The Global Burden of Malaria

Niati Boka is 52 years old and lives in Djenne, Mali. She is a member of a village banking group organized by Kondo Jigima, a microfinance institution based in Mali. Prior to joining Kondo Jigima, Niati’s life was marked by the loss of 14 of her 16 children to malaria; she did not have the money to pay for life-saving medications. Lougue Samby is a 48-year-old mother of 9 children in Sevare, Mali, and is responsible for providing food for 11 people every day. Before joining Kondo Jigima, her family had survived several bouts of malaria but now, because of the loans and malaria education, she has “money for mosquito spray and malaria medication, and my family has no problems with malaria at all.” Niati and Lougue’s stories remind us that malaria is a significant development problem, and a very personal one. According to the Roll Back Malaria initiative, malaria affects 247 million people each year; 881,000 of them will die of malaria. Yet malaria is a preventable and manageable disease.

Freedom from Hunger’s Microfinance Against Malaria Initiative

In 2002, Freedom from Hunger partnered with GlaxoSmithKline to develop a malaria curriculum for delivery by microfinance institutions in West Africa. By the end of 2007, malaria education had been delivered by microfinance institutions in six West African countries during regular credit and savings meetings facilitated by credit officers; 180,000 clients had been reached with malaria education. During this time period, a randomized, controlled trial (RCT) was carried out with rural bank partners in Ghana to test the value of the malaria education when delivered by credit officers. Freedom from Hunger compared microfinance clients who received malaria education to microfinance clients who received diarrhea education—to test the value of the content of the malaria education in terms of impact on malaria knowledge, mosquito net ownership and use, antenatal care to prevent malaria and appropriate treatment protocols.
Between 2006 and 2009, a revised version of the malaria education was tested in Benin using an RCT with the microfinance institution Promotion et l’Appui au Développement de Micro-Entreprises (PADME). By the end of 2009, 11,290 clients had access to group-based microfinance, and 5,385 of them had access to malaria education at the group meetings. Freedom from Hunger compared clients who received credit with malaria education to clients who received only credit. These two treatments were each sub-divided into clients in groups composed of women only and clients in groups with both men and women. This latter comparison was to assess whether men’s involvement in the education facilitated or impeded improvements in malaria impacts among women members.

Malaria education is also currently offered to 360,000 women in Saving for Change groups in Mali. This is a savings-led initiative for the very poor, developed jointly with Oxfam America and the Strømme Foundation of Norway.

**Malaria Education, Delivered by Microfinance Institutions, Works**

Freedom from Hunger found in Ghana that clients receiving malaria education had better malaria knowledge than comparison groups: 48.4% of “malaria clients” were able to identify pregnant women and young children as most vulnerable to malaria, compared with 39.2% of “diarrhea clients” and 37.7% of non-clients. Malaria clients were more likely than diarrhea clients and non-clients to report that insecticide-treated nets (ITNs) provide the best protection against malaria and to agree that pregnant women should use ITNs. Between baseline and follow-up, malaria clients were most likely to improve in their knowledge of malaria complications during pregnancy, to own at least one mosquito net, and to report at least one child or woman of reproductive age sleeping under a mosquito net. Malaria clients also had the greatest increase in ITN ownership and use (9% vs. 2.9% and 6.7% among diarrhea clients and non-clients, respectively).

Freedom from Hunger found in Benin that women clients receiving malaria education performed better than the credit-only clients in malaria knowledge indicators, such as knowing the cause of malaria, knowing that sleeping under a mosquito net is one way to prevent malaria, and knowing pregnant women and children under the age of five should have priority for sleeping under a mosquito net. However, this difference was statistically significant only for the mixed-gender groups, not for the women-only groups.

Malaria education clients also had statistically significantly better malaria behaviors (use of insecticides and repellants; household has a mosquito net obtained in the last three years, the net is installed and in good condition and has been re-treated with insecticide as necessary, and family members sleep under the net) compared to credit-only clients. Again, the women clients in mixed-gender groups were more likely than the
clients in women-only groups to have obtained a mosquito net in the past three years, to have better overall malaria behaviors, to have more nets per household and to have a stronger overall combination of knowledge and behavior.

**Policy Implications**

Results indicate that malaria education provided by microfinance institutions can effectively contribute to community and national malaria initiatives as well as the Millennium Development Goal to “halt by 2015 and begun to reverse the incidence of malaria and other major diseases.” Given that microfinance has become a sustainable channel of service delivery to tens of millions of poor, rural women and families in malaria-affected countries, this finding opens up large-scale opportunities to offer effective education for malaria prevention and treatment to often hard-to-reach populations exposed to the malarial parasite.

Rigorous research can produce unexpected results, such as the stronger impacts seen among women in Benin receiving credit with malaria education in groups that included men. Perhaps it should be no surprise that men matter when it comes to changing knowledge and behaviors of women in traditional societies like rural Benin. If this observation were confirmed by new studies in other countries and contexts, it would have important implications for malaria prevention and treatment efforts.

**Full Papers:**
