



# Contraception for Women on First-Line Antiretrovirals (ARVs)

- *Women on ARVs need access to contraception for compelling reasons.*
- *In the right circumstances, any method of contraception can be appropriate, including IUDs.*
- *The projected rapid scale-up of ARVs presents an excellent opportunity for integration with contraceptive services, and they should be incorporated in such programs from the beginning.*

**ARV Basics:** The World Health Organization (WHO) recommends four alternative regimens for "first-line therapy." Each "triple-therapy" regimen contains two nucleoside reverse transcriptase inhibitors (NRTIs) and a non-nucleoside reverse transcriptase inhibitor (NNRTI). Currently the most commonly used NNRTI is nevirapine (NVP). However, drug resistance to NVP is becoming an increasing concern. Also, some data suggest efavirenz (EFZ) is more effective, and it is specifically recommended for women with tuberculosis co-infection. ARVs are not recommended for all who are HIV-positive, but only those relatively late in infection. (Another class of ARVs—protease inhibitors—can have interactions with contraceptive hormones, but are not included in first-line regimens and not discussed here. See the reference for more information.)

## **Why availability of contraception is crucial for women on ARVs:**

- Women of reproductive age are the majority of potential ARV recipients;
- Unmet need for contraception is high—in Africa, 20-25% according to the Demographic and Health Surveys (DHS);
- Women with HIV undergoing ARV therapy already have major stresses in their lives without the additional stress of unwanted pregnancy;
- Preventing unwanted pregnancy in HIV-positive women can prevent maternal-to-child transmission and also the further tragedy of a child orphaned if the woman does not survive;
- ARV drugs themselves have significant potential drug toxicities that can harm the fetus. Notably, EFZ is considered a potent teratogen;
- Prematurity and other poor birth outcomes are more likely for HIV-positive women;
- Maternal mortality and morbidity are higher for HIV-positive women;
- Programmatic synergies can result from providing family planning (FP) and ARV services together.



**IUDs:** Most HIV-positive women are eligible for IUDs. They can be provided for HIV-positive women during the initial, long asymptomatic phase. They are also appropriate for women who are on ARVs and are "clinically well." Lastly, a woman who is already using an IUD can continue to use it even if she develops significant clinical disease. IUDs are not recommended for women at "very high individual" risk of gonorrhea or chlamydia.

**Oral Contraceptives (OCs):** The chief concern about OCs is that NVP speeds up liver metabolism of contraceptive hormones and could lower blood levels of estrogen by almost one-third. It is not clear, however, that effectiveness is appreciably affected. Ordinarily, the 30-35 mcg estrogen OCs have failure rates of about 5-8% per year, probably as a result of very inconsistent



use by some women. Yet pills with only 20 mcg are quite effective if taken consistently. Because of concern about reduced effectiveness, OCs may not be the first choice for many women. However, if OCs are the choice of a woman on NVP, providing 30-35 mcg estrogen OCs can be reasonable if she will take them consistently. Additional sensible approaches include (1) providing a 50 mcg estrogen OC or (2) using condoms consistently along with the OCs. For a woman on EFZ, reduced OC effectiveness is even less likely. EFZ's effects on liver metabolism appear to be variable, but in one study it increased estrogen levels somewhat.

**Depo-Provera®:** In one study NVP reduced the blood level of a progestin by about 18%. It probably modestly reduces the progestin level with *Depo-Provera* as well. A dose of *Depo-Provera* is high enough, however, to give a very wide margin of effectiveness. In a WHO study comparing 100 mg versus the usual 150 mg dose, the lower dose also had excellent effectiveness. If there is any reduced effectiveness, it is likely to be at the end of the 3-month period, when the blood levels decrease. Although *Depo-Provera* re-injection can normally be given as much as 2 weeks late, striving to provide the next injection by the end of 3 months appears prudent for a woman on NVP.

**Condoms:** Both male and female condoms have the advantage that they can help prevent HIV transmission to a woman's uninfected partner as well as transmission of other sexually transmitted infections. They might conceivably prevent transmission to the woman of a different strain of HIV. If a woman's HIV disease is being effectively controlled by the ARV, however, she is highly *unlikely* to transmit or to be infected by HIV. Also, women may have difficulty negotiating condom use with their partners, and condoms alone, as typically used, are not very effective for pregnancy prevention.

**Other Methods:** Sterilization, lactational amenorrhea method, fertility awareness-based methods (such as the Standard Days Method), diaphragms, and other methods can all be used, recognizing the advantages and disadvantages of each. WHO has classified the other hormonal methods (implants, other injectables, patch, etc.) as Category 2 (generally use).

**Programmatic Synergies:** Reaching potential ARV recipients in resource-poor settings requires using a variety of existing "entry points" such as maternal-child health services, including FP. Such entry points might either provide ARVs directly or serve as referral to other sites. A strengthened, high-quality entry point with broad applicability (such as FP) is more likely to attract larger numbers of potential ARV clients, as well as help overcome stigma (a major constraint to ARV recruitment). Providing more than one service in a visit can also mutually support drug adherence and follow-up.

**Opportunity for Integration During Current ARV Scale-Up:** The burgeoning scale-up of ARV services presents an excellent opportunity for integration with FP services. Access to contraception should be built in from the beginning. Funding for ARVs and for FP often come from different funding streams, requiring a merging of funding at the program level. Some aspects (such as funding for ARVs or contraceptives) clearly fall into one stream or another, but others such as systems support may have a rationale for support from either stream.

**Where to get more information:** [www.maqweb.org](http://www.maqweb.org)

Reference: WHO. Scaling up antiretroviral therapy in resource-limited settings: Treatment guidelines for a public health approach. Geneva, 2004.

<[http://www.who.int/3by5/publications/documents/arv\\_guidelines/](http://www.who.int/3by5/publications/documents/arv_guidelines/)>

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