



Women living with HIV: Pondering options for pregnancy and motherhood

By Lois Chingandu

Antiretroviral drugs have enabled people living with HIV and AIDS to consider childbearing and parenthood. The same applies to their access to prevention of parent-to-child transmission. However, these benefits are countered by limited understanding of the reproductive healthcare needs and the impact of infection on the fertility desires of women living with HIV and AIDS.

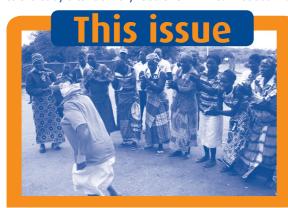
Research on the relationship between fertility and HIV has been largely clinical, focusing on the ability of women living with HIV to conceive or on their pregnancy outcomes.

A qualitative study with married women living with HIV and AIDS in Namakkal District, Tamil Nadu, India, found that women who indicated that they did not have family support and were stigmatised by the family avoided pregnancy, as they were not sure of the future, including child care in the event of their death. In contrast, women who opted for motherhood did so based on family support, especially when family members offered to take care of the child in case the parent died.

Awareness and access to PPTCT and antiretroviral therapy (ART) was also critical to the final decision on child bearing.

Helping prevent unintended pregnancies is an important but often neglected approach in preventing HIV transmission to infants. A study in eight African countries demonstrated the potential importance of family planning services in reducing HIV infection in infants. According to the study findings documented by World Health Organization (WHO), reducing unintended pregnancies among women living with HIV and AIDS by 16 per cent would have the equivalent impact in averting HIV infection among infants as antiretroviral prophylaxis using single dose maternal and infant Nevirapine.

Single dose Nevirapine (SDNVP), a regimen of one tablet of the antiretroviral drug Nevirapine to the mother, is administered at the time of labour onset and one dose to the baby after delivery. Use of SDNVP can reduce mother-to-child transmission by



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Editorial





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Stemming infections in children of HIV-positive mothers

Women living with HIV have the right to make informed and voluntary decisions on whether to have children or not alongside the right to healthy motherhood. In practice, however, their reproductive rights are rarely respected, as they often encounter many obstacles related to their reproductive health needs.

Members of the International Community of Women with HIV/AIDS (ICW) note that, women who choose not to have (any or more) children struggle to access appropriate contraceptives and related services. They also struggle to negotiate contraceptive use with their sexual partners.

Deciding not to have children is often significantly influenced by negative social perceptions related to women with HIV having children. Often, there is a lack of services and information on how to conceive safely, carry a healthy pregnancy, and care for the baby. To compound this situation, women with HIV who decide to have children often face discrimination by healthcare workers, communities, the media, politicians and even HIV activists.

At the same time, testing of HIV in antenatal clinics reinforces the belief that it is women who bring the virus into the family. Failure of testing services to take into account the discrimination and gender inequalities many women with HIV face on disclosing their status prevents many from opening up. On one hand, disclosing leads to stigma and discrimination. On the other hand, failure to disclose prevents women from accessing appropriate care, treatment and support, or testing services, for themselves and their children.

Inadequate services and indiscreet health workers who do not protect confidentiality along with badly-designed policies, such as those criminalising HIV transmission, not only put the reproductive rights of women living with HIV at risk, but also endanger their rights to the benefits of scientific progress, health, liberty and life.

There is need to support HIV positive mothers and to train health workers. This requires commitment from policymakers, health managers, NGOs, community leaders and activists.



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A mother and her child at a health facility in Eastern Cape, South Africa. [Photo courtesy of REACH/SAfAIDS].

nearly half. Use of more efficacious regimens during pregnancy including Zidovudine (AZT) and triple-drug combination therapy, also known as highly active antiretroviral therapy (HAART), can reduce transmission rates to two percent or less. Recent studies have also shown the benefits of starting ART prophylaxis for PMTCT earlier during pregnancy and the effectiveness of extending ARV prophylaxis to mothers or infants during the breastfeeding period in reducing risk for MTCT ¹.

Women living with HIV should be strongly encouraged and enabled to use condoms consistently and correctly, with or without another contraceptive method in what is often referred to as dual protection.

HIV and fertility

According to WHO, studies from Africa and from high-income countries suggest that HIV may adversely affect fertility. Several factors may affect the ability of women living with HIV and AIDS to become pregnant.

Reduced fertility may be caused by decreased sexual activity for several reasons, including less desire for sex and the clinical symptoms associated with HIV infection. They may also be caused by previous sexually-transmitted infection and associated pelvic inflammatory disease (PID).

Infertility caused by PID is common in areas with high HIV. Studies have also found that women with HIV have more severe clinical presentations of PID and more tubo-ovarian abscesses and may require more surgical intervention.

A woman's inability to conceive, according to WHO, may also be caused by infertility in a partner living with HIV. Studies have shown that men living with HIV may more frequently experience hypogonadism — the decreased functional activity of the gonads (testes and ovaries). Evidence also shows that HIV, in particular with more advanced disease, reduces sperm motility, sperm concentration and total sperm count, and increases abnormal sperm forms.

