

Mother to Child HIV Transmission in Africa

Twenty five million men, women, and children are living with HIV/AIDS in sub-Saharan Africa. African women are at higher risk than men and comprise 55% of all AIDS cases in the region. Although the life expectancy of a person living with HIV/AIDS is significantly lower in Africa than in industrialized countries, the total number of people living with HIV/AIDS continues to rise in sub-Saharan Africa, because there are more newly infected individuals than AIDS-related deaths each year.

Sub-Saharan African women and children are particularly at risk for HIV. In June 2000, UNAIDS reported that one in five women under the age of 25 are infected with HIV in Africa. HIV/AIDS transmission in Africa is primarily through heterosexual sex and vertical transmission (mother-to-child). Forty percent of all HIV/AIDS cases result from mother to child transmission. While fewer than 300 infants in the U.S. acquired HIV through vertical transmission in 1997, in sub-Saharan Africa over 2.5 million children under the age of 15 have died of AIDS. Most of these children were exposed to HIV during labor or breastfeeding.

HIV/AIDS is a serious threat to future development in Africa. The cost of one year of basic healthcare for an individual living with HIV/AIDS is two to three times more than the average per-capita gross domestic product of some African countries. HIV prevention programs are less expensive than HIV care and should be a critical component of any AIDS intervention program.

Recent evidence demonstrates that antiretroviral drugs are effective in the prevention of vertical transmission of HIV. A study in Thailand found that providing the antiretroviral drug AZT (zidovudine) twice a day for four weeks reduces the rate of perinatal transmission by 50%. However, the treatment regimen is expensive. The total

discounted cost for generic AZT is \$53 U.S. for both the mother and child to be treated. AZT therapy also requires periodic physician visits throughout a woman's pregnancy. Many women in Africa live in rural areas and may not be able to afford to travel frequently to medical facilities or to pay for their care.

A newer drug, Nevirapine, has shown promising results in reducing the rate of vertical transmission. One dose of Nevirapine given to a mother around the time of labor and delivery and another dose given to the child within 72 hours of birth reduces the rate of transmission by 47%. This drug therapy costs \$8 U.S. for both the mother and child.

Pharmaceutical companies, including the manufacturer of Nevirapine, have begun to make these life saving drugs available to needy countries, including sub-Saharan Africa. While some of these antiretroviral drugs will be available free of charge, others will be offered to sub-Saharan African countries at reduced rates that still significantly exceed the per person health budget of these countries. Nigeria, Tanzania and Ghana each have health budgets of \$8 U.S. per person per year, making the cost of some vertical HIV transmission prevention programs -- much less HIV drug treatment -- an unattainable goal.

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According to a recent poll, more than half of Americans believe that the United States should devote more funds and resources to African nations dealing with the AIDS pandemic. The survey also found that 64% of Americans support using federal funds to aid Africa, and 70% support funding educational and prevention programs in the region. HIV prevention programs, including vertical HIV transmission prevention through drug therapy, are a cost-effective response to the AIDS pandemic.