (UMPP) to promote home-based treatment of malarial fever for children, intermittent presumptive treatment (IPT)

* NGOs under the MACIS umbrella include the Adventist Development and Relief Agency International, Africare, African Medical and Research Foundation, CARE, Christian Children's Fund, Minnesota International Health Volunteers, PLAN International, Population Services International, and World Vision. MACIS partners include Makerere University, Uganda Red Cross, United Nations Children's Fund (UNICEF), and the World Health Organization.

** Roll Back Malaria (RBM) is a global effort to halve the world's malaria burden by 2010. The RBM partnership includes the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), national governments, non-governmental organizations, research institutions and the private sector.

for pregnant women,*** and the use of insecticide-treated bed nets (ITNs) in three districts. The three programs reach approximately 163,000 children under age five.

This document is the result of a 14-day qualitative methods and "field story" writing workshop sponsored by MACIS in May 2004. Workshop participants — including staff members of the Adventist Development and Relief Agency International, Africare, AMREF, Christian Children's Fund, Minnesota International Health Volunteers, THETA, Uganda Red Cross Society, and World Vision — sought to answer a number of questions surrounding home-based treatment of malarial fever that are not routinely documented by NGOs or academic journals. These questions included:

- What happens when home-based management of malarial fever is implemented under real-life conditions, with few resources, communication outages, and low levels of training, in communities where annual per capita government expenditures on health are less than the cost of one dose of a new vaccine or an insecticide-treated mosquito net?
- Under such conditions, can home-based care truly increase access to prompt and appropriate treatment for children?
- Are parents actually learning to identify malaria in their children and promptly seeking medication from their local drug distributor?
- Are children with severe forms of the illness being referred to trained professionals?

As part of the workshop, MACIS members traveled to Kiboga District in central Uganda to interview and observe parents, volunteer drug distributors, traditional healers, outreach workers, government officials, and health center personnel. The group took extensive field notes and translated those notes into the journalistic story presented here. Though much of the story focuses on the work of AMREF in Kiboga, it is also representative of Africare's work in Kanungu district and the Uganda Red Cross Society's work in Kumi district.

*** The World Health Organization (WHO) promotes IPT and the use of ITNs as the best ways to prevent and control malaria in pregnant women. WHO suggests that women in areas of stable malaria transmission be given sulfadoxine-pyrimethamine at each antenatal care visit (but no more than once a month).

Fever Theories

Kiboga is located 120 kilometers northwest of Kampala, Uganda's capital, amid savannah grasslands and rolling hills. The majority of the district's inhabitants are subsistence farmers who grow bananas, tobacco, beans, maize, cassava, coffee, and beans. They also rear Ankole long-horned cows. The district was hard hit by war in the 1980s, but with peace its economy has grown rapidly.

Kiboga's residents subscribe to a great diversity of theories when considering the cause of illness, especially childhood fevers. Parents commonly speak of *omusujja gw'ensiri,* or mosquito fever, which is believed to be spread by mosquitos — a perception that is similar to the biomedical understanding of uncomplicated malaria. Another fever of importance is *"omusujja ogutalina nsonga,"* which means "fever with no cause." It can appear in many forms, including chills and rigors *(ekitengo)* and cerebral malaria *(akalogojjo)*. Many Ugandans believe this kind of fever is caused by ancestral spirits and people's misdeeds against them; the spirits decide the symptoms of each particular illness.

Convulsions *(yaabwe)* can be an outcome of "fever without cause" or have other supernatural etiologies. "Convulsions can attack suddenly when a child is playing," said one Ugandan father who took part in a focus group. "One moment he is fine, the next he is down sick. One should go a traditional healer for this." Delirium from cerebral malaria is also often attributed to supernatural causes.

Personally devised explanations of fever abound. "Delirium happens when the malaria parasites go up to the brain," explained one man. "People begin to speak things that are not understandable. Delirium gets people with small brains." As he said this, he put his two fists together to show the small size of the cerebrum at risk.

