

## Bridge of Hope

February 18-March 1 2009



Malaria Project and Net Distribution

GlobeServe Ministries International

Lutheran Church of Hope Mission Ghana

Kpogadzi, Silandre, Atiyinu, GlobeServe Leadership Development Summit,  
Frauenshuh Preparatory School, and Agortakpo

Volta Region, Ghana

## Introduction

Nine missionaries from Lutheran Church of Hope in West Des Moines, Iowa departed from Des Moines to fly to Accra, Ghana. The Hope team had learned from Pastor Sam Dunya of GlobeServe Ministries International in Ghana that the most urgent medical need of the people of the Volta Region was to have access to education and tools to prevent and treat Malaria. After careful consideration GlobeServe and the Hope team chose an approach to teach leaders from the villages and then assist the leaders to in turn teach their communities. The World Health Organization (WHO) has done encouraging research on community directed intervention of the major health problems in Africa that suggests this approach is highly successful. The vision was that this approach would provide a program that was guided by the GlobeServe pastors of Ghana and sustained by the people in Ghana.

## Local Medical Contacts

We contacted the Ghana Malaria Control Project and also a local physician assisted us with this project. Research about mosquito nets and best practices lead us to [againstmalaria.com](http://againstmalaria.com) where there was good instruction on net teaching and distribution.

The leaders were chosen by the chiefs of the villages using an adaptation of criteria described by I.O. Ajayi et al:

- with ability to read and write Yoruba (*Ewe*);
- resident in the community for at least a year and ready to stay in the village throughout the study period;
- with at least one child that is 10 years of age and below or caregiver to at least one child 10 years of age and below;
- acceptable to the community, with good disposition toward care of children and will be willing to attend to sick children at anytime of the day;
- whose husband will support and allow the villagers to enter their house at anytime of the day; and
- committed to work for her (*his*) community.<sup>i</sup>



On February 21, GlobeServe Ministries International hosted the Hope team and the chosen leaders at a training conference in Ho, Ghana. Communities represented included Bakpa Agortakpo, Ahiagbakope, Sarakope, Vedome, Silandre, Mepe Adudornu, Amezakope and Kpogadzi. The training was based on a program of home malaria management (HMM) that is used in Nigeria. This program described on the World Health Organization website<sup>ii</sup> answers the following questions:

What is Malaria?

What causes Malaria?

What are misconceptions about Malaria

How is Malaria prevented?

Demonstration of Long-lasting insecticide net (LLIN)

Discussion of environmental control and indoor residual spraying

How is Malaria recognized?

How is Malaria treated?

In Children

In Pregnant Women

When is it necessary to go to the hospital or clinic?

Where is your closest health care facility?

How can worms be prevented and treated?

How can diarrhea be prevented and treated?

What is Malaria Advocacy?

The leaders returned demonstrations including how to make Oral Rehydration Solution and how to hang a Bednet. The Bednet Play was also performed to dramatize how bednets work. The participants were enthusiastic and became known as the Community Health Care Givers.

During the training the team determined that there was a need for a handout of Malaria Facts and a guide for medications. These were created during the conference.



The lectures were translated from English into Ewe by Pastor Gideon Dorworna.





## **Arrival of Nets from Against Malaria**

One thousand long lasting insecticide nets arrived in port in Accra. They were transported by van to Ho. They were stored awaiting the first distribution. This was a very exciting evening for our team!



The net distribution was to be for everyone in the village, we chose to not try and single out high-risk groups, but to provide blanket coverage for the entire village. Each family was to get at least one net and if there was a second bed for children the family would get two. The Community Health Care Givers would provide Malaria education and net demonstrations for their community. The people would then organize into families for the distribution.

## **Choice of Antimalarial**

Artemisinin containing therapy (ACT) is now vital Malaria therapy in Ghana where chloroquine resistance is widespread.<sup>iii</sup> Although prepackaged artesunate-amodiaquine combination tablets (ASAQ) are less expensive and considered first line therapy in Ghana, an unfortunate circumstance resulted in

this not being an accepted treatment in the community:

The first consignment of medicines arrived in Ghana in April 2005; however, the medicines could not be distributed for a further six months because training on the new treatment guidelines had not yet begun. During this time, some public health facilities procured a locally manufactured artesunate-amodiaquine combination before the providers in the public sector were trained. Adverse drug reactions in patients to the locally manufactured combination which contained a higher strength of amodiaquine than recommended, resulted in a highly publicized opposition to the new treatment guidelines.<sup>iv</sup>

As a result of the adverse reactions, people either refused the ASAQ or, as the medication was packaged as two pills in a co-blister pack for each dose, took the artesunate tablet and discarded the amodiaquine. Artemether-lumefantrine (AL)<sup>v</sup> has also been well studied in children under 5, has the advantage of having two drugs combined in a single tablet, and it has been added to the list of ACT used in Ghana. At the suggestion of our advising physician, we chose Arthemether-lumefantrine to be our antimalarial.

