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# Meeting the reproductive health needs of women with HIV

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During the past decade, HIV counselling and testing services have expanded in both urban and rural areas of sub-Saharan Africa, even becoming routine in some medical settings. With this expansion, more women who are infected with HIV are becoming aware of their status. Recent population-based studies and health surveys from 12 African countries suggest that between 10% and 25% of women with HIV now know that they are infected.<sup>1</sup>

As more HIV-infected women learn of their status, they will be able to make informed choices about their reproductive health – including whether to have children and how to prevent further transmission of the virus. A knowledgeable healthcare provider can help with these difficult decisions.

## Fertility desires

A recent review of how HIV status affects people's reproductive intentions and behaviours found that the fertility desires of HIV-infected women are not that different from those of uninfected women. According to a summary of 19 studies that were conducted in developing countries, most women with HIV still want to have children.<sup>2</sup> Others do not want children, and so need effective contraception to prevent unintended pregnancies. Like the fertility desires of uninfected women, these desires are not static and may change over time.

Research also shows that HIV-infected women who do *not* want more children have a high risk of unintended pregnancy. Studies and surveys from Zimbabwe and Uganda even suggest that HIV-infected women who do not want more children may be more likely than their uninfected counterparts to report that they are not using contraception.<sup>3</sup> This could be due to a fear of social stigma or discrimination, which could inhibit women with HIV from seeking family planning and other reproductive health services.

At least one study, from Malawi, suggests that HIV-infected women are more likely to put off childbearing and to use contraception after they receive HIV counselling and testing and find out their status.<sup>4</sup> This suggests that counselling HIV-infected women about their reproductive health options may influence their health decisions. Professionals who offer family planning or HIV services can talk with their HIV-infected patients to determine their fertility desires and reproductive health needs. Regardless of their own personal views about whether HIV-infected women should be sexually active or have children, healthcare professionals should also provide

accurate, unbiased information about the medical risks and benefits of both contraception and pregnancy.

## Contraception

Nearly all modern methods of contraception, including the intrauterine device (IUD) and hormonal methods, are safe for most women with HIV (see Table 1).

The only methods that are not recommended for women with HIV are spermicides and diaphragms. If used frequently, spermicides containing the surfactant nonoxynol-9 can actually increase the risk of acquiring HIV. Thus, theoretically, women who are already infected with HIV may have a higher risk of being re-infected with a different strain of HIV when they use spermicides often. Diaphragms are not recommended because they need to be used with spermicides.

In 2004, the World Health Organization (WHO) changed its international guidelines for use of the IUD by women with HIV, making the method more available to infected women. This change was implemented after research from Kenya showed that women with HIV are no more likely than women without HIV to experience complications from IUD use. Also, the use of an IUD does not increase the chance that a woman with HIV will transmit the virus to her sexual partners. As long as she has regular access to medical services, an HIV-infected woman can safely begin using an IUD in most circumstances. However, IUD insertion is not generally recommended for a woman who has AIDS unless she is taking antiretroviral (ARV) drugs and responding well to them. This is because AIDS can



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*A healthcare professional speaks to women at a prenatal clinic in Asmara, Eritrea, where counselling about HIV and pregnancy are among the services offered.*

**Table 1 Guidelines for the use of contraceptive methods by women with HIV or AIDS**

Method	Category	
	HIV	AIDS*
Copper intrauterine device		
Initiation	2	3
Continuation	2	2
Combined oral contraceptives	1	1
Progestin-only pills	1	1
Injectable contraceptives	1	1
Contraceptive implants	1	1
Male and female condoms	1	1
Diaphragm	3	3
Spermicides	4	4
Female sterilisation	A	S

Categories: 1=no restriction for use; 2=method may be generally used, as the advantages of use generally outweigh the theoretical or proven risks; 3=use not usually recommended unless more appropriate methods are not available or acceptable, as the theoretical or proven risks generally outweigh the advantages of use; 4=method should not be used; A=no medical reason to deny; S=special care should be taken in a setting with an experienced staff and medical support.

\*Not taking antiretroviral drugs.

Adapted from: World Health Organization. *Medical Eligibility Criteria for Contraceptive Use*. Third edition. Geneva, Switzerland: Reproductive Health and Research, World Health Organization, 2004.

suppress a woman's immune system, which may put her at risk of infection during an IUD insertion. On the other hand, if an IUD user develops AIDS after her IUD is already in place, she can generally continue using the method.

WHO places no restrictions on the use of hormonal methods – including combined oral contraceptive pills, progestin-only pills, injectables, or contraceptive implants – for women who have HIV. Women who have AIDS but are not receiving ARV drugs can also use hormonal methods without restrictions.

