

Community Maternal Health Project
Ghana, Africa
Wartburg College
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<http://hecuba.exposure.co/women>

Section I

Anne and Kwabena's ultimate goal for the Community Maternal Health Project was to reduce the high maternal mortality rate in Oyibi, Ghana. In order to combat this issue, they set four objectives, which included constructing a two-room maternal health center in the village of Oyibi, engaging Community Health Officers, developing a mobile healthcare application dubbed OBaa 2.0, and carrying out community health outreach programs. It was apparent from the start that we had our work cut out for us, but we felt prepared and compelled to take on these hefty tasks.

The construction of the clinic commenced while we were still in the United States. Our project architect constructed a two-room health facility on a plot of land donated by the chiefs. Local volunteers who worked around the clock to supply water, sand, and stones aided the construction of the center. The Ghana Health Service fulfilled its part of the bargain by posting a part-time community health worker to the center. It is our hope to gain extra funding and hire a full time health worker. The Charisbel Health Service has provided selected medical devices for use at the center. This project would not have been possible without the support of all these partners and the community. The health post still has some challenges such as erratic water supply. Through future endeavors, we hope to construct a bore-hole to supply constant clean water to the facility in order to serve patients better.

OBaa 2.0, the mobile application we designed to connect urban doctors to rural expectant mothers has received enormous support from many stakeholders. The Director General of the Ghana Health Service has committed to implementing the mobile app across the country. We are working with the Ghana Health Service to develop a plan for a national roll out. The best part is that expectant mothers do not have to pay for the services they receive through the app. We are still corresponding with the National Health Insurance Scheme to include OBaa into the list of services covered under the scheme. In order to get OBaa into the hands of most community health officers in Ghana, we have partnered with Vodafone to distribute phones preloaded with our app to health workers across the country. We believe that our invention will allow thousands of expectant mothers access to quality antenatal care across Ghana and beyond.

While in Ghana, we held one community outreach event. Originally, the plan was to have at least two, but due to our time being cut short, we only had time for one. From the start, both of us felt as though the outreach secessions would be one of the most important aspects of the project. Without learning about the importance of seeking maternal care, how is the maternal mortality rate in Ghana supposed to improve. These events would also allow us to notify the people residing around Oyibi about the clinic. In addition, we saw outreaches as a great opportunity to directly interact with expecting and recent mothers. With the health outreach event, we would be able to hear stories from mothers and actually experience what accessing maternal care is like in Ghana.

Our original thought was that these outreaches would provide us with the opportunity to address the outdated cultural perceptions forbidding women from attending antenatal clinics at an approved health facility. However, during the outreach we focused more on topics like breast-feeding, proper diet, and diseases common to the region such as malaria and guinea worm disease. It was when we were trying to discuss these subjects with the women that we experienced the greatest language barrier. The majority of the women only spoke Ga, one of the many native languages of Ghana that we were unfamiliar with. Luckily, Betty Apronti, a senior nurse for the Ghana Health Service and soon to be midwife, was with us that day to help translate. From Betty, we learned that one of the females at the outreach was giving her

small infant water before breastfeeding. Doing this prevents the infant from filling his or her stomach with nutritious, vitamin and mineral packed breast milk, thus promoting malnutrition. Betty also told us that one of the mothers thought that one breast gave out milk in the form of food while the other gave out milk in the form of water. The fact that we were able to provide these two women with the correct knowledge and breast-feeding practices alone made the outreach session a success.

The money we received from the Davis Project Grant allowed us to make good head way in the undertakings of the Community Maternal Health Project. However, we quickly learned that these ventures come with a big price tag. Therefore, Kwabena and Anne looked towards other ways to acquire extra funding. During the month of May, presentations were given at churches around the area and the local Rotary chapter. Additionally, a Mother's Day card fundraiser -with all the proceeds going towards the project--was carried out on campus to earn more money. We were also fortunate enough to have landed a spot in MIT's Global Founders' Skills Accelerator program to further develop Obaa 2.0 into a reality. By participating in the program, we earned nearly 20,000 dollars to be put towards the application. We are also in the process of securing a 60,000 dollar grant with the United Methodist Women's Organization. This money all be put towards the clinic aspect of the project and will allow us to fill the clinic with reliable medical instruments and possibly even expand and/or make additions to the already pre-existing structure.

Section II

Just like many words in life, the term peace can take on different meanings depending on the person and situation. We both see peace as being free from a disturbance that once consumed the thoughts of an individual. For many Ghanaian women, the topic of pregnancy and childbirth does not involve peace. Pregnancy related deaths are far too common to ignore, causing Ghana's women to live in terror because they know they could be next. The Community Maternal Health Project allows expecting and current mothers to find peace of mind. Ghanaian women can now fear pregnancy less. They can instead enjoy this event as the joyous occasion that it is. We feel as though the project will have a lasting, long-term impact on the status of maternal health in Ghana. Although the community health outreach events and our engagement with the Community Health Officers were transient, the health center and Obaa 2.0 are two long-lasting, active players that have the potential to enhance maternal care in Ghana.

For Kwabena, this project demonstrated that socio-economic challenges can be addressed through innovative thinking and action. The designing and implementation of OBaa 2.0 has proved this point. This serves as an encouragement for Kwabena to pursue more ventures and solve other social and economic problems that exist in his country of Ghana or elsewhere. As for Anne, the Community Maternal Health Project shed light on a subject that many countries around the world still currently face. Maternal mortality is a major problem, affecting female or male, young or old. Anne is thankful that she was able to personally contribute her time, energy, and resources to improve maternal care and knowledge. An end to maternal mortality may not currently be in sight. However, as long as we continue to empower women to seek maternal care during and after pregnancy and encourage them to practice habits good for their health, we see the world growing in the number of happy and healthy mothers and babies.

"This Davis Project Initiative has proved that 'the socio-economic challenges (eg. maternal health) faced by the developing world isn't insurmountable. With the right ideas, mentorship and collaboration, these problems will become a thing of the past.' " - Kwabene Owusu-Amoah

"As for me, working on this Davis Project initiative shed light on a topic often neglected in fully-developed countries--maternal deaths is something of the past in the United States. Very rarely do we hear of a mother dying during pregnancy or shortly after giving birth. But now after working on The Community Maternal Health Project, it is apparent that maternal mortality is not a thing of the past for countries like Ghana and other developing nations around the world." - Anne Epley Birtwistle

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Photographs

Fig 1 & Fig. 2: The community health outreach event took place at a clinic also in Oyibi. We were provided with material from the Ghana Health Service and focused on topics like breast-feeding, diet, malaria, and other diseases commonly seen in Ghana. Nearly all the women were eager to participate and learn.