During training all of the leaders were taught symptoms of malaria, how to give medication, when to transfer patients who are too sick for HMM, and how to make records for the children and appropriate follow up.

### **Rationale for Anthelmintics (Dewormer)**

The WHO and United Nations Children's Fund (UNICEF) literature regarding treatment of helminthes or worms is very compelling.<sup>vi vii viii</sup> Worms can cause growth retardation, anemia, malnutrition, poor learning, low birthweight in children of affected mothers, and chronic disease of the liver, kidney and bladder. Medication is inexpensive, effective, easily administered, and with low side effects. UNICEF and WHO recommend "piggybacking" deworming on top of other programs to provide low cost and more stable and long-lasting programs.



## **Kpogadzi. 264 nets**

Monday February 23 the team from Lutheran Church of Hope and the Pastors from GlobeServe Ministries went to the village of Kpogadzi. One of the first things the team did was to spend time at the well or “borehole.” This borehole was previously created by the Hope/GlobeServe Bridge of Hope vision. The community is aware of the contribution of the well to their overall health and likes to celebrate this advance.



The leaders were Benedicta, George and John. During a short meeting the team and the leaders reviewed the teaching points and determined who would be responsible for which subjects to speak on and which follow up tasks they would perform. The three leader positions were for Home Malaria Management (HMM), Sanitation, and Nets.

The leaders received a small backpack with job specific items

1. Home Malaria Management. This backpack contained Antimalarials, equipment for Oral Rehydration Solution (ORS), hand sanitizer and a notebook to keep records of the work,



2. Nets: Extra nets and a notebook with pens to track use and distribution of nets.
3. Sanitation: Notebook and pens to document projects.



HMM Backpack Contents



Backpack



ORS equipment

The schoolteachers and some of the team members also taught the children. They learned quickly and they also enjoyed participating in their own “Net Play” demonstration. A doll was also used who had her own small mosquito net to demonstrate how important it is for everyone to avoid mosquitoes





The leaders gave lectures to the community and the community response and interest was good. Here is one of the schoolteachers speaking out in support of the community leaders' message.



### **Lessons learned from Kpogadzi**

The team and pastors learned much from this distribution. Initially the Hope team thought net recipients signing a notebook would be a good record keeping scheme. Instead the pastors suggested that papers be distributed to the recipients and people who were good at writing would help the families write the names of all the people in the family on the paper. When they receive the nets a thumbprint was placed on the paper and the paper was retained for counting purposes. Identification of people who could write names helped distribution process. The team determined a printed form would be helpful as one of the pastors signed each piece of paper before it was distributed to create a unique mark.



The distribution queue needed to allow space between the table and the line. Persons working at the tables were somewhat overwhelmed by the crowd.

The pastors were better at setting limits with the distribution than the leaders who were peers with the people in the village.



Despite being the first village, the net distribution at Kpogadzi was successful. The community was receptive and very pleased with the information and the nets.



## Silandre 215 nets

One person from Hope and the GlobeServe pastors assisted the leaders of Silandre to provide Malaria training and distribution of long lasting insecticide nets. After a brief review of the information, James, Abigail and Gloria gave instruction on Malaria, worms, oral rehydration solution, and diarrhea. After the teaching a new approach was provided. The people remained seated comfortably where they had been listening to the teaching. A leader then called a few people at a time. The pastors distributed the nets which prevented negotiation regarding the need for more than the recommended number of nets.



Leaders from Vedome who came to Silandre to experience a Net Distribution



## Atiyinu 193 nets

In the village of Atiyinu the approach was different. Atiyinu did not have leaders able to attend the training. The Pastors provided Malaria education and a net distribution for Atiyinu. One team member from Hope went to take pictures and the Pastors did the work. The meeting all the community was very interesting. We met next to the school. The people were very enthusiastic about this project and their community. They were also interested in other improvements around their village and talked about these as well. They seem very motivated and were eager to have leaders at the next Malaria Teaching Conference.



The distribution worked well with a set up between the meeting area and the village to provide a flow of traffic from learning to receiving nets to hanging nets. We were welcomed into the village and into people's homes. We were delighted to see how they had hung their nets. There was even a home with a screen on one of the windows!



## **GlobeServe Leadership Summit 37 nets**

The GlobeServe Leadership Summit was attended by Pastors and women leaders of the churches in the Volta region. The attendees were “challenged as to what to know, what to be and what to do with regards to their personal, family and ministry lives”. They met together and were instructed by Pastor Molly Juntunen and by each other through the exercises that Pastor Molly created.

During the leadership some there was a question and answer period on Malaria and on women's health. At the end of the summit there was a small net distribution to the attendees at this conference.



