



## **Report to Against Malaria Foundation RE: 300 Bednets Donated to GHEI**

**30 March 2011**

### **GHEI Background**

The Ghana Health and Education Initiative (GHEI), a non-profit, non-governmental organisation (NGO), was founded in 2001 in the rural village of Humjibre, located in Ghana's Western Region in the Bibiani-Anhwiaso-Bekwai District. This district is mainly Sefwi speaking and is currently underserved by NGOs and government programmes compared to other regions in the country. GHEI's mission is to improve the health and education of villagers within Humjibre and surrounding communities through the development of independent, but complementary, health and education programmes. The GHEI health programme currently focuses on programmes in the areas of malaria prevention, sanitation and hygiene awareness, communicable disease prevention, and sexual and reproductive health outreach. All health programmes are coordinated by a Health Team that consists of a Health Programme Coordinator, Malaria Prevention Manager, and Health Programme Assistant. A total of 14 Community Health Workers (CHWs) also volunteer part-time help to implement, monitor, and evaluate all of GHEI's health programmes. They are women and men ranging in age from 25 to 65 years and are located in the villages of Humjibre, Kojina, Soroano, and Ampenkrom.



GHEI welcome sign in Humjibre and the road to Kojina.

### **GHEI Malaria Programme History**

Since 2006, GHEI has been committed to preventing malaria by distributing free insecticide treated bednets (ITN) to the Humjibre community. In an effort to increase bednet usage rates, GHEI collaborated with the Soroano village in 2007 to develop an intervention aimed at encouraging and increasing bednet usage. The intervention included:

1. Distribution of free ITNs to every sleeping site in the community
2. Help with hanging and mending bednets in homes by trained CHWs
3. In-home education with a picture flipchart on care and maintenance of ITNs
4. Monthly follow-up visits to ensure correct usage and assist in caring for bednets

After implementation and evaluation of the intervention, ITN usage rates in Soroano significantly increased. The same intervention was implemented in Humjibre from June 2009 to May 2010, with distribution of over 1900 long lasting treated bednets (LLTN) to cover every sleeping site and continues today with follow up visits. In September 2010, the Millennium Villages Project (MVP) came to Humjibre to learn about our malaria programme and began utilizing our methods in their communities. With assistance from the Against Malaria Foundation, GHEI expanded its malaria programme to the neighbouring village of Kojina in February 2011.

## **The Village of Kojina**

Kojina is a small village of approximately 360 people located about 2 km from the village of Humjibre, where GHEI is based. Before expanding our malaria programme to Kojina, we first met with the village chief, Nana Adomakwahene, to present the idea and receive his permission. He understands the problems associated with malaria and was therefore very welcoming to the idea that we would provide bednets and help the people of Kojina protect themselves from mosquito bites. We also interviewed and selected two residents of Kojina to serve as Community Health Workers (CHWs) to encourage and support the people of Kojina to use the bednets.



The main Sefwi Bekwai-Takoradi road divides Kojina.



A shop and houses in Kojina.

## **Arrival of Nets**

GHEI is located approximately 10 hours by road from Tema, where the bednets from Against Malaria Foundation were located. As our organization does not own a vehicle, collecting the bednets required some planning. We were able to have the bednets transported to Kumasi from Tema at a cost of 60 Ghana cedis. We then sent one of our staff to Kumasi to collect the bednets and bring them to Humjibre via a three hour bus ride to the nearest town and then a shared taxi to the village. We then kept the bednets in the health storage room next to the GHEI office until our staff were trained to distribute them.



300 bednets from Against Malaria Foundation!