Antiretroviral therapy can improve semen quality and reduce white blood cell numbers in semen.

Care of women living with HIV during pregnancy also involves assessing HIV-related signs and symptoms, including evidence of opportunistic infections. In particular, clinical staging and, where feasible, immunological staging, of such women are important for assessing prognosis and determining eligibility for antiretroviral therapy.

To make an informed decision on whether to continue with the pregnancy or have an abortion, women living with HIV need to know the risks of pregnancy to their own health, the risks of transmission of HIV to their infant and the effectiveness, availability and cost of ARVs for treating HIV and for preventing HIV infection among infants as well as the potential toxicity of such drugs.

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Factors to consider include evidence that women living with HIV have higher risk of developing cervical cancer. A study from South Africa found that people with cell counts below 200 cells per µI were significantly more likely to have advanced-stage disease at initial diagnosis than those who are HIV-negative.

Women on ARVs

Women who start ART may find that, with their return to health, they become more sexually active. For those whose fertility had been affected by HIV, this can signal a return to fertility. As the health and well-being of women improves with ART, women may reconsider previous decisions regarding their sexuality and reproduction. Some women may wish to "replace" children who have died from AIDS-related illnesses.

Healthcare providers should realise that women on ART may need counselling and support to make choices regarding their sexuality and childbearing and help in adopting safer sexual behaviours. Interventions to promote sexual health among women on ART include assisting in identifying and overcoming impediments to safer sexual behaviour to prevent the transmission of HIV to other people; educating on the potential for transmitting HIV to an uninfected partner even when receiving ART and providing information and counselling on preventing STIs, including the importance of using condoms correctly and consistently.

For women on ART, special efforts to support adherence may be needed during pregnancy, childbirth and the early postpartum period. Nausea or vomiting associated with pregnancy may affect a woman's ability to stay on ART. Such women should be encouraged to continue treatment, and drugs should only be withdrawn under specialist advice.

After childbirth, they may need additional support to comply due to the physical changes at this time, the demands of caring for the baby and possible postpartum depression.

There is also concern that in utero exposure to tenofovir disoproxil fumarate, a nucleotide analogue drug, may potentially result in abnormal foetal bone development, although there is still very limited experience with using the drug in pregnancy.





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However, for women receiving a regimen containing tenofovir disoproxil fumarate, the benefits of continuing treatment during pregnancy are likely to exceed the risks to the foetus. Therefore, women on the drug are recommended to continue with it during pregnancy. ²

Labour and giving birth

The risk of mother-to-child transmission of HIV is low for mothers who take ARVs during pregnancy and have a viral load less than 1,000 copies/mL near the time of delivery.

All deliveries have risks — even for mothers without HIV infection. In general, a caesarean delivery is riskier than a vaginal delivery. For the mother, the risks of surgery, including infection and anaesthesia-related problems, are greater with a caesarean delivery. HIV-infected women who have a caesarean delivery should receive antibiotics to prevent infection. For the infant, the risk of breathing difficulties is greater with a caesarean delivery.

HIV testing for babies born to mothers with known HIV infection is recommended at 14 to 21 days, at one to two months, and again at four to six months using virologic HIV tests. The tests are different from HIV antibody tests. Instead of detecting antibodies to HIV, virologic tests look directly for HIV in the blood.

HIV antibody tests are only used to test babies born to HIV-infected mothers from 12 to 18 months after birth because babies born to such mothers carry their mothers' antibodies to HIV for up to 18 months. An HIV antibody test would detect HIV antibodies from the mother, thus not be useful until the baby grows older and the HIV antibodies from the mother disappear.

To be diagnosed with HIV, a baby must have two positive virologic tests; a second positive virologic test is necessary to confirm a diagnosis of HIV. To know for certain that a baby is not infected with HIV, the baby must have two negative virologic tests, the first at one month and the second at four months of age. Many healthcare providers also order an HIV antibody test at 12 to 18 months to confirm that a baby is not infected with HIV. A negative HIV antibody test at 12 to 18 months confirms conclusively that the baby is not infected with HIV.³

Babies who are infected with HIV receive anti-HIV medications as soon as they are diagnosed. Anti-HIV medications help HIV-



Event to launch a SAfAIDS gender-based violence toolkit in Mozambique. [Photo courtesy of

infected babies stay healthy. At six weeks, HIV-infected babies are also put on cotrimoxazole. Cotrimoxazole is also given as a precaution if a baby's HIV status is unknown.