## Frauenshuh Preparatory School 118 nets

The time we spent at the Frauenshuh Preparatory School was delightful. The students gathered and sang to us as we arrived. They then gathered in assembly and we had introductions. The students put on a play for us and gave us a concert.

Malaria teaching was done in English. The students were excellent! They knew all the answers to questions regarding the cause of Malaria and how to prevent it. They answered enthusiastically and in unison. Their teachers had already done a great job of explaining malaria to the students. They were also very disciplined and lining up in a queue was not a difficult task for them.







The distribution went very smoothly.



We distributed some small gifts: crayons and coloring drawings on paper with craft supplies for the younger children and for the older students we gave “health kits” which contained on toiletry and washcloths.

### **The Dormitory at Frauenshuh**

A unique aspect of the Frauenshuh Preparatory School was the dormitory. A large number of students live at the school. The students proudly showed us their techniques for hanging nets and arranging them during the day.



## Agortakpo 173 nets

This village is a favorite one for us to visit. After we stopped and asked permission to enter the village we went to visit and dedicate the borehole. We then gathered and were treated to a dance performance by students of Agortakpo. The Community Health Care Givers were Timothy, Cynthia and Patience. The lectures were well attended and enjoyed. The net distribution was undertaken with helpers that the Care Givers selected. These helpers guided the net recipients from under the community meeting tree to tables set up under a roof across the path.



Future Plans. This project was designed to be sustainable. Our next trip to Ghana includes plans to do training again with the previous leaders. We also hope to meet new leaders from Atiyinu, Wumenu and Kpeleho. We will review the Malaria facts and the demonstrations. We will review the experience of the leaders who have agreed to visit several homes each week and follow up on the numbers of persons with nets hung properly and to assist those who need help to hang their nets. The training will serve as a refresher for all leaders as well as an opportunity to improve technique.

We will continue to integrate with the local networks. Our interest remains in supporting sustainability. Our future planning will support local efforts such as Quality Healthcare in Ghana<sup>ix</sup>

In an effort for the project to be sustainable we will be providing the pastors with “Flip” camcorders, which are inexpensive video recording systems that can provide downloads of video in a “plug and play” manner. The pastors do have some access to Internet Cafes in Ho. In this way, more video can be provided to document ongoing progress as we noted that our videographer had to be in many places at one time.

We would like to dedicate this report to Kwaku Agbavitor and the children of Ghana.





## Resources

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- <sup>i</sup> <http://www.malariajournal.com/content/pdf/1475-2875-7-24.pdf>  
Ajayi IO, Kale OO, Oladepo O, Bamgboye EA: **Using "mother trainers" for malaria control: the Nigerian experience.** *International Quarterly of Community Health Education.* 2007, 27(4):351-36.
- <sup>ii</sup> [http://www.who.int/countries/nga/areas/malaria/orientation\\_package\\_hbm.pdf](http://www.who.int/countries/nga/areas/malaria/orientation_package_hbm.pdf)  
Orientation Package on Home Management of Malaria for Role Model Mothers
- <sup>iii</sup> [www.who.int/malaria/docs/TreatmentGuidelines2006.pdf](http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf) **Guidelines for the treatment of Malaria.** *World Health Organization, 2006.*
- <sup>iv</sup> <http://www.rollbackmalaria.org/mmss/docs/GFcasestudiesSummary.pdf>  
Shretta R: **Global Fund Grants for Malaria: Summary of Lessons Learned in the Implementation of ACT Policies in Ghana, Nigeria, and Guinea-Bissau.** June 2007
- <sup>v</sup> <http://www3.interscience.wiley.com/cgi-bin/fulltext/118598791/PDFSTART>  
Chinbuah AM, Gyapong JO, Pagnoni F, Wellington EK, Gyapong M: **Feasibility and acceptability of the use of artemetherlumefantrine in the home management of uncomplicated malaria in children 6–59 months old in Ghana.** *Tropical Medicine and International Health.* 2006, 11(7):1003–1016.
- <sup>vi</sup> [http://www.who.int/wormcontrol/en/action\\_against\\_worms.pdf](http://www.who.int/wormcontrol/en/action_against_worms.pdf) **Action Against Worms Newsletter.** March 2003.
- <sup>vii</sup> [http://www.who.int/wormcontrol/documents/joint\\_statements/en/ppc\\_unicef\\_fina\\_report.pdf](http://www.who.int/wormcontrol/documents/joint_statements/en/ppc_unicef_fina_report.pdf) **WHO/UNICEF Worm Control Joint Statement**
- <sup>viii</sup> <http://www.who.int/wormcontrol/en> **Partners for Parasite Control.** WHO Webpage.
- <sup>ix</sup> <http://www.ghanaghp.org> Quality Healthcare Partners. USAID collaborative site.