

The Link between Malaria and HIV and AIDS



Background

Malaria and HIV and AIDS (HIV/AIDS) are two of the most devastating global health problems of our time, causing approximately 3 million deaths a year combined. Both malaria and HIV/AIDS disproportionately affect poor people in developing countries and have been called ‘diseases of poverty.’ In areas where both diseases are present, the vicious cycle of poverty is often exacerbated as children, families and communities are overburdened by decreased health and economic productivity. Malaria and HIV/AIDS have a devastating impact on the family structure and community fabric that can lead to the erosion of a family’s asset base. HIV/AIDS disproportionately affect the young, economically active population leaving children and the elderly responsible for care and income generation, not to mention the added expenses incurred to treat the sick family member. Malaria has the greatest impact on very young children and pregnant mothers which can create additional strain on the family’s resource base as older siblings and mothers may be forced to care for family members who contract the disease. When these two diseases overlap the impact can be cross-generational and have devastating effects on families and whole communities. Additionally, co-infections with malaria and HIV/AIDS have major health implications, especially on children and pregnant women. But it doesn’t have to be this way—both malaria and HIV/AIDS are preventable and treatable.

Malaria and HIV/AIDS

Both diseases intersect at a number of different levels

- Geographically: Both diseases are concentrated in tropical and sub-tropical regions of the world, particularly in sub-Saharan Africa.
- Socio-economically: Malaria and HIV/AIDS are exacerbated by and reinforce poverty. They often affect the poorest segments of a population, which may be more vulnerable to disease due to lack of access to education, information and state services.
- Individually and biologically: People living with HIV/AIDS (PLWHA) are at increased risk of clinical malaria and severe illness, and HIV infection can decrease the protection offered by anti-malarial treatment. Malaria contributes to a temporary increase in viral load among HIV-infected people which may worsen clinical disease and increase mother-to-child transmission and transmission in adults. Malaria causes anaemia which often requires blood transfusions, a procedure that increases the risk factor for HIV infection where universal blood screening has not been achieved.

Both HIV/AIDS and malaria HIV exacerbates the effect of malaria during pregnancy, causing an increase in anaemia, clinical disease, and lower birth weight in babies, leading to poor infant survival. Children and adults who have HIV/AIDS are more likely to experience severe malaria requiring hospitalization and the risk of death.

What you need to know about malaria

Malaria is an infection caused by a parasite that is transmitted from person to person through the bite of female Anopheles mosquitoes that only feed at night. The parasites then multiply in the human liver and bloodstream causing fever and chills and can lead to death if left untreated. Today, approximately 50% of the world’s population, or 3.3 billion people, are at varying degrees of risk of malaria. Nearly one million people die from malaria annually, 90% of these deaths occurring in sub-Saharan Africa. Each year, roughly 250 million people become acutely ill with malaria, primarily among people living in tropical and sub-tropical regions of the world. Children under five years and pregnant women are the most vulnerable to severe malarial illness and mortality. Every 40 seconds, a child dies from malaria, making it the fourth leading cause of death worldwide for children under five. As many as 10,000 maternal deaths are attributed to malaria every year, and the disease can cause complications affecting fetal health. More specifically, adverse consequences of malaria during pregnancy include anemia, spontaneous abortion, stillbirth, preterm delivery, and low birth weight.

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Malaria is preventable

Two key interventions can turn the tide against malaria: the use of long-lasting insecticidal nets (LLINs) to provide both personal protection from mosquito bites and community protection when coverage levels are high and well-targeted indoor insecticide spraying to control transmission of the parasite caused by mosquitoes. Both interventions can be effective in different circumstances and strategies must reflect local needs as there is no “one size fits all” approach to malaria control.

In addition to LLINs, a critical intervention to prevent malaria in pregnancy is the use of intermittent preventive treatment of pregnant women (IPTp) with at least 2 doses of sulfadoxine-pyrimethamine (SP). More frequent dosing is recommended in areas where the prevalence of HIV among pregnant women is high. Malaria and HIV interventions, including prevention of mother to child transmission (PMTCT) and voluntary counseling and testing (VCT), should be integrated into focused antenatal care (FANC).

Malaria is treatable

Malaria can be effectively treated, even in PLWHA. Although resistance to certain anti-malarial drugs has occurred in some regions of the world, it has not developed for artemisinin-based combination therapy (ACT), highlighting the importance of scaling up this intervention. All uncomplicated *P. falciparum* infections should be treated with an ACT, and *P. vivax* should be treated with chloroquine and primaquine (except where *P. vivax* is resistant to chloroquine). Rapid treatment with ACTs can reduce transmission as well.

Malaria and HIV programs can work together to strengthen health systems, improve diagnosis through laboratory services, improve supply chain and distribution systems, and expand the reach of health services to the community.

Recommendations for addressing malaria and HIV/AIDS

- In order to maximize the use of resource and increase the impact on co-infected individuals LLIN distribution and efforts to increase net usage for malaria should be incorporated into all PMTCT/ Antenatal care and VCT programs in malaria endemic countries.
- Public education programs and IEC materials should be incorporated into HIV/AIDS and Malaria programs to encourage mothers and children under five to sleep under LLINs every night.
- Areas where both malaria and HIV/AIDS occur, diagnosis and treatment of febrile patients with ACTs within 24 hours needs to be ensured.
- In order to ensure a strong, community-focused response to malaria, HIV/AIDS activities and programs at the local level should be integrated and knowledge shared in a manner that supports and strengthens activities of the National Malaria Control Plans.
- In order to fulfill commitments of nations to achieving universal access to treatment for PLWHA and provision of LLINs for prevention of malaria and malaria treatment, governments must ensure increased levels of funding and resources are provided to achieve these goals.
- National governments should work to improve coordination between partners and expand reach of access by engaging more non-governmental, civil society and faith-based organizations in joint malaria and HIV/AIDS programs and increase opportunities for these partners to become sub-recipients of Global Fund grants.



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