Others believe that convulsions and cerebral malaria may be caused either by spirits or mosquito fever. They say there is no clear dividing line on the cause of these complications. "I attended a number of patients that presented with convulsions and fever and never responded to the malaria treatment we provided," said a retired nurse. "One convulsing child really puzzled me. After some days on treatment with no change, her parents took her home. I later heard that she was given traditional medicine and she was improving." In this case, as in many, the successful treatment decided the diagnosis.[5]

This is not to say that skepticism concerning supernatural causes of illness is not common. Many in Kiboga district understand malaria and convulsions in biomedical terms. "If you have water behind your house," said a father in Gayaza, "mosquitoes hatch there and bite you. If I'm sick and it sucks my blood, then it will transmit malaria to another person that it will bite. They will come down with chills, muscle aches, and tiredness. When the disease is severe it can cause convulsions."

Within the same family one might find several different explanations for the same episode of childhood fever. How then do people decide on a course of action? According to one anthropological study on behaviors related to malaria, "Treatment strategies are often based more on the perceived effectiveness of a medication or treatment . . . than on a belief in their relationship to a specific cause of the illness. As symptoms alter, beliefs and explanations shift and alternate types of treatments are employed until an outcome (recovery or death) is reached."[6]

A Shift to Home-Based Care

Health workers complain that parents often "do nothing" during the initial stages of a child's episode of malaria. In Kiboga District, however, it appears that mothers are generally well attuned to their children's state of health. They provide treatment when a child is sick and look for signs that the illness had improved or worsened.

Parents might employ one or several strategies for a childhood fever. In addition to tepid sponging, people use a number of herbal remedies such as *Mululuza (veronica amydalina,* a bitter leaf), *Kigaji* (aloe vera) and *Makayi (aspila Africana)* to bring down a fever. They also use leftover drugs or purchase chloroquine and analgesics from corner shops, local drug stores, and itinerant vendors. These local outlets are often closer than the nearest health facility, have a more stable supply of drugs, and offer credit. They are also less likely to "talk down" to or scold their clients, as can happen in some public health facilities. However, such enterprises are profit-driven and are rarely monitored or supervised.

If there is no improvement within a day or two, or if the fevers or symptoms become more severe, parents seek help from a health care provider. They often go to the health facility for more severe fevers and vomiting. "People start out using herbs or buying tablets," said a retired nurse. "But sometimes this leads to a delay in going to the health center and it results in death with the child's eyes popping out. This is very common among children with convulsions because the parents keep thinking they have been possessed by spirits…and the problem is that we are never sure whether it is malaria or our grandparents causing us trouble."

For fevers closely associated with spirits, a person is bathed with water mixed with herbs. They recite phrases that ask the spirits to release the sick person and relieve him or her of suffering. This is most often done at a traditional healer's shrine, although at times a sick person may be directed to bathe in the wilderness, where the spirits reside. The practice is called *okunazibwa,* meaning "to be washed," or *okwambululwa,* "to be undressed of all evil." If the fever persists, it can raise concern among the sick person's entire clan; cleansing ceremonies are then called for. "People drink, dance, and sing to the spirits," said one woman from Gayaza. "In the process, the spirit speaks through one of us present and explains why a member of the community is ill."

The quest for therapy is often not as systematic as it appears from anecdotal evidence. Both biomedical practitioners and traditional healers may be consulted simultaneously. A number of factors can influence decisions on course of therapy. The costs of treatment and transportation are important considerations, as are the distance to the health center, the available supply of drugs, and rapport with health center staff.[7]

"One middle-aged man showed us a medicinal plant he normally uses with his family when fever attacks. It was Mululuza, which is widely used in many villages in Uganda to treat malaria fever. Many we spoke to reported positively about this herb. They say such remedies are widely used for first aid until daybreak comes, or until such a time when they have enough money to buy some tablets at the local store or go to a health center."

