



HIV: Mother to Child Transmission

"Strategies and interventions to prevent mother-to-child-transmission of HIV are an important means to strengthen health systems, reduce the impact of AIDS, and mobilize societies to combat HIV/AIDS"-UNICEF

There are many ways of looking at the world's AIDS crisis. You can look at the situation of women worldwide – the fact that in Africa there are fourteen infected women for every ten infected men. You can look at the impact on certain sections of the population, such as LGBT communities around the world, or the spread of the virus through indigenous peoples. Or you can look at the problem of mother to child transmission.

Passing from mother to baby is a major source of AIDS and HIV infection. It can occur during pregnancy, passed through the placenta, but is more commonly transmitted at birth, or through breastfeeding. There are several ways to reduce to likelihood of infection. A properly attended birth, for example, can help stop the tearing that allows blood to be exchanged, as can opting for elective Caesareans instead of vaginal delivery. This would require a major strengthening of medical capacity, particularly in Africa, where 95% of all the world's HIV-positive pregnant women currently live.

Reducing the length of breastfeeding, or avoiding it altogether, has been shown to significantly cut the rate of transmission, but this raises many other issues. Firstly, it's very common for African women to breastfeed their babies for up to two years, often because of its contraceptive effect. Reducing this to six months can cut the risk of transmission by two-thirds, but changing habits would mean changing cultural values. Breastfeeding is the safest way for African women to feed their babies, as it passes on antibodies and protects children from the bacteria present when formula milk is made with dirty water. The tactics of powdered milk companies in developing countries are well known. Some companies have been widely criticised by the WHO for failing to print tin labels with minority languages or pictorial instructions, for mothers who cannot read.

The price of formula is so elevated that it's also common for families to skimp on powder, unknowingly starving their babies. Infant deaths from diarrhoea and malnutrition are commonly linked to drinking formula that is too weak, or mixed with contaminated water. Poor women, previously told that breastfeeding was best for their children, are now being told that their own milk could infect their baby with HIV. Yet newborns that are not breast-fed are six times more likely to die in the first two months of their life.

Transmission through breastfeeding can also be cut by attending quickly to any sores or rash on the breast or the child's mouth, but as with deliveries, it

requires a medical infrastructure that simply isn't there. In some countries, such as Brazil, innovative solutions have been found, such as breast milk banks, wet nurses, and flash-heating the milk before feeding. All have been found effective, but again widespread education and support is needed for mothers.

The standard treatment for pregnant HIV-positive women is a course of drugs called antiretrovirals, usually administered before and during the birth. While these drugs have been shown to be effective, there is widespread controversy about their use. Many people in Africa do not believe that drugs can help with AIDS, or have no access to information about their use, or even clean water to take them with.

The use of drugs to cut maternal transmission rates has also raised difficult issues around corporate pharmaceuticals and their role in public healthcare. One common drug, AZT, has aroused scandal and suspicion due to alleged toxic side effects. Another hurdle for fighting AIDS in Africa is the fact that counterfeit medicines have infiltrated the continent, often originating from factories in China that produce ineffective copies of the drugs. Women who have taken this medication often die, further spreading suspicion about the benefits of drug therapy.

There is also the obvious issue of cost. One common antiretroviral, Nevirapine, costs 8 US dollars for a dose, adding up to a month's wages in parts of Africa. The expense of ARVs, added to the mistrust and lack of information that surrounds them, are stopping thousands of Africa women from accessing the healthcare they need. Furthermore, there is some evidence that HIV can become resistant to Nevirapine.

When women are already HIV-positive, efforts to reduce transmission are usually focussed around the above strategies. However, this is part of an overall strategy that aims to both to prevent infection among couples who are considering becoming parents, and also aims to prevent unwanted or unplanned pregnancies about HIV-positive women. When a pregnancy is planned there are a number of alternatives that can significantly reduce the danger of transmission.

It's estimated that worldwide 1% of all pregnant women are HIV-positive. Of these, nearly all live in developing countries with limited access to medical treatment. Currently, 700,000 babies are infected with HIV each year, either in the womb, during delivery, or through breast milk. There are five million HIV-positive children worldwide, 90% of who live in developing countries. It's easy to project the future impact of this mode of transmission. When children are born to sick mothers, they may be orphaned young, and grow up in poverty, deprived of an education. It's common for AIDS orphans to end up on the streets, or turn to stealing and prostitution to survive – there are over a million in South Africa alone. If these children are themselves HIV-positive, their prospects for survival are dismal. As an economic and medical crisis it is unprecedented.

If Africa, one in five women under the age of 25 are HIV-positive, and so the problem is on the verge of a massive explosion. It is a difficult issue to solve, with high feelings surrounding the issue of breastfeeding and a lack of information exacerbating the problem. New plans of approach aim to offer confidential HIV testing and counselling to all women of childbearing age, in an attempt to break down some of the stigma and misinformation surrounding the disease. Some African countries, such as Botswana and Lesotho, are introducing opt-out testing during pregnancy, meaning that women would have to forcibly choose not to be tested. This is the approach recommended by the US Centre for Disease Control. As with all strategies to help pregnant women and children, it is vital to inform and empower mothers in their own diagnosis and treatment.