MALARIA AND HIV FACTSHEET

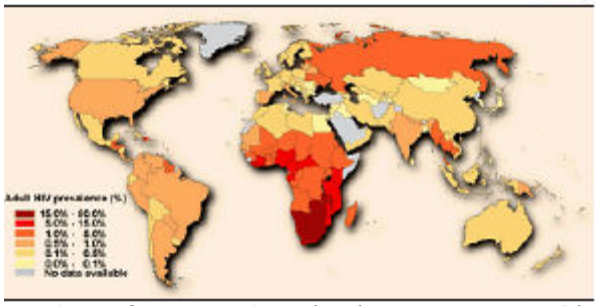
- Malaria and HIV cause more than four million deaths a year combined, and are both concentrated primarily in sub-Saharan Africa, Asia and South America. More than 500 million cases of malaria occur every year, at least a million of which cause deaths. An estimated 30-36 million people are living with HIV in Africa, resulting in more than three million deaths every year.[i]

- There is considerable geographical overlap between malaria and HIV and increasing evidence on a direct link with one disease making the other worse and more difficult to treat.

- Studies in 2006 highlighted the interaction between malaria and HIV infection and revealed malaria may be fuelling the spread of HIV in areas of sub-Saharan Africa, while HIV may be playing a role in boosting adult malaria-infection rates. Based on a study in a Kenyan city with high levels of both malaria and HIV, researchers calculated that the interaction increased AIDS cases by 8 percent and malaria by 13 percent.[ii]

- Guidelines for treatments of the two infections can often conflict. There are also issues around drug resistance and cross-reactions between drugs, as well as concerns that some medications used to treat HIV-positive persons could be harmful for malaria treatment in certain settings. More research leading to clear policy recommendations for treatments is urgently needed.

Maps www.who.int/malaria/malariandhivaids.html or www.who.int/malaria/malariaHIV/malariahiv flyer.pdf



Source: Center for Disease Control and Prevention, UNAIDS/WHO

Effect of Malaria and HIV Interaction

Pregnant Women:

- Both malaria and HIV have disproportionate effects on pregnant women and pose serious risks. Research has shown that HIV impairs immunity to malaria in pregnant women – an estimated 440,000 women in sub-Saharan Africa had malaria infection during pregnancy attributable to HIV in 2003.[iii]

- Not only does HIV increase a pregnant woman's chances of contracting malaria, but it also increases the risk of developing anaemia, delivering a low birth weight infant, and delivering prematurely. Low-birth weight increases the risk of death in infancy.

- Malaria infection in HIV-positive pregnant women can also increase the risks of mother to child transmission (MTCT) during pregnancy, labour as well as the breastfeeding period as a result of increase in the level of HIV in the blood (the viral load).[iv]

HIV-positive Adults:

- People living with HIV and AIDS are especially vulnerable to malaria and will suffer more often and more severely from malaria once their immune system starts to decline.

- HIV not only increases the incidence and severity of malaria, it also compromises malaria treatment. HIV infection can decrease the response to standard antimalarial treatment. For HIV-positive adults with a weakened immune system (a low CD4 count), antimalarial drugs are less likely to be effective.[v]

- Malaria contributes to an increase in viral load among HIV-positive people which can potentially accelerate the progression from HIV to AIDS.

- Once malaria gets into the blood of a person living with HIV, it increases the level of HIV by up to ten times during a malaria fever episode. This significantly increases the risk of them infecting a sexual partner with HIV.[vi]

Children:

- Few studies have examined the link between malaria and HIV in children and more research is needed in this area.

- For children HIV infection increases rates of malaria fever, severe disease and coma, with parasite density higher in children with advanced immuno-suppression (a weakened immune system).

- Malaria is also a common cause of severe anaemia which is often treated with blood transfusion. However these are often unscreened for the HIV antibody especially in countries with limited health resources and can result in HIV infection.

What needs to be done

- Recent findings about the interaction between malaria and HIV should add extra urgency to the fight against malaria.

- Provision of Insecticide Treated Nets (ITNs), preferably long-lasting insecticide nets, and prompt and effective treatment of malaria should form part of the care package

for people living with HIV and AIDS, as well as counselling and offering HIV testing for adults that suffer frequently from malaria.

- Combining the use of ITNs and certain antibiotics with antiretroviral therapy have been shown to reduce malaria cases in HIV-positive people by 95 percent in one study.

- Reproductive health services must be strengthened to deliver quality antenatal care which includes a minimum package of interventions for the prevention of both malaria and HIV.

- Providing integrated health services in areas heavily affected by malaria and HIV is critical to reduce the burden of both diseases. Despite recommendations that HIV/AIDS interventions work together with malaria and TB, in practice in many places they continue to be treated separately.

- There is a need for clear guidelines for both the prevention of severe anaemia and for the appropriate use of blood transfusions in malaria-endemic areas to help limit transfusion related HIV transmission.

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[i] The Link Between Malaria and HIV, Centers for Disease Control, Division of Parasitic Diseases, 13 January 2006
[ii] Fred Hutchinson Cancer Research Center and the University of Washington, co-authored by Laith J. Abu-Raddad, Ph.D., Padmaja Patnaik, Ph.D. and James G. Kublin M.D., M.P.H. published December 8 2006, Science
[iii] World Health Organization (WHO), "Malaria and HIV Interactions and their Implications for Public Health Policy Conclusions of a Technical consultation, 23-25 June 2004
[iv] UNICEF Technical Note No 6, Malaria and HIV, February 2003
[v] See i.
[vi] See i.