—Field notes from Gayaza

Convincing the Skeptics

Early treatment of malaria is critical. The disease progresses rapidly in children; most who die from malaria do so within 48 hours of onset of illness. Factors such as distance from the nearest health facility; economic constraints; intra-household decision making

processes; irregularity of the drug supply at health centers; the use of traditional remedies and healers; and lack of rapport with health workers can all delay treatment.[8]

The goal of home-based management of malarial fever is to overcome such delays and make treatment available within 24 hours of the onset of each episode. A study in Burkina Faso found that early treatment within the community reduced progression to severe malaria by 50%. The closer the source of effective treatment, the more likely it is that early treatment will succeed.[9]

In the past, health care providers have opposed home-based care out of fear that mothers might mismanage treatment. Some have even doubted that mothers could mix sugar, water, and salt together correctly to make oral rehydration solution for their children.[10] Whether mothers would comply with the complicated diagnosis and dosing schedule required for the proper treatment of malaria was seen as even more questionable. However, for the last three decades, primary health programs around the world have shown time and again that men and women with little or no formal education can learn to effectively treat and prevent a number of the major causes of childhood death and disability.

AMREF Uganda, Uganda Red Cross Society, and Africare Uganda currently support the efforts of three district health services through the UMPP to promote home-based treatment of malarial fever in children and IPT for pregnant women. These programs have shown that mothers can in fact learn to recognize the signs and symptoms of malaria and seek prompt and appropriate treatment.

Every participating community has at least two volunteer drug distributors trained to recognize the symptoms of malaria and provide appropriate drugs *free of charge* to children five and under. The ready availability of the volunteers is invaluable given the urgency of treating childhood malaria within 24 hours of onset. No family in Kiboga lives farther than two kilometers from their local drug distributor. The volunteers are available 24 hours a day, and the patients are usually served quickly. District health centers, on the other hand, are open only 5 days a week for a maximum of 7 hours a day; long waits are common.

Drug distributors give the child the first dose of the prepackaged medication (Homapak). They then explain to parents how to give the remaining tablets and tell them about possible side effects. They emphasize the importance of adherence to the specified course of treatment. This one-on-one health education is critical to the home treatment regiment. The best of the volunteers teach parents the signs and symptoms of severe malaria, how to manage body temperature through tepid sponging, and the importance of immediately seeking assistance for symptoms such as high temperatures and convulsions. They also discuss the need for referral if the child does not improve within 48 to 72 hours.

During the first months of the program, some in the community doubted village volunteers' capacity to treat malaria effectively. "Some people were skeptical and queried why the drugs were being distributed at home and not the health units," said one health center midwife. "There was one man who was very negative about the program. By some luck, his wife was selected as one of the drug distributors, so he had to calm down. Then there was a primary school teacher who undermined the drug distributors very much. Every time he came here to the health center I labored to convince him to begin with the drug distributor. Being a teacher he felt belittled getting medicine from a local woman."

Slowly, attitudes began to change. AMREF collaborated with the local health services to create awareness about the program's benefits and how to get and use the medications. Drama groups and video shows have been particularly effective; AMREF sponsors six drama groups in the sub-counties where it works. The groups spread awareness of the im-

We entered the drug shop and introduced ourselves to the attendant. He told us he also works as an assistant at the hospital. The shop was busy. People of all ages came in to buy drugs. Some had medical prescriptions. Others didn't. We ask him about self-medication for malaria. He said that most people come for fansidar, chloroquine, panadol, or quinine. He prescribes for those that wish this. We observed several people buying medicines according to the money they had. They only bought as many tablets as they could afford, instead of following the recommended dosage.

—Field notes from Kiboga town

A DRUG DISTRIBUTOR'S 'LUCKY HAND'

"The first thing I do is touch the child," said Hajati Zuena, a volunteer drug distributor. "I ask when the child got sick. If the fever isn't severe I take the first tablet from the packet, crush it, and mix it with some sugar to disguise the bitter taste."

"So you must have sugar all the time?" the interviewer from the Uganda Malaria Secretariat asked with a smile.