## **Data Collection Training**

Before distributing bednets in Kojina, we first had to conduct a baseline survey with all the households in the village to determine the number of bednets they needed and to collect other demographic and health related information about the community to help us better serve them with future programming. As conducting a baseline survey is an intricate process, we felt this was an important time to prepare and implement a training on Data Collection with our

Community Health Workers and staff. GHEI's incoming Health Programme Coordinator worked with our Malaria Prevention Manager to train seven staff and fourteen Community Health Workers from four villages in topics such as the purpose of collecting data, respect for participants, confidentiality, how to avoid bias, asking questions in order, translation, and how to initiate an interview. The training lasted six days at the beginning of December and was followed by a week of practical exams where each trainee conducted a short baseline survey with three households to practice and demonstrate their new skills. Seven staff and five Community Health Workers were certified in Data Collection for GHEI. Others were unable to attend all the days of training or need more practice before they will become certified. Future trainings will work to ensure that others may become certified, as well as continue to build the skills of those who are certified.



Mensah addressing the Data Collection trainees.



Trainees discussing concepts of Data Collection in small groups.

### **Baseline Survey Creation and Translation, Training on Survey**

Once the Data Collection training was complete, we focused on finalizing the baseline survey tool we would use in Kojina, ensuring that the questions were culturally relevant and understood. This also involved translating the final survey into Twi (a written language closely related to Sefwi that all adults in Kojina understand) to ensure that every Community Health Worker asked the same questions and collected accurate information. As Twi does not translate directly into English in many instances, this was a time consuming task, but well worth it. The baseline survey tool consisted of a household questionnaire including a census, a woman questionnaire for women between 18-49, and a child questionnaire to be asked to mothers of all children under age five. After the survey was complete and translated into Twi, we were ready to train the Community Health Workers on the survey. This consisted of three half day sessions in which we reviewed the questions, clarified any confusion, and discussed ideas for managing the order of the survey and the various forms that would potentially be needed. For example, it would not be known how many woman's or child's surveys would be needed until the household questionnaire was implemented. It was then up to the CHW to prepare and implement these additional surveys as needed, as well as preparing any surveys for women who were not home, so that it would be easy to return at a later date to interview them. We then went to a neighbouring village to give each CHW the opportunity to practice implementing the survey with households before we started in Kojina.

Example of a question on the survey regarding bednets:

BN1. Seiseiara me pe se me bisa wo nsem a efa ntontom nan ho. Mo wo ntontom nan wo efie ha?  
BN1. Now I would like to ask you some questions about mosquito bednets. Does your household have any bednets?



## Baseline Survey Implementation and Preliminary Results

Two health programme staff and four Community Health Workers certified in Data Collection conducted the baseline survey with all of the 43 households in Kojina over the course of six days in January. The survey included questions about how many bednets (if any) a household owned, the condition of these nets, a demonstration to see if people know correct bednet usage, and questions to understand the number of sleeping sites in each household. Sleeping sites is the indicator GHEI uses to determine how many bednets are needed to blanket cover the community. The baseline survey found that there are approximately 353 people in Kojina, 64 of which are children under five (and most at risk for life threatening malaria, along with pregnant women). 178 sleeping sites were observed and 34 bednets were reported as being owned. However, sleeping sites minus bednets owned does not necessarily give us the number of nets needed, as we replace bednets that are old or in poor condition.



Preparing to start conducting baseline surveys.



CHW trainee conducting a survey while his CHW mentor looks on.



Kojina CHW conducting a baseline survey with her neighbour.



Explaining confidentiality before starting the household questionnaire with the Kojina chief.



Conducting a survey while a woman continues to work on her cocoa.



Walking back to Humjibre after a long day of surveying.

Some statistics on the population of Kojina from our data collection (before the distribution):

- 19.0 % of children under age five sleep under a bednet
- 15.0 % of the population sleep under a bednet
- 0 % of pregnant women sleep under a bednet
- 39.5 % of households have at least one net in any condition
- 48.4 % of children age 0-4 years had a fever in the last two weeks

