MATERNAL AND MATERND
AND CHILD HEALTH

Malaria is a leading cause of child mortality in Africa, claiming a life nearly every 30 seconds, and posing a tremendous risk to the health and well-being of pregnant women. In addition, through a confluence of physiological factors, malaria contributes to the toll of other maternal and child health conditions and places a significant burden on health systems. Rapidly scaling-up investment in malaria prevention and treatment programs can reduce illnesses and save the lives of children and pregnant women while simultaneously strengthening health systems.

SCOPE OF THE PROBLEM

An estimated 50 million pregnant women are exposed to malaria every year, 60% of them in Africa and more than 10,000 infants die in Sub-Saharan Africa alone as a result of malaria infection during pregnancy. Pregnant women who are infected with malaria, have an increased risk of severe maternal anemia, parasites in the placenta, low birth weight, prematurity, and increased infant mortality. Pregnant women are more susceptible to complications from malaria, including cerebral malaria and kidney failure. In malaria endemic areas, one in four severe maternal anemia cases are attributable to malaria infection, as are nearly 20% of low birth weight babies.

Even if newborns escape malaria infection during gestation, children are at highest risk for severe malarial illness and death during the first five years of life while their immune systems are developing. Malaria is a leading cause of child mortality, responsible for 8% of child deaths worldwide and 18% of child deaths in Africa. In addition to the symptoms and complications of the disease, malaria affects a child’s immune system and increases their susceptibility to other diseases. As they grow older, childhood malaria infection, including cerebral malaria, can have long-term effects related to delayed physical growth, impaired cognitive development and persistent neurological damage.

African children suffice the greatest malaria burden

Citation: UNICEF (2007) Malaria and Children: Progress in Intervention Coverage.

INTERVENTIONS

Malaria deaths, illnesses and impact on child development are preventable and effective prevention and treatment tools are currently available. The World Health Organization has adopted a three pronged approach to ease the burden of malaria on women and children in endemic areas that includes intermittent preventive treatment (IPT) for pregnant women, malaria illness management during pregnancy, and the use of insecticide-treated bed nets (ITNs) for the entire population living in malaria-affected areas. These strategies, combined with initiatives to promote prompt and effective treatment for childhood fevers, have measurable impact. IPT reduces low birth weight by 29%; treatment during pregnancy...
saves lives, and insecticide-treated nets are one of the most effective ways to prevent malaria transmission. Studies have shown that high coverage and regular use of ITNs can reduce overall all-cause under-five mortality rates by nearly 20% in malaria-endemic areas.

Global investment in malaria must increase to address the burden of malaria. While current efforts to scale-up effective interventions will reduce the incidence of malaria, it is estimated that an increased investment to support a rapid scale-up approach can result in significantly more lives saved. In the next five years, $10.9 billion is needed to support IPT for pregnant women, universal distribution of ITNs, and the provision of ACTs for those infected with malaria. The projected returns on this investment include 3.5 million lives saved, 427,000 hospital beds freed due to the reduced burden of malaria, and more than $80 billion GDP generated in Africa alone.

FUTURE TRENDS AND TARGETS

The 2010 global targets Roll Back Malaria Partnership (RBM) include 80% of pregnant women in endemic areas receiving IPT, 80% of people at risk of malaria are protected by ITNs and indoor residual spraying, 80% of malaria patients are diagnosed and treated within 24 hours of the onset of illness, and the malaria burden is reduced by 50% over the rates recorded in 2000. These global partnership goals support the previously established Millennium Development Goals (MDGs) that apply to maternal and childhood mortality and target the reduction in deaths across disease areas.

OPPORTUNITIES FOR INTEGRATED MATERNAL AND CHILD HEALTH SERVICES

Integration of scaled-up malaria programs with existing maternal and child health services is essential to achieving global targets for malaria reduction. There is growing evidence for the cost efficiencies of integrating malaria treatment and prevention with child and reproductive health services to reduce the burden of malaria while simultaneously addressing other health concerns.

Current integration examples include combining malaria prevention and treatment with HIV/AIDS, hookworm, onchocerciasis, and vaccination services and campaigns. In addition to disease-specific programs, malaria prevention can also be integrated with general services and care. In Africa, existing integrated programs distribute ITNs during antenatal visits, at children’s regular vaccination visits, and as part of regional and nationwide child survival ‘nutrition weeks’ and integrated health campaigns that distribute vitamin A and deworming medicine.

The link between malaria control and improved child health and pregnancy outcomes is both mutually beneficial and synergistic. Investing in malaria to support an integrated model reduces the burden of malaria, improves health outcomes and ultimately strengthens health systems. While the integration of malaria prevention and treatment services offers an important cost-efficient model to maximize impact and save lives, the success of this model is dependent on the increased investment in malaria prevention and treatment tools to secure the necessary resources.

Malaria, HIV/AIDS, and Maternal and Child Health

HIV/AIDS compounds the symptoms of malaria, particularly in pregnant women. HIV infection during pregnancy is associated with greater numbers of malaria parasites in the placenta, which brings a higher risk of birth complications. Malaria in turn causes anemia in pregnancy and is associated with a higher HIV-1 viral load. Malaria, HIV/AIDS and anemia all result in low birth weight, an important risk factor for infant mortality. The dangerous combination of HIV/AIDS and malaria underlines the need for integrated health services, and also highlights the need for further research into the effects of HIV treatments and anti-malarial drugs in pregnant women.

For a complete list of references, or more information, please visit www.malariafreefuture.org.