

Malaria & Women Deliver

Pregnant women are adult group most at risk from Malaria



- Malaria is a devastating disease with some 40 percent of the world's population in 107 countries at risk todayⁱ. **Pregnant women are the main adult group at risk of malaria and are four times more likely to suffer malaria than other adults.**ⁱⁱ Every year an estimated 30 million women living in Africa's malaria-endemic countries become pregnant.
- Pregnancy reduces a woman's immunity to malaria making her more likely to become infected/affected. Pregnant women's increased vulnerability to malaria can have devastating consequences for both the women and her unborn child. In sub-Saharan Africa malaria infection is estimated to cause 400,000 cases of severe maternal anaemia which contributes significantly to maternal mortality – causing an estimated 10,000 deaths per year. Despite this, it is estimated that less than five percent of pregnant women have access to effective malaria interventionsⁱⁱⁱ.
- The unborn children of women with malaria are also affected and at greater risk of spontaneous abortion, still birth, premature delivery and low birth weight. Some 200,000 newborn deaths a year are estimated to be due to malaria in pregnancy with up to 200 000 newborn deaths each year as a result of malaria in pregnancy^{iv}.
- The problems that malaria infection causes during pregnancy differ depending on the type of malaria transmission area. For example, in high transmission areas where women have gained a level of immunity to malaria that is lessened during pregnancy, malaria infection is likely to result in severe maternal anaemia and delivery of low birth-weight infants. In areas of low transmission where women generally have developed no immunity to malaria infection during pregnancy infection is more likely to result in severe malaria disease, maternal anaemia, premature delivery, or stillbirth.
- The burden of malaria in pregnancy is exacerbated by HIV infection which increases susceptibility to malaria in pregnancy, reduces the effectiveness of antimalarial interventions, and complicates the use of antimalarials because of potential drug interactions.v
- One of the difficulties in diagnosing malaria is that the disease-related symptoms can be easily confused with pregnancy-related symptoms.

Malaria Prevention and Treatment for Pregnant Women

- Efforts to prevent malaria in pregnant women focus on sleeping under insecticide-treated nets (ITNs) and intermittent treatment with an antimalarial drug. ITNs decrease both the number of malaria cases and the number of malaria deaths in pregnant women and their children. Studies have shown that in areas where there are high rates of malaria, women protected by ITNs every night during their first four pregnancies give birth to 25 percent fewer underweight or premature newborns. Using ITNs also benefits infants who sleep under the net with their mother.^{vi}
- Intermittent preventive treatment (IPT) involves providing pregnant women with at least two preventative treatment doses of antimalarial drugs. Evidence shows this is

a safe, inexpensive and effective way of preventing malaria during pregnancy with a decline in both infection rates, and in the number of low birth weight babies^{vii}.

- At the first African Summit on Malaria held in Abuja, Nigeria 2000, African heads of state committed to providing effective malaria interventions to at least 60 percent of pregnant women by 2005.

Malaria & Maternal Health Services

- The World Health Organization (WHO) has introduced malaria guidelines into their Making Pregnancy Safer programme. Antenatal clinics are a key setting where women can be made aware of the problems of malaria and take preventative steps. However, whilst delivery of malaria interventions through antenatal clinics in malaria-endemic areas needs to be widespread, WHO acknowledges that currently this approach is the exception rather than the rule.^{viii}
- Pregnant women who do not attend antenatal clinics or who attend only for the first visit or too late during pregnancy need to be reached. Many women are not aware that pregnancy makes them more susceptible to malaria and new strategies are needed to encourage these women to attend antenatal care early and consistently.
- Other challenges include drug resistance and the safe and appropriate use of different antimalarial drugs during pregnancy. As resistance to antimalarial drugs increases, the challenges of treatment and prevention of malaria among pregnant women become greater. Research in this area is therefore a high priority.
- Effective management and treatment of malaria have also been hampered due to lack of research/development linked to issues of drug safety concerns for pregnant women which make companies reluctant to test drugs and treatments in pregnant women.

Gender & Malaria

- Women are more vulnerable to malaria not only due to biological factors, but also due to socio-cultural and gender-based factors. In developing countries, women can be excluded from decisions on household purchases (e.g. ITNs) and their bargaining power within the household can significantly impact on their treatment-seeking behaviour and their ability to care for their health and that of their children.
- Low social status, lack of access to formal education, poor nutrition and less access to financial resources are some of the key factors that increase women's vulnerability to malaria.
- Gender inequality also has a direct impact on women's vulnerability to HIV with women accounting for a majority of HIV infections in sub-Saharan Africa, and heightens the risk of co-infection with malaria.
- Empowering women is essential for reducing their vulnerability to malaria, and ensuring that women have a greater voice in household and community decisions is critical to fulfilling the rights of children.

ⁱ World Malaria Report, WHO/RBM/UNICEF, 2005

ⁱⁱ RBM Guide to Gender and Malaria Resources

ⁱⁱⁱ RBM: Malaria in Pregnancy InfoSheet

^{iv} Public Library of Science Medicine, Ribera JM et al, 2007

^v The burden of co-infection with human immunodeficiency virus type 1 and malaria in pregnant women in Sub-Saharan Africa. *Am J Trop Med Hyg* 2004; **71** (suppl 2): 41-54.

^{vi} RBM: Malaria in Pregnancy InfoSheet

^{vii} RBM Infosheet

^{viii} Lives At Risk: Malaria in Pregnancy, WHO April 2003