"I've been fortunate enough to be with some sugar all through," said Hajati, responding with a warm smile of her own. "I then give the mother the Homapak packet with the rest of the medication and explain to her how to use it."

"What do you do if the child has severe malaria?" asked the interviewer.

"I put a wet cloth on her face if the fever is very high. I then escort the family to the health unit where they can treat severe malaria. We were told not to [delay referring] such a child or one who has convulsed. At the health centre I explain the history of the child's illness—then the nurse can take over at that point."

"So you administer the first tablet and then give the mothers the packet. Do they complete the full course of the medication at home?"

"I go to their homes the next day to find out how the child slept, and I ask to see the drugs left to be sure that the dose is being followed. We are near our people and don't find trouble checking on them. In the evening I can meet her and ask, 'Mama, how is the child today?'"

"What happens if someone comes when you are out in the fields?"

"I stop whatever I am doing to see a child. We were trained to be handy even if they find you in the gardens. When I'm not available the other distributors can be found. But most of the time I am around."

"Do many people take advantage of this home-based care program?"

"They all do. The dramas have made us aware that malaria kills if we delay treatment. And the parents know that by using Homapak they save that 100 shillings which would have otherwise been spent on medicine, and can instead be used to buy akatunda [passion fruit juice] for the child."

"What are your feelings about the program?"

"Our children are healing with Homapak. The number being brought to the health center with severe malaria has dropped. The children we treat get cured. I want to assure you that for all the time I've been doing this I have not had a single death. I guess I have a lucky hand—and I thank God for that."

portance of early treatment, the availability of the drug distributors and IPT for pregnant women, and promote the use of ITNs. Two of the groups are composed of community members; four groups were organized through local schools. Health workers help the groups develop the educational content of their songs and dramas. "The shows and performances brought clarity to the people about the value of the Homapaks. Now drug distributors are being effectively utilized," said one mother from the Muwanga drama group.

Such a Show

A woman sings sadly. A man walks out before the audience carrying a large hoe. He raises the tool high into the air and brings it down into the rust-colored earth. He does this several more times, then pauses to wipe his brow. He looks up to the sky and past the people before him, pressed together on wooden benches.

"Benjamin," a woman calls as she approaches. "Benjamin, the baby has a high fever." She's clutching a baby doll wrapped in cloth to her chest.

"When I'm finished," he says, returning to work. After hoeing for a while more he sighs, stretches his arms, and says, "I need something for my dry throat." He simulates a long walk to the trading center where he sits down to drink with his friends.

Meanwhile, the mother goes to the local store to buy a few tablets for her child. She shows the child to the storekeeper. The storekeeper recommends chloroquine. The mother buys one tablet, and one tablet of an analgesic. This is all she can afford.

A day passes. The baby's fevers continue. "It's time to see Mr. Munobwa," the father announces. Mr. Munobwa is a traditional healer. The parents cross the dirt stage and call out for Mr. Munobwa. The healer comes out. He

"The drama groups go out to sensitize people. It's a very good job they're doing. Wouldn't you pay dearly for such a show in a cinema?"

—An AMREF program officer in Kiboga

looks at the baby and then the couple. "I have to consult the ancestors," he says solemnly. "Come back tomorrow with a chicken."

They return the next day with a chicken in hand. "With this your child will be well," says Mr. Munobwa as he takes the chicken. Mr. Munobwa simulates slaughtering the chicken and pouring its blood over the mother and child to wash away the evil that has beset them. He gives the mother herbs to tie to her waist. As the parents leave, the healer holds the slaughtered chicken close to his body and rubs his stomach.

The child does not improve. A friend drops by. "You need to take him to Mrs. Wamani, the village drug distributor," she says upon seeing the condition of the child.

"I'm not sure," says the mother, hesitating. "Maybe…"

"Now!" says the neighbor.

