

The Problem of Co-Infection

Malaria and HIV

ETHIOPIA—“Three years back, conditions here were terrible due to the disaster of malaria,” Dr. Ebrahim said softly, his eyes darting toward a pile of tattered patient charts. “The Ministry of Health here in Ethiopia has done a great job bringing the high rates of malaria down.”

At the Felege Hiowet Hospital in Ethiopia’s central region, conditions have certainly changed. It was only a few years ago when Dr. Ebrahim and his colleagues were treating patients in tents, due to the massive overcrowding during rainy season due solely to malaria.

“During that time, we saw at least ten cases of severe malaria a day, in addition to the more treatable cases,” he said. “Today, it is quite different. In the entire hospital we have only one case of malaria, and it is the result of the biggest problem we are dealing with now: co-infection.”

The lone patient suffering with malaria in the hospital is a striking example – Anana is in her early thirties, eight months pregnant, and HIV-positive. She was also recently diagnosed with malaria and anemia.

“I know Anana and her husband Tirualem well because he brings her regularly for her HIV treatments,” said Dr. Ebrahim. “Just yesterday, they returned here unexpectedly and I knew immediately she was anemic. When I tested her for malaria, it was positive.”

HIV-positive patients like Anana often have weakened immune systems, making them more susceptible to malaria. Though Anana, her husband, and two other children sleep under a bednet at night, Anana said that her children often un-tuck the net during the night, leaving the entire family exposed to malaria-carrying mosquitoes.

Despite Ethiopia’s success bringing down malaria transmission rates, people like Anana remain highly vulnerable to the disease. More resources are needed to continue scaling up interventions that will reach those at greatest risk, like mothers, children and HIV-positive patients like Anana. With continued government leadership and international support, the battle against malaria in Ethiopia rages on. *(More on reverse)*



Anana is receiving treatment for multiple infections, including malaria.



The Link between Malaria and HIV/AIDS

Malaria and HIV/AIDS overlap geographically, primarily in sub-Saharan Africa, Southeast Asia and South America. Globally, malaria is responsible for more than one million deaths per year, with 90% of these deaths in sub-Saharan Africa. In 2003, HIV/AIDS caused the deaths of an estimated 2.9 million people worldwide, of whom 2.4 million lived in Africa.

While infection with either malaria or HIV/AIDS can cause illness and death, infection with one can make infection with the other worse and/or more difficult to treat. The two diseases have particularly devastating effects for those living in malaria endemic regions throughout the world. Pregnant women suffer particularly serious consequences when infected with both HIV/AIDS and malaria. HIV/AIDS can increase the adverse effects of malaria, including anemia and placental malaria infection. As a result, a pregnant woman is more likely to give birth to a low-birth-weight baby, and a low-birth-weight baby is more likely to die during infancy.

Adult men, non-pregnant women, and children are also at risk of adverse health outcomes when experiencing co-infection with HIV/AIDS and malaria. People living with HIV/AIDS face increased risk of becoming ill with malaria and of developing severe malarial illness due to a weakened immune system. Additionally, antimalarial drugs taken by people living with HIV/AIDS have been shown to be less efficacious.

People living with HIV/AIDS are at higher risk for malaria due to their weakened immune systems. There are a number of interventions available for people living with HIV/AIDS that can prevent the devastating effects of malaria such as sleeping under an insecticide-treated bed net (ITN), which repels and kills malaria-transmitting mosquitoes; receiving treatment with effective antimalarial medications, such as ACTs; and, for pregnant women living with HIV/AIDS, taking at least three doses of intermittent preventive treatment (IPT). IPT helps lessen the harmful effects of malaria in pregnancy by reducing malarial infection of the placenta and preventing anemia.

Fighting malaria improves the lives of people living with HIV/AIDS. A comprehensive malaria program must be a priority for malarious countries with a high prevalence of HIV/AIDS.

Adapted from the CDC factsheet on HIV/AIDS and Malaria: www.cdc.gov/malaria/features/malaria_hiv.htm

To read more profiles in the fight against malaria, visit www.MalariaFreeFuture.org

