



Malaria: Prompt Treatment Saves Lives

- *Prompt disease recognition followed without delay by high-quality treatment of malaria shortens the duration of illness, reduces complications, and saves lives*
- *Programs should help home-based caregivers make key decisions and take action to ensure proper treatment*
- *Artemisinin-based combination therapy is the most effective first-line treatment for malaria.*

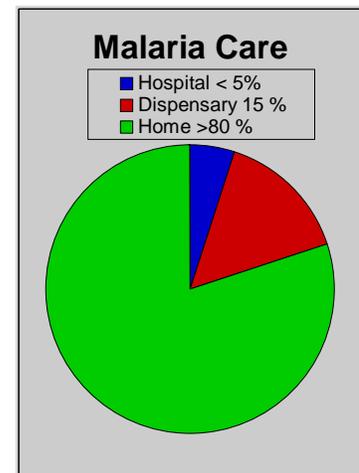
Malaria causes between 300 and 500 million illnesses and kills 1 to 2 million people each year. More than 80% of these illnesses and deaths occur in sub-Saharan Africa, where every 30 seconds a child dies of malaria, making it the number one killer of young children in Africa.

Most episodes of malaria are treated outside the formal health care sector. Inappropriate home treatment is a threat to proper management of malaria and may contribute to the development of drug resistance.

Improve home and community management of malaria

Disease recognition and care-seeking for febrile illnesses in children starts in the home. Caregivers have to make several key decisions and take action to ensure proper treatment. In malaria-endemic areas program interventions should aim to facilitate or improve the following¹:

- caregiver's recognition of signs and symptoms of malaria;
- caregiver's understanding that malaria requires immediate and complete treatment;
- caregiver's ability to provide adequate home care;
- caregiver's access to outside care and ability to bring a sick child to a skilled provider;
- caregiver's compliance with appropriate treatment guidelines and/or referral.



Fewer than 20% of those acutely ill with malaria receive formal health care services².

Treat within an Integrated Management of Childhood Illness (IMCI) framework

The clinical presentations of malaria and pneumonia overlap. In addition, infants often have more than one disease. Thus it is important that, at all levels and in all areas where possible, children are treated within an IMCI framework. Formal and informal providers need, at a minimum, to be skilled or trained to be able to diagnose, counsel, treat, and refer when necessary.

¹ Surviving Malaria-Decision Guide: A programming tool for promoting appropriate case management of malaria in infants and young children.

http://www.coregroup.org/working_groups/Surviving_Malaria_Field.pdf

² Adapted from: Breman JG. The ears of the hippopotamus: manifestations, determinants and estimates of malaria burden. Am J Trop Med Hyg 2001;64 (Suppl 1-2):1-11

Diagnose: With the spread of resistance to anti-malarial drugs, and the high cost of Artemisinin-based combination therapy (ACT), accurate diagnosis, especially of adults, has become important as a means to avoid presumptive treatment of all febrile patients with anti-malarial drugs. Conventional microscopic diagnosis is sensitive, specific, and relatively inexpensive and is still considered the gold standard; however, it requires trained staff and an infrastructure that is not always available at the periphery of the health care system. In these settings, especially in areas with lower rates of transmission, where malaria accounts for a small proportion of all fevers, some National Malaria Control Programs (NMCPs) have decided to use rapid diagnostic tests (RDTs) for malaria diagnosis. A key constraint for diagnosis, either microscopic or RDT, is that health workers treat patients even when results are negative. With the high costs of ACTs, particularly for treatment doses in older children and adults, this practice can place an unnecessary financial burden on malaria control programs. For younger children this is less of an issue and the WHO policy for areas with stable malaria transmission is to treat all febrile children under 5 years with an ACT (or other appropriate anti-malarial).

Counsel: Counseling should focus on compliance with treatment and referral guidance; recognition of danger signs at home; and home-care strategies such as continued feeding and giving extra fluids. Health care workers should also discuss the advantages of using an insecticide-treated bednet. (See the Technical Brief, "Bednets Reduce Malaria.")

Treat and refer: Included in the management of malaria are recognition and management of anemia, including iron supplementation, de-worming, and counseling of caretakers on nutrition. Programs should also ensure that referral facilities can provide good quality care for complicated or severe malaria. In many countries NMCPs are in the process of adopting pre-referral drug policies for the treatment of suspected severe malaria among children. PMI works closely with NMCPs to assist with the implementation of these policies.

Ensure prompt referral and immediate care for severe cases of malaria

If children with malaria fail to receive prompt and appropriate treatment, their condition may deteriorate quickly; they may develop severe malaria within 48 hours of fever onset. Mothers and health care workers should be aware of the clinical features or danger signs of severe malaria: multiple convulsions, prostration, coma, respiratory distress, and shock. Severely ill children need immediate attention, priority treatment, and/or referral. Referral facilities should be able to provide good quality care for complicated or severe malaria, including resuscitation, treatment of hypoglycemia, and restoration of normal circulating volume, including blood transfusion.

Mitigate the spread of drug resistance

National malaria control programs have in the past relied primarily on single-drug therapy as their first-line treatment for malaria. The spread of drug resistance forced programs to change to ACTs as first line drugs for the treatment of malaria; the combination of two or more effective anti-malarial drugs greatly increases efficacy of treatment and reduces the probability of resistance to each of the drugs, extending the useful therapeutic lifetimes of these drugs. Artemisinin-based Combination Therapy (ACT) rapidly reduces malaria symptoms and parasite density in the blood. Four ACT regimens are recommended: artemether-lumefantrine and amodiaquine-artesunate, SP-artesunate, and mefloquine-artesunate.

PMI Target

85% of children under five with suspected malaria will have received treatment with an ACT within 24 hours of onset of their symptoms.

References:

USAID Technical Reference Material, <http://www.childsurvival.com/documents/trms/tech.cfm>

Roll Back Malaria Web site, <http://www.rbm.who.int>

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