



TECHNICAL ISSUE BRIEF

AN EARLY INTERVENTION: PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

June 2009

Introduction

One of the tragic consequences of HIV infection in women is the transmission of the virus to their children, which can occur during pregnancy, at the time of delivery, or through breastfeeding. In fact, mother-to-child transmission represents a major cause of morbidity and mortality among young children in developing countries with a high prevalence of HIV infection. It is estimated that more than 90 percent of children living with HIV acquired the virus before or during birth, or through breastfeeding. The result is staggering: An estimated 2.5 million children are currently HIV infected, and 1,000 children under 15 are newly infected every day.

For the past decade, the U.S. Agency for International Development (USAID) has sought to strengthen health systems and communities to deliver prevention of mother-to-child transmission (PMTCT) services to women through support of a wide variety of complementary interventions. These include improvement of antenatal services, HIV counseling and testing for pregnant women, administration of antiretroviral drug prophylaxis for HIV-positive pregnant women, and support for safer infant feeding practices. USAID programs also provide multiple types of other psychosocial, clinical, and nutritional support to women who are identified as HIV positive in the course of PMTCT programs.

Multifaceted Approach to PMTCT

Efforts to reduce mother-to-child transmission (MTCT) of HIV require a multifaceted approach. The World Health Organization (WHO) recommends a comprehensive strategy, including:

1. Primary prevention of new infections;

A key component of USAID-supported PMTCT activities is the use of support groups and patients or trained “expert clients” at PMTCT service sites to help pregnant women better understand and access HIV/AIDS services.



USAID/Mozambique

A new mother rests quietly next to her sleeping newborn baby.

2. Prevention of unintended pregnancies among women living with HIV;
3. Prevention of HIV transmission from mothers living with HIV to their infants; and
4. Care, treatment, and support for mothers living with HIV, their children, and families.

Introducing HIV Counseling and Testing in Antenatal and Maternity Settings

HIV counseling and testing of pregnant women is critical in identifying pregnant women who are living with HIV and in preventing transmission of the virus to infants during labor and delivery. Yet the majority of pregnant women in the developing world have never been tested for HIV and do not know their status. According to UNICEF estimates, only 18 percent of all HIV-positive pregnant women receive testing in antenatal care clinics. Many others deliver at home or arrive at health facilities for labor and delivery, unaware of their HIV status.

USAID has introduced programs to help increase the number of pregnant women tested for HIV. Through outreach programs, USAID has worked with traditional birth attendants and community health workers to identify and refer women to HIV counseling and testing and antenatal care. USAID has also supported programs that provide counseling and testing services to women during labor and delivery. USAID-supported projects work closely with sites to provide training, mentorship, and close supervision to multidisciplinary teams of providers. Among the Agency's priorities is support for the integration of PMTCT services into maternal and child health (MCH) settings.

Providing Antiretroviral Therapy for HIV-infected Pregnant Women

USAID supports the implementation of HIV counseling and testing for pregnant women as a routine part of MCH. For women who test positive, USAID supports increased access to one of the following, depending on the individual medical condition of each woman: short-term prophylaxis beginning at 28 weeks gestation or initiation of highly active antiretroviral therapy (HAART). Timely administration of antiretroviral drugs significantly reduces the risk of MTCT. With the increased focus on PMTCT, recent epidemiological estimates suggest that coverage of antiretroviral prophylaxis for HIV-positive pregnant women for PMTCT in low- and middle-income countries increased from 9 percent in 2004 to 33 percent in 2007.

USAID-supported projects have led on-site workshops and HIV/AIDS medical education meetings and provided intensive clinical mentorship while working at the same time with staff to realign job responsibilities. In many of these projects, nurses and nurse clinicians were supported to initiate patients' use of HAART, which enables more women in need to be started on therapy at locations where a physician is not always available.

The expert clients serve as integral members of multidisciplinary teams and provide an array of patient support services, including treatment adherence counseling and assistance with referrals. They also lead both individual and group counseling sessions.

Supporting Safe Infant Feeding Practices

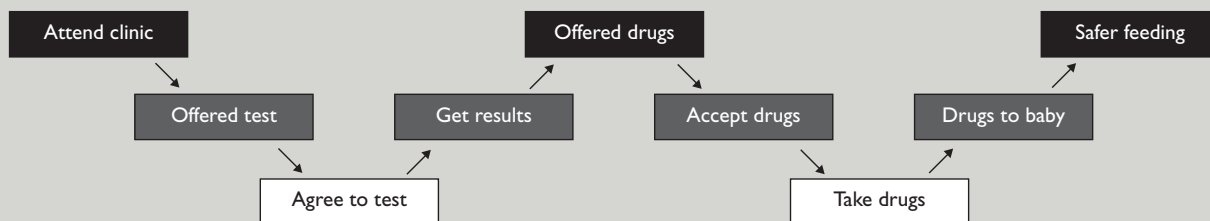
USAID-supported projects work with host country governments to incorporate the WHO Consensus Statement on HIV and Infant Feeding (2006) into national policies and guidelines. The WHO Consensus Statement on HIV and Infant Feeding states that the only certain way to completely avoid the risk of HIV transmission through breast milk is for women living with the disease to abstain from breastfeeding and provide replacement feeding instead. However, replacement feeding is not recommended unless it is acceptable to the family, feasible, affordable, sustainable, and safe. For example, families must have reliable, uninterrupted access to nutritionally appropriate formula, as well as the clean water and fuel for cooking required to prepare it. In cases where families lack these resources, mothers are advised to breastfeed their infants until the age of six months, even if they are HIV positive. In order to reduce the risk of MTCT, the Consensus Statement stresses that HIV-positive women should never use mixed feeding – giving a baby foods or other liquids as well as breast milk – because it carries the greatest risk of such transmission. Regular breastfeeding up until the sixth month also protects women from getting pregnant; after that point, however, they should begin taking a contraceptive to avoid unintended pregnancy.