Mrs. Wamani is not home when they arrive. But her son goes out to the field where she is working to get her. When she arrives she greets the two women warmly and examines the baby. She applies a compress to bring down the baby's temperature and brings out a red box of tablets. She takes one and grinds it up in a spoon, adds sugar, and gives it to the baby. Just then the baby's father arrives, very drunk.

"How long has he had this fever?" asks Mrs. Wamani.

"Two days," says the father. "We took him first to Mr. Munob…"

"Just a few hours," interrupts the wife. "Don't listen to him. He's been drinking," she adds, not wanting to admit that she had gone to the traditional healer. Mrs. Wamani looks doubtful, but goes on to explain how to use the remaining medication in the red box. "Come back if your baby does not improve, she tells the parents.

As they leave the husband tries to hand Mrs. Wamani some money. "Oh no. There is no charge for this," she says. Anytime you see this sign on someone's house" — she points to a sign with a picture of a mosquito — "it means that you can get free malaria medication there for children five and under."

"Why a grasshopper?" asks the husband, confused by the size of the mosquito in the picture.

"That's a mosquito, you fool," says his wife as she pulls him from the house. "They just enlarged it for the drawing." The audience laughs.

"Free," he says. "And to think that we gave that tasty chicken to Mr. M…."

"Good night," his wife says to Mrs. Wamani, interrupting her husband. "I'll give him the medicine just as you've instructed."

"What should we do?" asks the chorus as they walk out before the audience. "Let us gather together to rid Uganda of malaria."

KIBOGA'S MEN: 'IT'S THE WOMEN WHO TAKE CARE OF THIS'

In Kiboga households, the husband most often has decision-making authority over the family budget and, thus, treatment decisions. But women are responsible for the care of a sick child. Because Homapak medications are provided free of cost, and uncomplicated malaria is often considered a "routine" disease, women appear to have considerable autonomy in deciding whether to seek treatment from drug distributors.

I meet a group of men at the trading centre in Muwanga sub-county. Some were enjoying the local potent gin and playing a local board game called Omweso. So I tell one gentleman that I'd like to interview a few of the men together. He approaches the group and after a rowdy discussion they agree. They choose two elderly men in the group to talk to me. I emphasize that I need men with young children. Three of the younger men then consent to speak with me. One of the elderly men, woozy with gin, insists on being part of the discussion.

"Do you all have young children?" I ask the three young men.

"Yes sir," said a man called Mukasa. "All except Mzee." (Mzee is the local term for "old man.")

"Yes. We all have children," said Abdu. The other young men laugh.

"Why are you laughing?"

"Abdu represents us in this regard," Mukasa says, smiling. I later find out that Abdu, in his mid-twenties, has two wives and seven children.

"Is malaria common among children in this area?"

"Yes." They reply in unison.

"When did your child last have malaria?" I ask the third young man, named Tito.

"Towards the end of last month."

"How old is that child?"

"He's about to make two years…"

"Is that your last born boy?" Mzee interrupts.

"That's it."

"How did you know it was malaria?" I ask Tito.

"My wife sent someone here to the trading centre to tell me that my child was sick. So when I finished playing Omweso I went home and found him sleeping. My wife told me that he had a high temperature and was shivering before he fell asleep. She told me she had given him some tablets."

"Those little ones even know how to convulse," interjects Mzee. "They become so stiff and look up at the heavens… malaria is dangerous."

"Did your wife tell you which tablets?" I asked Tito.

"She said she had given him chloroquine and fansidar. They come in boxes called Homapak."

"Have you ever used Homapak with your children?" I ask Abdu.

"I've seen those small packs, but I don't know exactly what's inside," he says. "I don't take much notice. It's the women who take care of this. If there is need for other tablets they come to me for money."

"And you give it?"

"If I have it…you know these problems arise just when you're broke."

"What do you do when you don't have the money?"

Abdu thinks for a moment while biting at a straw of grass. "You borrow from a friend or the shop owner. But our children must learn to live the hard way. Our Jjajas (the local term for grandparents) did not have tablets, but they were around for a long time."