Breastfeeding

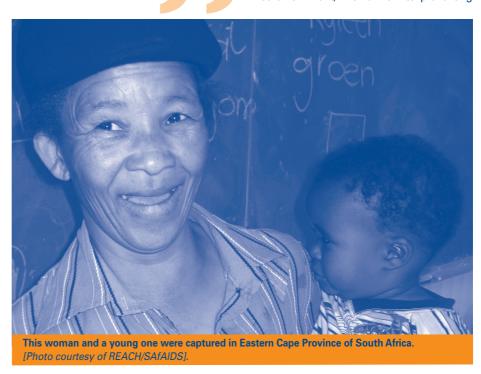
Breastfeeding remains a common practice in parts of the world where the burden of HIV is highest and the fewest alternative feeding options exist.

Single dose Nevirapine (SDNVP), a regimen of one tablet of the antiretroviral drug Nevirapine to the mother, is administered at the time of labour onset and one dose to the baby after delivery.

The dilemma faced by HIV-positive mothers is whether to breastfeed their infants in keeping with cultural norms but in doing so risk transmitting the virus through breast milk, or to pursue formula feeding, which comes with its own set of risks, including a higher rate of infant mortality from diarrhoeal illnesses, while reducing transmission of HIV.

Treatment of mothers and/or their infants with ARVs is a strategy that has been used for several decades to reduce HIV transmission through pregnancy and delivery, but the effect of these agents when taken during breastfeeding is not quite clear.

An evaluation of the latest clinical research from trials that encourage exclusive breastfeeding to trials of ART for either the mother or infant, with a view to preventing





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Swaziland women sing and dance during an HIV and SRH event organised by SAfAIDS (Photo courtesy of SAfAIDS)

HIV transmission through breast milk, shows that exclusive breastfeeding is much safer than mixed feeding (the supplementation of breastfeeding with other foods). Therefore, exclusive breastfeeding should be encouraged even in settings where ART for either the mother or infant is not readily available.

Research on maternal treatment with highly active antiretroviral therapy (HAART) during pregnancy and the breastfeeding period has all been non-randomised with relatively little statistical power, but suggests maternal HAART can drastically cut the risk of transmitting HIV. ⁴

Infant prophylaxis has been intensively studied in several trials and has been shown to be as effective as maternal treatment with antiretrovirals, reducing the transmission rate after six weeks to as low as 1.2 per cent. There is hope that perinatal HIV transmission may be greatly reduced in breastfeeding populations worldwide through a combination of behavioural interventions that encourage exclusive breastfeeding and pharmacologic interventions with antiretrovirals for mothers and/or their infants. ⁵

And yet financial and cultural factors often dictate which method of feeding is used. Therefore, mothers need counselling and support from trained and sensitive health workers. Also, mothers who know that

they are HIV positive but cannot obtain or afford sufficient substitute milk will probably decide to breastfeed their babies. Mothers who can provide an adequate safe alternative such as commercial formula will probably decide not to breastfeed. Regardless of the decision, the HIV positive mother needs to be educated about the risks and benefits of breastfeeding. She should be counselled as to any resources that may be available that would allow her to choose not to breastfeed, thus decreasing the risk of mother-to-child HIV transmission ibid.

The many benefits of breastfeeding are well documented. Breast milk is the only food perfectly designed for human consumption, easily digestible, always the right temperature, hygienic, and available at no cost to the mother. Also, breast milk contains important immunologic components that help protect against pathogens and result in fewer deaths and illnesses among exclusively breastfed infants. The advantage with exclusive breastfeeding for the first six months of an infant's life is that it promotes maturation of the intestines and prevents damage to the lining of the intestines. This may explain why exclusively breastfed children have a lower risk of acquiring HIV compared to infants whose mothers use mixed feeding.

Breastfeeding also nurtures the development of beneficial microflora that lower

intestinal pH, which prevents the growth of pathogens. Exclusive breastfeeding also promotes successful milk production, which reduces breast inflammation in the mother and may decrease HIV transmission.

Exclusive breastfeeding is a feasible and effective public health solution — one controlled by mothers. Extensive programmatic evidence from countries throughout the world demonstrates that simple and effective models of counselling and support for breastfeeding mothers are extremely effective in increasing rates of exclusive breastfeeding for up to six months.

The goal of improving infant feeding practices among HIV-positive mothers is to improve infant survival while minimising the risk of HIV transmission. WHO recommends that HIV-positive mothers breastfeed exclusively for six months unless replacement-feeding is acceptable, feasible, affordable, sustainable, and safe (AFASS). WHO also recommends continued breastfeeding after six months until it is acceptable, feasible, affordable, sustainable, and safe to stop.

Understanding and adopting these recommendations in appropriate settings is far from universal and needs to be promoted and incorporated in national and local protocols in all at-risk areas.

Without education, services, and support, many HIV-exposed women stop breastfeeding at six months in order to decrease their infants' exposure to HIV. However, recent data show that young infants who stop breastfeeding at such a young age are at high risk of falling sick and dying. Therefore, it is critical that adequate funding and support are available to ensure that HIV-positive mothers have access to the individualised advice, care, and support that will help them to maximise their baby's HIV-free survival.

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