New guidelines from WHO specifically address the use of hormonal methods by women taking ARV drugs. According to the new guidelines (see Table 2), a woman on any ARV drugs can use the injectable depot medroxyprogesterone acetate (DMPA) without any restrictions. Research has shown, however, that some ARV drugs decrease the level of active steroids that some of the methods rely on for their contraceptive effectiveness.<sup>5</sup> Because most of the studies did not actually measure contraceptive effectiveness, it is not clear whether the decreases in active steroids are clinically relevant. No data are available on the interactions between contraceptive steroids and some ARV drugs, such as stavudine, which is a component of first-line therapy for HIV in some parts of Africa.

Based on research concerning these possible interactions, a woman who is taking ARV drugs other than the protease inhibitor ritonavir can still generally use oral

**Table 2 Guidelines for the use of hormonal methods by women on antiretroviral therapy**

Method	Category		
	NRTIs	NNRTIs*	Ritonavir <sup>†</sup>
Combined oral contraceptives	1	2	3
Progestin-only pills	1	2	3
Combined injectables	1	2	3
Progestin-only injectables			
DMPA	1	1	1
NET-EN	1	2	2
Contraceptive implants	1	2	3

Categories: Same as Table 1.

Abbreviations: DMPA=depot medroxyprogesterone acetate; NET/EN=norethisterone enanthate; NNRTIs=non-nucleoside reverse transcriptase inhibitors; NRTIs=nucleoside reverse transcriptase inhibitors.

\*Although NRTIs are category 1 for all hormonal methods, it is important to remember that NRTIs are never taken alone. Highly active antiretroviral therapy also includes either an NNRTI or a protease inhibitor, which would change the category to 2 or 3 depending on the individual drug.

<sup>†</sup>Or ritonavir-boosted protease inhibitors.

Adapted from: World Health Organization (WHO) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), INFO Project. *Family Planning: A Global Handbook for Providers*. Baltimore, MD, and Geneva, Switzerland: CCP and WHO, 2007. Available at: [http://www.inforhealth.org/globalhandbook/book/fph\\_appendix\\_d/hiv aids.shtml#hiv aids](http://www.inforhealth.org/globalhandbook/book/fph_appendix_d/hiv aids.shtml#hiv aids).

contraceptives, contraceptive implants, and the injectable norethisterone enanthate (NET-EN), but WHO suggests that she also use condoms – to compensate for any potential decreases in contraceptive effectiveness and to prevent HIV transmission. According to the new guidelines, a woman should not use oral contraceptives or combined injectable contraceptives if her ARV regimen contains ritonavir, because this particular drug has been shown to reduce the blood concentration of contraceptive hormones more than the other drugs studied.

## Pregnancy

Although HIV can affect fertility, making it harder for an infected woman to conceive a child, most HIV-infected women who become pregnant can have a healthy baby if proper medical care is available. But before deciding to become pregnant, HIV-infected women should understand the risks that pregnancy can pose, especially if they have advanced HIV or AIDS.

Pregnancy does not facilitate the progression of HIV to AIDS, but it is not without other risks. When compared with uninfected women, women with HIV are about three to six times more likely to miscarry.<sup>6</sup> They are also more likely to go into labour early, to deliver prematurely, and to have a baby that is too small or weighs too little. Other complications of pregnancy that are more common among HIV-infected women include postpartum fever (but no other signs of infection) and anaemia.

Children of HIV-infected women are also at risk of increased morbidity and mortality, most likely due to increased chances that their mothers will be sick or die. For the same reasons, the children of infected women are at risk of orphanhood, inadequate nutrition, and missed educational opportunities.

To improve their own health – and thus the odds of having a healthy baby – some pregnant women who have high viral loads can take ARV drugs after their first trimester of pregnancy. However, not all ARV drugs are safe during pregnancy. The drug efavirenz, for example, can be toxic to a developing fetus. Health professionals who are caring for women with advanced HIV or AIDS should discuss this issue with their patients. A woman with advanced disease may need to rethink her decision to become pregnant until her health improves or until she has access to the ARV drugs she needs.

Perhaps the biggest risk to the infants of HIV-infected mothers – but one that is largely preventable with access to appropriate medical care – is the risk of mother-to-child transmission. In Africa, the rate of mother-to-child transmission is estimated to be between 25% and 40% if no efforts are made to prevent infection.<sup>7</sup> The severity of the mother's HIV infection is the most significant factor in predicting mother-to-child transmission, and the highest rates of transmission happen when the mother's viral load exceeds 100 000 copies per milliliter of blood.<sup>7</sup> Most of the infections occur during pregnancy or delivery, but the virus can also be transmitted to the baby during the postpartum period, through breastfeeding.

Several strategies have been shown to reduce the risk of mother-to-child transmission. One of the most effective strategies is ART for both a mother and her newborn baby. For instance, studies have shown that different regimens of zidovudine or nevirapine can reduce rates of transmission by 47% or more.<sup>8</sup> Avoidance of breastfeeding is another effective way to reduce mother-to-child transmission, if infant formula is available and affordable. If formula is not an option, exclusive breastfeeding is advised since it appears to be associated with a lower risk of mother-to-child transmission than a mix of formula and breastfeeding. Finally, a planned caesarean section is more protective against mother-to-child transmission than a vaginal delivery, although caesarean sections can be associated with increased health risks to the mother.