### **Malaria Outreach Event in Kojina**

After we completed the baseline survey in Kojina, we were ready to hold a Malaria Outreach Event in Kojina to teach the community about malaria and bednet usage and inform them of our plan for distributing bednets to the community. Our outreach was held one evening at the end of January. We started the event with an introduction from our Programme Director, Clement Donkor, on our bednet distribution programme. He informed the community that we would be coming to distribute bednets and that community members must ensure that they take good care of their bednets, as we are not able to provide more nets until the end of the life of the insecticide treated bednets, four to five years from now. Our Malaria Prevention Manager then explained that mosquitoes cause malaria, methods people can use to prevent getting malaria, symptoms of malaria, and the importance of seeking treatment. Our Health Programme Assistant then explained the importance of sleeping under a bednet every night; how to care for a bednet, especially the importance of limiting times washed and proper washing methods; and the extreme importance of pregnant women and children under five sleeping under a bednet every night. She then introduced the two new Community Health Workers from Kojina to the community, explaining that they would be available to help community members with care and usage of their bednets.



Preparing the generator and sound system.



Explaining the importance of sleeping under a bednet nightly.

We then showed a film produced by GHEI volunteer Laconia Koerner entitled *United Against Malaria* that encourages community members to seek help when they have malaria symptoms and to sleep under a bednet to prevent malaria. The film was well received by the community, as it was in Twi and the actors were CHWs from Humjibre and present at the outreach. Approximately 50 children and 60 adults attended the outreach, nearly one third of the community. As there is currently no electricity in Kojina due to a broken transformer, we set up with a generator to provide light and power so that we could show the film.



The crowd grew as we began to show the film.



Children enjoyed the opportunity to watch a film.



Adults were also engaged in the film's message: the importance of treating malaria quickly and preventing it by sleeping under a bednet.



GHEI health team, including CHWs from two communities.

### **Training for Bednet Distribution**

The new Community Health Workers from Kojina were given a training on our distribution methods. This included learning our bednet care flipchart education and going with the Health team to a new house in Humjibre that needed bednets to learn how to hang the bednets, as well as practice giving the education.



GHEI's Health Programme Assistant teaches the new CHWs from Kojina how to hang a bednet.



Our CHWs from Humjibre are well practiced in bednet hanging and our flipchart education, but we all came together for a two hour training/practice to ensure that we were all ready to start.





Humjibre CHWs refresh their presentation of the bednet flipchart education.

### **Bednet Distribution in Kojina**

Over the course of four days at the beginning of February, CHWs from Humjibre and Kojina worked together with GHEI health staff to hang 158 bednets in 44 homes. We made announcements in the community in advance, informing them which day and time we would come to their area to hang the bednets so that they could try to be home by postponing going to farm or coming back from farm early. Some days we started our distribution in the early morning and some days we went in the late afternoon to have a better chance of meeting everyone in the community. We worked in three groups of three to four people to go door to door and room to room to hang bednets for every sleeping site in Kojina for a blanket cover of the community. Each CHW group had a stack of bednets and a bag of supplies for bednet hanging, including nails, string, hammer, scissors, permanent marker, and the flipchart. At each house, two CHWs would enter the rooms and begin to hang the bednets with the method most appropriate for a given room (adding nails to the walls, tying string to existing nails or hooks, etc.) and number of sleeping sites in that room. We hung all the bednets needed in each house, including a reassessment of the number of sleeping sites and the condition of bednets currently owned by the house.



At the GHEI office preparing bednets and supply bags.



In Kojina ready to start hanging bednets!



Most days we walked to Kojina from Humjibre.



One day we were lucky to get a ride from one of our CHWs who is also a taxi driver in the community.



Demonstrating how to keep the bednet clean in the day. After hanging bednets at each house, we recorded the number of sleeping sites and bednets we provided.



A family waits in anticipation for their bednets to be hung. In some rooms we hung bednets for three sleeping sites.

A third member of the group would sit with people from the household to give them the flipchart education on bednet usage and care. An important part of bednet care is not washing the bednets too frequently and using gentle methods to wash them. Since women are usually in charge of household washing, we tried to make sure that we gave the flipchart education to at least one woman, as well as any other people present in the household. Although this often involved taking people away from their house or farm work, they were usually welcoming and willing to listen to the education. After the bednets were hung and people had received the education, we then went to the room with the people from the household to show them how to rehang the bednet and for them to practice how they will tuck the bednet to sleep under it.