This grabs the attention of Mzee, who seems to be getting tired because of the gin that he's taken. "We drank Mululuza (a bitter herbal preparation) the whole of our lives and we're still strong," he says as he staggers away. I fail to see the strength he's just mentioned.

"Where does your wife get the

Homapak tablets?" I ask Tito.

"From Mrs. Kasenge. There is also one other drug distributor in the village."

"Do they always have the medicine?"

"I think so. …I don't know."

"Has any one of you been there for medicine?" I ask. They all shake their heads no.

"Are the drug distributors always around?

"We don't know…well, as for me, I don't know," said Mukasa. "But I see those drug distributors every day in our village, so they must be available."

"Do you think the medicine works?" I ask Abdu.

"It works. But look at the conditions in which we live. Malaria is a part of our life. It is our everyday song," he said.

The others agree with Abdu. We end the discussion and part our ways. Tito heads home and the rest go back to join their group.

—A case author, from interviews in Muwanga sub-county

Those Small Tablets Really Work!

For home-based management to work, drugs need to be readily available, effective, affordable, and easy to use. Homapak packets contain a combination of chloroquine and sulfadoxine-pyrimethamine. The packets are designed for ease of dosing and adherence to the specified course of treatment. Since 40% of Ugandan mothers cannot read or write, the packets are color-coded: red packs are for children younger than two years, while green ones are for children ages two to five.

Interviews with mothers, fathers, drug distributors, and health workers indicate that the great majority of parents administer the full course of treatment. Home visits by the drug distributors appear to improve adherence greatly. "People are responding positively," said Harriett, a midwife at Muwanga Health Centre III. "Treatment lasts only three days. Today, tomorrow, and the next day, and you are through. Those I know personally say that those small tablets really work!"

Those parents who didn't administer the entire treatment said they didn't do so because their child felt better or because the child's condition worsened. "After taking the first dose, the fever goes down and some parents get relaxed and forget to give the entire dose," said Harriett. "I think this happens most often if the first dose causes itching." Some parents said that their children vomited up the tablets. Others said that when they first started using the tablets they became alarmed because their child's temperature shot up after the first dose.

"We advocate for Homapak as though we are campaigning for election for a seat on the local council."

—A staff member of the Muwanga sub-county health center

A major strength of the program in Kiboga is that drug distributors have a regular supply of drugs on hand. Only one stock-out has occurred since the program began. In early 2004, distributors were given packets with expiration dates just a few months away. By April, all the drugs had expired. The distributors returned the unused medications, and waited for the next consignment.

AMREF bought bicycles for those distributors designated to re-supply other volunteers in their communities. Unfortunately, this resulted in bad feelings among those who did not receive bicycles, and the program posted mixed results. Many volunteers therefore restock when they deliver monthly reports or pick up drug packets from the Kiboga hospital, at their convenience.

DRUG DISTRIBUTORS: 'THESE ARE OUR SISTERS . . .'

Mrs. Kagolo is a drug distributor in Muwanga sub-county. She is a young lady in her late twenties, educated to secondary school level. She has a small shop at the trading center. We hold the discussion while she breastfeeds her baby.

"How long have you been a drug distributor?"

"Two years," Mrs. Kagolo replies.

"Are people utilizing the drugs?"

"Yes they are. Especially in those times when malaria is rampant. You know malaria has peak periods, mainly December through March, and when the children get sick the parents come for the drugs."

"Which categories of people use your services the most?"

"The women. They look after the children. I've seen only one man who brought his child for treatment."

"Is it just a few women who repeatedly come for the drugs, or is it everyone in the community?"

"Everyone. If they would go to the health unit, they might find a long line of 30 people. By the time they are attended who knows what condition the child will be in. The health center serves the whole of this sub-county. So all the patients from the villages use the medicines there and in no time they run out of stock. Even when they do have drugs, they have chloroquine and fansidar, the same as me. My drugs are free and I have them all the time. And we are the same people as the rest in the community."