Unfortunately, access to ART, infant formula, and safe caesarean sections remains a challenge in many parts of Africa. But, if all three precautions can be taken, rates of mother-to-child transmission drop significantly. In developing countries, where access is relatively good, fewer than 2% of babies acquire HIV from their HIV-infected mothers.<sup>9</sup>

### Condom use

Whether or not a woman decides to have children, she must also be aware of the best ways to prevent further HIV acquisition and transmission. Consistent condom use

can protect an HIV-infected woman against re-infection with another strain of HIV or from acquiring a sexually transmitted infection such as gonorrhoea and chlamydia. It can also reduce the risk that she will transmit the virus to an uninfected partner.

If a woman is trying to conceive, unprotected intercourse should be limited to the day of ovulation and a few days before ovulation is expected. Male or female condoms should be used during every act of sexual intercourse in which an infected woman is not trying to conceive. If her infection is controlled by ARV drugs, she may be unlikely to infect others. However, because ARV treatment may not completely eliminate her risk of infecting others, she should still be encouraged to use condoms.

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### Resources

<http://www.inforhealth.org/pr/115/index.shtml>

*Family Planning Choices for Women with HIV.*

<http://www.fhi.org/en/RH/Training/trainmat/ARV-module.htm>

*Contraception for Women and Couples with HIV.*

[http://www.who.int/reproductive-health/publications/fphiv\\_flipchart/index.htm](http://www.who.int/reproductive-health/publications/fphiv_flipchart/index.htm)

*Reproductive Choices and Family Planning for People Living with HIV.*

# Improving HIV counselling and testing for youth

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An innovative counselling tool developed by Family Health International (FHI) and its partners is making it easier for healthcare professionals to share comprehensive reproductive health information with youth who are seeking an HIV test.

In many countries, up to half of all new HIV infections occur among 10- to 24-year-olds. It is not surprising, then, that youth are more interested than ever before in finding out their HIV status. In one study from Kenya, about one in three people seeking an HIV test was younger than 25.<sup>1</sup>

Traditionally, counselling and testing services have provided only information about HIV and other sexually transmitted infections. But many youth who visit sites offering counselling and testing also have general questions about sexual risks, including pregnancy, which suggests a need for integrated reproductive health services.

Research from 'youth-friendly' service-delivery sites in Tanzania further demonstrates this need, particularly among young women.<sup>2</sup> About one-quarter of the young women in the study reported no contraceptive use. Even when they did use contraception, most chose less effective methods such as condoms and withdrawal, and both the women and their healthcare providers lacked extensive knowledge about family planning.<sup>2</sup>

In 2003, even before these research results were available, FHI's YouthNet programme approached FHI/Kenya to help develop an innovative tool – one that combined all the evidence on what youth need to know about reproductive health into an effective job aid for counsellors providing HIV counselling and testing. FHI/Kenya, which was already working in many sites providing HIV services, assembled a group of young counsellors who were working with youth. These stakeholders helped shape the new tool. Previously published resources on providing reproductive health services to youth, as well as consultations with reproductive health and HIV experts, were also instrumental.

After the new manual was disseminated globally in 2005, providers in the International Planned Parenthood Federation/Western Hemisphere Region (IPPF/WHR) network expressed an interest in developing a training

guide that would help providers use the manual to deliver integrated services to youth. FHI, IPPF/WHR, and Population Services International (PSI) drafted the new training guide, which was field-tested with IPPF/WHR providers in St. Lucia in 2007 and with FHI and PSI providers in Zambia in 2008.

During the Zambian field test, 17 providers of HIV counselling and testing were trained to use the manual. These providers served youth in a variety of settings, from mobile HIV-testing units to stand-alone clinics, but they had not received prior training or job aids to help them work with this often-vulnerable population.

FHI/Uganda is now working with multiple non-governmental organisations in Uganda to train more service providers to use the manual. The AIDS, Population, and Health Integrated Assistance (APHIA) II programme, which is working to strengthen service delivery

in Kenya, is also preparing to introduce the counselling tool and training guide in two regions of Kenya. Determining the impact of the job aid is the next challenge of this work.

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*A young counsellor stands next to a sign advertising HIV voluntary counselling and testing services in the sprawling slum of Kibera in Nairobi, Kenya.*

## Provider tool

<http://www.fhi.org/en/Youth/YouthNet/rhtrainmat/vctmanual.htm>

*HIV Counseling and Testing for Youth: A Manual for Providers* includes technical information on the prevention of pregnancy, HIV, and other sexually transmitted infections, as well as guidance on the life skills that youth need to make healthy choices.

