MALARIA IN PREGNANCY AND CHILDHOOD

"Malaria is a disease that is both preventable and curable, yet a child dies of malaria every 30 seconds."

World Health Organization at who.int

According to the World Health Organization (WHO), a mosquito bite can be deadly for humans with weak or underdeveloped immune systems. Groups particularly at risk are children under 5, and pregnant women. The United States Agency for International Development (USAID) estimates that 24 million pregnancies are threatened by malaria each year in Africa. More grim statistics from the World Health Organization (WHO) are that 1 in 4 childhood deaths in Africa is caused by malaria, and that women are twice as likely to die from malaria if pregnant.

Following is a summary of pregnancy-associated malaria from USAID. Infected red blood cells accumulate both in the mother's placenta, and in the umbilical cord. Consequently, malaria compromises the delivery of nutrients from the mother to the fetus. The most common side effects in children born to mothers with malaria are premature birth, impaired cognitive development, neonatal death and, most frequently, low birth weight.

Malaria infection can cause a woman to hemorrhage to death during labor and after giving birth. Pregnancy increases a woman's risk of becoming anemic, even if she does not have malaria. If a pregnant woman with anemia becomes infected with malaria, her anemia can be fatal.

WHO estimates that severe anemia in malaria causes 190,000 to 974,000 deaths in children under 5 each year. Blood transfusions can be save lives, but only if the donation and transfusion are both strictly regulated.

Cerebral malaria is the most severe form of malaria infection. It is characterized by coma and convulsions. If a child survives cerebral malaria, she or he is left weak and underdeveloped. Lifelong effects can include blindness, speech problems, and epilepsy. Because of Africa's strained resources, special education for these children is limited or unavailable.

The fever that goes hand-in-hand with malaria decreases a child's appetite, thereby increasing the chance that a child will become malnourished or anemic. Symptoms of infection and illness are likely to prohibit children from attending school, which only exacerbates the socioeconomic consequences that result from lack of education for that child when she or he reaches adulthood.

The CDC discourages pregnant women from traveling to malaria-endemic areas.

From US Centers for Disease Control (CDC) at www.cdc.gov

Malaria has been eradicated in many countries. The last major outbreak in North America was in 1880, and by 1951 the CDC considered malaria eradicated. However, sub-Saharan Africa was excluded from eradication efforts because of wars, an exploding population and a disorganized healthcare system. Today, malaria remains one of the most serious threats to public health in underdeveloped tropical and subtropical regions around the world, particularly in Africa.

The WHO suggests a 3-part approach for malaria prevention for pregnant women. The biggest challenge is keeping steady contact with patients, especially in rural areas where doctor visits are sporadic.

1.Pregnant women should receive intermittent preventive treatment with antimalarial medications. The most frequently used medications are quinine, chloroquine, mefloquine and sulfadoxine-pyrimethamine.

2.Women and their babies should sleep under insecticide-treated nets during and after pregnancy. Women should sleep under them when they reach childbearing age to protect unborn children from the time of conception.

3.A caseworker should be assigned to each pregnant woman to track febrile malaria management.

By AA Reynolds

Resources

www.malaria.org.za
www.childsurvival.com
www.cdc.gov
www.rbm.who.int
www.who.int/malaria/
www.unicef.org/health/
malaria.who.int
www.gsk.com/community/malaria/
www.gatesfoundation.org