USAID ensures that countries have up-to-date policies and guidelines, which helps health care workers and community members promote optimal feeding. USAID also works with country partners to develop or revise nutrition training curricula and courses that address the latest WHO guidance. The resulting materials are used to train health workers at PMTCT sites, as well as community workers and volunteers, to counsel HIV-positive pregnant women and mothers on improving nutrition during pregnancy and lactation and to ensure optimal and safe infant and young child feeding practices.

Strengthening Family Planning and Safe Motherhood Programs

Worldwide, women of childbearing age account for more than half of the people living with HIV/AIDS. In 2002, a WHO meeting identified the prevention of unintended pregnancy in HIV-infected women as a key strategy in preventing the transmission of HIV to infants. Combined with other approaches, including primary pre-

Steps to Reduce the Risk of MTCT of HIV



A background image showing a woman in a patterned top holding a baby. The image is semi-transparent, allowing text to be overlaid.

“I Can Make a Difference in One’s Family Life”: Preventing Mother-to-Child Transmission of HIV

Sister Abiyot Bedane lives in the Arsi Zone of Oromiya Region in Ethiopia. As a maternal and child health nurse at the Alem Tenna Health Center, she works a busy schedule caring for local mothers and children. Until recently, though, her health center has not been able to help mothers who are HIV positive avoid passing on the virus to their children.

From February 18 through April 9, 2008, the USAID-funded Capacity Project conducted in-depth, on-the-job training sessions for health providers in the four regions of Amhara, Tigray, Oromiya, and SNNPR. Through these sessions, 212 providers were trained in comprehensive antenatal care and PMTCT, including Sister Abiyot.

Sister Abiyot received training at the Geda Health Center in Nazareth, about 100 kilometers east of Addis Ababa and not far from Alem Tenna, where she works. “The depth of the 10-day on-the-job training made us capable of launching PMTCT services in our health center,” she explains. “The training gave us the capacity to counsel, test for HIV, determine the infection stage, provide treatment follow-up for the mother and the child, and a lot more.”

The training sessions also incorporated information on pediatric HIV so infected babies will be able to receive services at the health center level rather than needing to travel to hospitals. In February and March 2008, the Capacity Project trained 90 providers in integrated management of neonatal and childhood illness in 45 health centers in Amhara, Tigray, Oromiya, and SNNPR regions.

The Capacity Project is also expanding the successful Mothers Support Group program for HIV-positive mothers; scaling up health extension workers’ involvement in PMTCT; conducting training for pediatric HIV/AIDS linkages and referral; and providing support for PMTCT in private facilities.

The knowledge and skills Sister Abiyot learned are already making a big impact – not just on the services she is able to provide, but on her own outlook as well. “Now I see pregnant women differently,” she says. “When I find an HIV-positive pregnant woman, I will be sad just like any other person, but my frustration for not providing a solution is gone now. I am capable of counseling for HIV testing and keeping the mother in medical follow-up toward institutional delivery, which most women in our area are not willing to do,” she points out. “This way, I can make a difference in one’s family life.”

vention of HIV infection in women; prevention of transmission from women living with HIV to their infants; and provision of care, treatment, and support for women living with HIV and their families, this could dramatically reduce MTCT.

USAID has been working to integrate family planning and HIV activities. USAID supports the formulation of policies that facilitate the implementation of family planning and HIV service integration at the national level, which leads to a greater change in practice at the facility level. In addition, USAID supports provider training to ensure HIV-positive women receive correct and unbiased counseling related to family planning, particularly during antenatal care, delivery, and postpartum follow-up. USAID has also trained peer educators to establish family planning and support groups for HIV-positive couples. In addition, USAID partnering organizations have developed a resource, *Increasing Access to Contraception for Clients with HIV: A Toolkit*, which responds to the demand for in-depth training and performance support materials by program managers who want to provide family planning services for their clients with HIV.

There is a small percentage of HIV-positive women who want another child. Because these mothers are at risk of giving birth to low birth weight and premature infants, the 2006 WHO policy brief on birth spacing is relevant to their family planning decisions. After a live birth, WHO recommends a 24-month interval before another pregnancy is attempted.

Results

Comprehensive Programs Help Mothers and Children

In Lesotho, USAID-funded projects support the family-centered MTCT-Plus model, which provides HIV testing, care, and treatment to pregnant women, their children, and partners. Since October 2007, program sites in Lesotho have provided HIV testing services to nearly 3,000 pregnant women. During the same period, a total of 457 HIV-positive pregnant women received prophylaxis for PMTCT, and 482 women were enrolled in comprehensive HIV care and treatment programs.

Improving Nutrition for Women and Children Through National Policy

In order to incorporate the WHO Consensus Statement on HIV and Infant Feeding into Haiti's national policies, a USAID-funded project coordinated a workshop, in collaboration with the Ministry of Public Health; WHO; and UNICEF, to bring together key stakeholders from more than 100 institutions in the public and private sectors. The stakeholders discussed fully accepting WHO's recommendations on infant feeding in the context of HIV. As a result of the meeting and additional support, Haiti now has a clear national policy and is in the process of validating standards of care and developing job aids for health care workers on infant feeding, with an emphasis on feeding in the context of HIV/AIDS.