"How do you tell that a child has malaria?"

"I look at the signs and symptoms: fever, chills and convulsions. I treat the child with Homapak, and if there is no change then I know that the fever may not be because of malaria, and I refer to the health unit. I refer children with convulsions to the health unit because I know that is too much malaria for me to handle with my Homapak."

"Do the parents sometimes come at night?

"Yes they come. They knock and I open for them. Most who come at night have a child in bad shape. I put a wet cloth on the child to bring down the temperature, give the first tablet, and then wait till the morning and take them to the health unit when it opens."

"Do you often get children with severe malaria?"

"Recently a child was brought here with high fever and I gave him the first dose of Homapak. I stayed with the child for one day and then

the parent took him back home. She came back the following day because the fever had gone up. So we went to the health unit, and then we were referred to Kiboga hospital. The mother was a bit terrified. That is where we come in as drug distributors. We counsel and comfort such parents. These are our sisters and we need to help them when we can. She stood firm and went to her husband to get the money to go to the hospital."

"Do you think the parents give their children the full course of medication?"

"Almost all the parents give the doses to completion, and we now know those ones who do not complete the dose. When you give the first tablet the child will feel better after resting. So the parent might get up the next morning and go to the garden and forget to give the child the medicine. We now tell these people to bring back their children for treatment, and it is us who administer the entire dose."

"Is there any one person like that nearby?"

"I would feel bad revealing that person. Let me try to deal with her slowly; maybe one day she will change. She is very good at collecting the tablets but she never completes the dose. She uses the drugs for first aid."

"How do you know whether a parent has administered the entire packet?"

"During our refresher training with AMREF we were told to visit the family on the day the child is to receive the last dose to make sure that all the drugs have been taken. We ask to see the empty packet."

—A case author's field notes

The Training Challenge: So Many New Concepts, So Little Time

Parish Development Committees are charged with selecting community drug distributors. The committees select people based on their readiness to work as volunteers, approachability, maturity, eagerness to accept training, and ability to read and write. Some of the committees recruit traditional birth attendants and other people with prior health experience. Almost all of the drug distributors selected have worked out well, though a few have had problems. "One was a drunkard," recalled Harriett. "He was never at home. He never went to collect the drugs because he was forever drinking. People gave up on him. So he surrendered the packets and record book, and we had to replace him."

Government health services originally trained 1,000 drug distributors to serve throughout the district. "I think the training was inadequate," said one of the instructors. "The volunteers were everyday people. Some could not even tell you the signs and symptoms of malaria. Then we came in for three days and pumped them with so much material. They had to learn so many new concepts in so little time. Fortunately, AMREF is providing refresher trainings in the areas of the district where they are working." The refresher sessions review the signs and symptoms of severe malaria, the administration of Homapak, methods of cooling a child's body, when to refer to the health centers, and the promotion of ITNs and IPT for pregnant women.

Drug distributors are scheduled to meet monthly at the health unit to report on the number of children served and referred, and the number of parents who have administered the full treatment. Because transportation is difficult, some drug distributors simply ask colleagues to submit reports and restock supplies.

"The volunteers are supposed to be supervised by the sub-county health assistant and the people who trained them," said the instructor quoted above. "But you find that…" she paused and broke into embarrassed laughter, "travel funds are in short supply. So only the health assistants who are close to the drug distributors do the supervision. It is our responsibility as their trainers to visit the volunteers, but it is just not possible. We don't know what they are up to in their homes. We want to be involved more, but it is a bit difficult. Still, the drug distributors send in their monthly reports, so we learn about their activities from these."

The Road Ahead

The promise of home-based management of malaria is enormous. A recent study of the program in three districts in Uganda found that "the odds of receiving appropriate treatment for fever (chloroquine plus sulfadoxine-pyrimethamine) are nearly five times greater in intervention districts than in control districts."[11] The report also notes that in districts with home-based care, parents received better counseling on the importance of early treatment, fever management, and the signs and symptoms of severe malaria.