Emphasizing the importance of pregnant women and children under 5 sleeping under a bednet.



Discussion questions prompt a conversation.



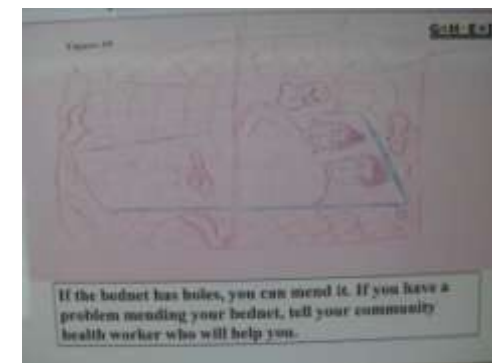
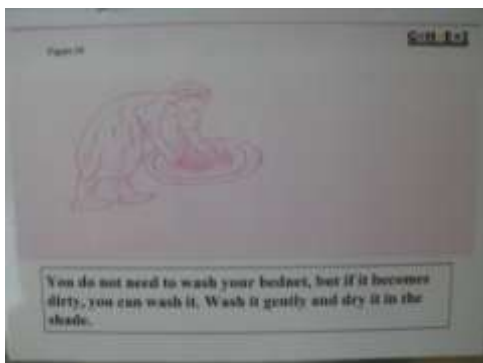
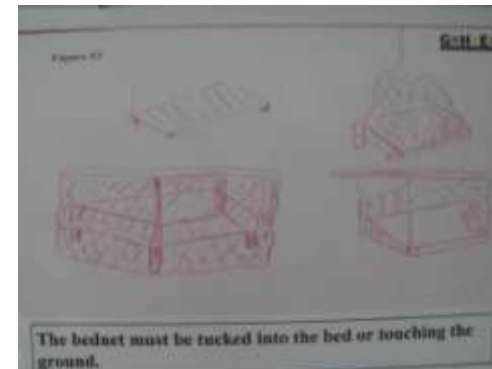


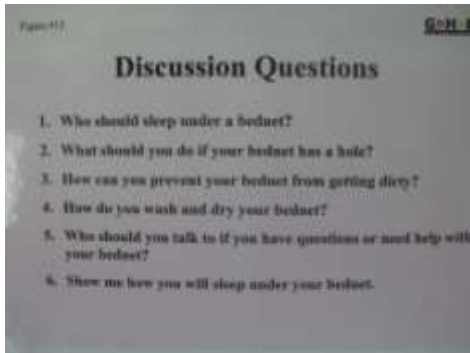
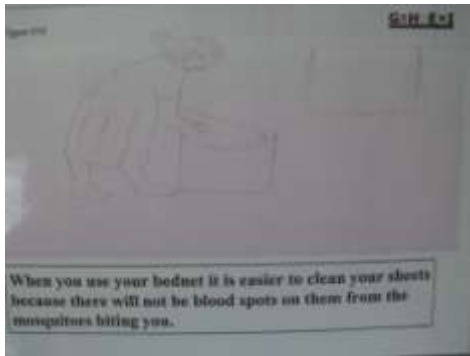
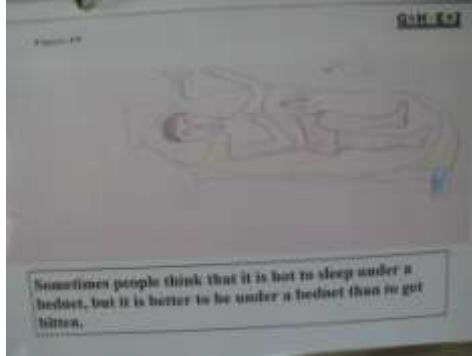
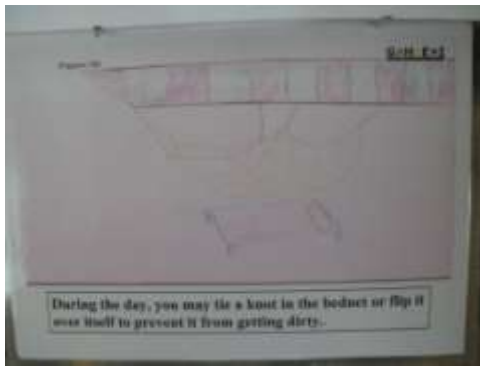
A CHW babysits and educates simultaneously.



