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Prayer Request: Physical and spiritual healing for patients.

Praise Item: Ken Siabowa has returned to work.

Zambia Declares War on Malaria

At the start of every rainy season in Zambia, Zimba Mission Hospital becomes the frontline in the life and death battle against malaria. Clouds form. The rains begin. Mosquitoes hatch. Soon after, sick children with malaria are brought by their parents for admission to the pediatric ward. Some present with very high fever, others are having convulsions, and an unlucky few are already in a coma. And so goes, this epic struggle with malaria.

Children
 With Malaria
 Admitted to
 the Ward



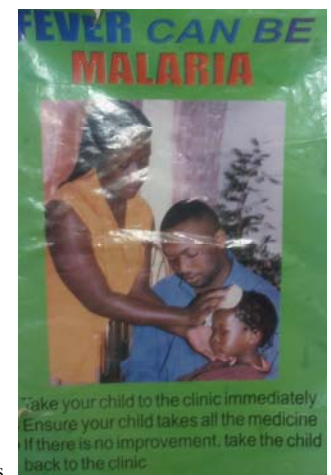
All of Zambia is being mobilized to stop malaria. 20 years ago the country's annual budget to control malaria was \$30,000. Now, it is more than \$40 million. Every year, 50,000 Zambian children die of malaria. The hope is that this major increase in funding will reducing the death rate by more than a third.

Malaria is now found in more than 100 countries. This year malaria will strike around 500 million people. The annual number of deaths is around 1 million people. Children under the age of 5 are most at risk to die from the disease. Most deaths from malaria occur in sub-Saharan Africa.



The disease is caused by the parasite known as *Plasmodium*. There are 4 species of this parasite. The most important one is *Plasmodium falciparum*. It is responsible for most of the deaths caused by malaria. The disease is transmitted by the female *Anopheles* mosquito. The mosquito spreads the malaria parasite when it bites one person and then another. Once inside the human host, the parasite moves to the liver where it multiplies. One week after being infected, several thousand parasites enter the bloodstream.

The first symptoms of malaria are headache and muscle pains. The patient will soon feel chills or rigors. Next, a very high fever will be followed a by a drenching sweat. This cycle is repeated frequently as the body's immune system attempts to fight the infection.



The most severe form of the disease is known as cerebral malaria. In these cases, infected red blood cells form an adhesion to the capillaries of the brain. This causes the brain to swell. Coma often results. The mortality is quite high for cerebral malaria. If the patient survives, they are at risk for permanent neurologic damage.

There are many ways that Zambia is combating malaria. First, insecticide is sprayed inside homes every year just before the start of rainy season. Another method of prevention is sleeping under bed nets.



A new lab test for malaria has recently been introduced. It is called a rapid detection test (RDT). The test is very accurate in confirming the diagnosis of malaria. It can be done by the clinician in just a few minutes inside the screening room.

The newest treatment for malaria is called artemisinin containing therapy (ACT). It is a derived from a Chinese herbal plant. One example is called Coartem. This specific drug contains artemisinin and lumefantrine. It is just as powerful as quinine which has traditionally been used for severe malaria cases. The main advantage to Coartem is that it has fewer side effects than quinine. Coartem is now available at no charge to any patient diagnosed with malaria in Zambia.

Health experts are waiting to see if these new aggressive approaches prove to be successful. Malaria research will determine the results of these interventions. This Zambian strategy has the potential become a national model for malaria control for other countries in Africa.