But there are a host of challenges that must be overcome if home-based care is to reach its potential. There is small but growing resistance to chloroquine and sulphadoxine-pyrimethamine in some parts of Uganda. District health services have limited resources and almost unlimited need. Supervision of the drug distributor is constrained by lack of travel funds and the heavy workload of district personnel. Referral systems need to be strengthened.

Another fundamental problem is volunteer morale. Most of the drug distributors find great satisfaction in their work. Even the woman with concerns about garden time lost and paraffin used added that she is motivated by the "knowledge gained, prestige, respect from the community, exposure to dramas, videos, and meetings I'm called to attend, and because I want to contribute to the development of my community." However, these volunteers are often poor and subject to many competing pressures.

Regular opportunities for in-service training, strong support and supervision, and varied forms of remuneration have all been shown to be effective in maintaining volunteer motivation and commitment. Buy-in from community members affected by malaria is equally important. Parents who have had a child die from malaria know more about its dangers than most health professionals do. Once they see the potential of early treatment through home-based care, they are likely to adopt the program as their own and become a driving force in its implementation as strong supporters of the drug distributors.

Collaboration will also be key to continued acceptance of home-based management of malaria. The Homapak program involves a high degree of cooperation between AMREF and the District Department of Health Services office. District personnel teach AMREF trainings, local health assistants advise drama groups, and local health personnel distribute AMREF newsletters and posters. Monitoring and supervision is carried out by AMREF and district health officials whenever possible. However, any collaboration involves at least two parties with at least two different perspectives.

"We know that for our work to be sustainable, we need the sub-county officials to think ahead to the day when we will leave," said an AMREF outreach worker. "They need to consider budgeting for many of the things we are doing. We'd like them to provide incentives to the drama groups and to the drug distributors. This is not something that can happen quickly. They are hesitant about supporting our programs financially because they think that NGOs have much more money."

"At times people come for treatment when we are in our gardens," explained one drug distributor. "We return home, administer the medication, and observe the child for 30 minutes as we were instructed. But our husbands are unhappy because the garden work isn't getting done. When people come at night we use our paraffin to provide light. This brings conflict since the men are the providers. They see this as exploitative. One of the volunteers in this sub-county dropped out for these very reasons."

—A volunteer drug distributor

SOMEONE WHO 'TREATS YOU AND NEVER FORGETS YOU': A VOICE FROM KIBOGA MARKET

"Where does the nearest drug distributor stay?" our group asked.

"Over there, beyond that garden," said the small trader in Kiboga District's market.

"Do you normally find her whenever you go there?"

"Yes, she is usually there."

"So you don't have to wait for her to serve you?"

"No, even if I find her along the path and tell her my child is sick, in no time she comes back with the medicine."

"Why didn't you use Mululuza?"(Mululuza is an herbal medicine commonly used for fever.)

"Now that I have the drug distributor so close to home, why would I bother with Mululuza?"

"And does Homapak cure malaria?

"Very well, but we get sick again…you know the conditions in which we live."

"But do you normally give the complete dose or do you stop once the child feels better?"

"I give them all the tablets."

"You know the tablets can itch?"

"The itch lasts only a few days, and then the child is okay. There is nothing we can do, even the tablets given in the hospital itch."

"There is nothing to do?

"Nothing, because you want life."

"So has this program changed anything?"

"Yes it has. And even if you don't have a shilling on you there is a person who treats your child and never forgets you. She comes back to check on you, to find out how the child is. On the day of the final dose she stops by and asks, 'How is the child? Is she feeling better?'"

"Is there nothing you want changed in the Homapak program?"

"Just more effort."

"In which way?"

"Look at our children," she says as she points to a child passing by. The child is stunted with a round stomach and reddish hair. "There are many other diseases that sicken our children. If only you could give the drug distributors training and medicines for other conditions. We need to help those mothers of this nation, who do not have a shilling in their pockets, to raise healthy children."

—A case author's field notes

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