A family listens to the flipchart education.

### GHEI's Bednet Education Flipchart with Drawings from a Local Artist





## Habitat Community Distribution to New Homes

There is a Habitat for Humanity community in Humjibre that is constantly growing as new homes are built. GHEI conducted a bednet distribution in Humjibre in April 2010, so people in Habitat (as the neighbourhood is called) who built homes after that were left without bednets. Since the number of bednets needed in Kojina was slightly less than we had estimated, we decided to use this opportunity to continue our bednet distribution to the new homes in Habitat. Working together in three groups of three, our CHWs were able to hang 44 bednets in 16 new homes over the course of one morning in Habitat.



CHW presenting the flipchart education.



A woman practices tucking her new bednet.



A father looks on at bednet hanging with excitement that his young baby will have a bednet to sleep under.



Walking home through the Habitat community.

### Reflections on the Distribution

People in Kojina were very welcoming of us coming to hang bednets for them. Many talked about the relief they will feel from having this protection against malaria and some voiced their excitement to sleep under the bednet that night. We met with the Kojina chief several weeks after the distribution to ask him if he has heard any questions or concerns about the bednets. He said he had only heard positive comments, and that since the rainy season has come on strong this March with rain nearly every day, he is relieved that people in his community are now protected from mosquitoes by bednets.



Working in teams of three to four worked well because we were able to hang the bednets quickly, even when a house needed four or more bednets. By the time one group member had finished the flipchart education, we had a bednet hanging for the members of the household to practice tucking the bednet and tying it up to keep it clean during the day.





One issue we encountered was a few people were reluctant to allow us to enter their rooms to hang their bednets. They asked us to give them their bednet so they could hang it themselves. We explained that it is our policy to hang every bednet to ensure that they are put to immediate use, so we could not give it to them to hang themselves. We also tried to reassure them by explaining that our only goal in entering their room is to hang their bednets and that anything we see in their room will be kept confidential. Usually this explanation worked and we were allowed to enter the rooms. One man would not let us enter his room, so we moved on to the other houses. On the last day, he called us back to hang his bednet for him, having seen his fellow community members accept us and benefit from owning a bednet.

Another issue was that some rooms had many people sleeping in them, so they should have received three bednets, but the room was too small to hang this many bednets. We hung two bednets in this circumstance and made a note in our distribution database. We then told the family that if their sleeping arrangement changes and they have space to hang another bednet, they can inform their CHWs and we will be able to provide them with another bednet.

Some people were not home when we went to hang their bednets or we could not get access to every room in the house (some were locked). We tried to inform someone in the house or a neighbour when we would come back so that we could be sure to gain access to the rooms. This worked fairly well and we were able to hang most of the bednets in the first week. Any people that did not get their bednets in the first week were to inform one of the CHWs so that they could arrange a time to hang the bednets. By going in the morning some days and in the evening other days, we were able to meet most of the people in a short amount of time.

### **Follow Up Visits by CHWs**

Now that the bednet distribution is complete in Kojina, our work is not finished. The two CHWs we have trained from the Kojina community will soon begin to conduct follow up visits with every household in Kojina. The purpose of these visits is to continue to encourage proper usage every night. Sometimes people take their bednets down to wash and then they do not know how to rehang them. Bednets get small holes that can be mended, but sometimes people do not know that they can mend the bednet or that they should still sleep under a bednet even if it has some holes. The CHWs visit the homes to help rehang bednets, help mend bednets, and to give the flipchart education. Through continued education and assistance, we aim for universal usage in all the communities we support through bednet distribution and follow up visits.

GHEI thanks the Against Malaria Foundation for their assistance and partnership in providing bednets to people in rural Ghana!

