

Achieving an AIDS-Free Generation: Reducing Mother-to-Child Transmission

The Problem:

More than 33 million people around the world are infected with HIV, the virus that causes AIDS. Nearly 70 percent of those infected live in sub-Saharan Africa, home to only 12 percent of the world's population. Every year, 2 million people still die from AIDS worldwide and 2.7 million people are newly infected with HIV. Sub-Saharan Africa accounted for 72 percent of the world's AIDS-related deaths in 2008.



Approximately 400,000 children less than 15 years old became infected with HIV in 2009. Ninety percent of these HIV infections occurred through mother-to-child-transmission (MTCT), which occurs when an HIV-infected woman passes the virus to her baby either during pregnancy, labor and delivery, or through breastfeeding. Ninety percent of MTCT of HIV infection in 2009 occurred in Africa, where every day 1,000 HIV-infected babies are born. Between 20 and 40 percent of babies born to HIV-positive women who do not receive treatment to prevent transmission will become infected with the virus during pregnancy and delivery. Another 20 to 50 percent will become infected during breastfeeding. Antiretroviral therapy throughout pregnancy, labor and delivery and the breastfeeding period reduce HIV transmission to infants to one to two percent.

- Prevention of mother-to-child transmission (PMTCT) services work to dramatically reduce HIV transmission to infants. For many countries, 80 percent coverage is the universal access target for both HIV testing and antiretroviral therapy (ART) to prevent MTCT. Reaching the goal of eliminating MTCT requires universal HIV testing and the provision of anti-HIV medications to at least 95 percent of HIV-positive pregnant and breastfeeding mothers.
- Revised World Health Organization (WHO) treatment guidelines recommend treatment for pregnant women with severe or advanced clinical HIV disease. Yet, only half of HIV-positive mothers receiving medication to prevent transmission to their newborns are taking three or more drugs to treat the virus. This combination therapy has been shown to cut the risk of transmission to a newborn nearly in half in comparison to shorter and simpler courses of treatment.
- According to the WHO and UNICEF, program data from several countries shows that universal access to PMTCT services is possible with strong political leadership and commitment, harmonized partnerships and sound programming. For example, in Botswana, high-quality PMTCT services are provided in all of the country's public facilities through the Maternal Child Health/Family Planning system, which serves more than 95 percent of pregnant

women. Only four percent of babies born to HIV-positive mothers were infected, which is close to rates in the U.S. and Europe.

The Unmet Need:

- In 2009, only 57 percent of pregnant women worldwide received an HIV test.
- In 2009, only 53 percent of pregnant women living with HIV in low- and middle-income countries received PMTCT services. While some countries are reaching high rates of coverage – such as Zambia, South Africa, and Rwanda – others are lagging far behind, such as Ethiopia and Nigeria, with only 20 percent coverage. According to UNAIDS, 57,000 infants were born infected with HIV in Nigeria last year alone.
- HIV-infected pregnant women at an advanced stage of disease have a much higher risk of transmitting the virus to their infants.
 - A study In Zambia found that women who were clinically eligible for treatment but did not receive it accounted for 88 percent of maternal deaths 24 months after delivery.
- Starting ART in all HIV infected pregnant women in Zambia would prevent 92 percent of maternal deaths and 88 percent of peri-natal and post-natal infections.
- Mother-to-child transmission rates are also significantly higher in pregnant women co-infected with HIV and tuberculosis. A recent study conducted in India found that 12 percent of women infected with HIV transmitted the virus to their infant, while 30 percent of women co-infected with TB transmitted HIV to their infant. Despite some progress, only about 10 percent of HIV positive people who are eligible for AIDS treatment are being screened for TB, even though it is the single biggest killer of people living with HIV/AIDS.

The Solution:

Enormous progress has been made in understanding the problems that lead to infection and forging a global strategy to address them. For instance, U.S.-funded research has shown that women must navigate a complex set of steps to access the care they need, so implementers are working to make services more user-friendly, culturally sensitive and better integrated with other maternal and child health programs.

Programs are also working to emphasize a holistic approach to reduce stigma, increase community involvement, protect the health of the mother and ensure the HIV-free survival of children. Among other steps, this requires programs to move rapidly to providing three-drug combination therapy for the mother, to significantly reduce the chances of transmission.

The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) has made a commitment to help countries achieve 85 percent coverage of treatment for infected pregnant women by 2014. PEPFAR is providing an additional \$100 million both in 2010 and 2011 to support six countries in accelerating expansion of HIV testing and ART. The Global Fund to Fight AIDS, Tuberculosis and Malaria has also prioritized PMTCT as a part of a global campaign to virtually eliminate the transmission of HIV from mothers to their children by 2015. The Fund is currently working with 20 countries in sub-Saharan Africa to reprogram existing Global Fund grants to allow for a switch from the use of simple yet less effective treatment options to the more effective ART involving two or more anti-HIV drugs for PMTCT.

Treating HIV infection in pregnant women will ultimately reduce HIV prevalence in the community. Treatment preserves the health of mothers, protects children from HIV infection and reduces the likelihood that women will pass on the virus to their sexual partners. And even HIV uninfected children are much more likely to survive and thrive if their mothers are healthy and able to care for them.

An AIDS free generation is attainable. It is imperative that the U.S. in partnership with the Global Fund and affected countries continue to scale up PMTCT to ensure that both mothers and their children have access to life-saving therapy and supportive services.