Preconception Counseling

for Women Living with HIV Infection

Eliminating Mother-to-Child Transmission of HIV

EMCT

CDC

Centers for Disease Control and Prevention

François-Xavier Bagnoud Center

School of Nursing, University of Medicine & Dentistry of New Jersey

Introduction

Routine incorporation of preconception care and counseling in primary care settings is needed in order to:

1. **Prevent unintended pregnancy**
2. **Protect maternal and fetal health during pregnancy**
3. **Prevent perinatal transmission of HIV**
4. **Reduce the risk of HIV transmission to uninfected partners**

Suggested Companion Tools and other resources

This guide describes the components of preconception counseling and provides sample scripts for discussing preconception issues with women living with HIV. Companion tools include the patient questionnaire and provider checklist *"Addressing Fertility Issues in the Context of HIV"* and the *"Preconception Care Algorithm for Providers Caring for Women Living with HIV,"* and the patient leaflet *"Are you living with HIV and thinking about having a baby?"* These materials were developed by the **François-Xavier Bagnoud (FXB) Center** at the School of Nursing, University of Medicine and Dentistry of New Jersey. They can be found at the FXB Center website (http://fxbcenter.org) and at the AIDS Education and Training Centers National Resource Center website (http://www.aidsetc.org).

For more information, contact the FXB Center:
fxbcenter@umdnj.edu or (973) 972-5644

Recommendations related to preconception care in the HIV primary care setting are available in the *"Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States."* The recommendations can be found here: www.aidsinfo.nih.gov

The National Perinatal HIV Hotline
(1-888-448-8765) provides 24/7, free, confidential, expert consultation. www.nccc.ucsf.edu

Assess pregnancy intentions	

✓ Consider using the patient questionnaire-provider checklist *"HIV and Pregnancy – Making a Decision"* as a guide to assess reproductive potential and fertility desires.	• Have you been thinking about having a baby? Do you have a partner who has expressed interest in having a child with you?
	• If **yes**, are you thinking about trying to become pregnant:
	  • Now?
	  • In 6-12 months?
	  • In 1-2 years?

Introduce the concept of preconception health and the importance of planning.

- If you are thinking of having a baby, I'd like to help you to have a healthy and safe pregnancy. Even if you are not thinking about having a baby right now, I'd like to share information with you about how women living with HIV can plan and prepare for a healthy pregnancy.
- Preparing and planning for a healthy pregnancy is called "preconception care." This involves helping you get as healthy as possible before you are pregnant and adjusting your care and treatment in ways that help to protect your baby. For example, you may need to start or change HIV medications to lower risk of passing HIV to the baby.
- If you become pregnant, starting prenatal care as early as possible is important. Women who get early prenatal care have healthier babies.

Key to table colors

Provider instructions

proposed script with patient

Preconception Care for all HIV-infected Women of Reproductive Age

Discuss risk factors for perinatal transmission of HIV and strategies to reduce risk.

- Pregnancy does not make HIV disease worse. Women with HIV can have healthy pregnancies. But women who are sicker from HIV infection (e.g., low CD4 cells or active infections) may have more pregnancy complications.
- A mother with HIV can pass the infection to her baby. This is called "perinatal transmission." Most transmission of HIV from mother to baby happens near or during delivery.
- Antiretroviral (ARV) medications are important for women with HIV who plan to become pregnant or who are pregnant. ARV medications improve the mother's health by fighting the virus and lower the risk of the virus passing from mother to baby.
- ARV medications and special care reduce the risk of a mother passing HIV to her baby to as low as 1-2% (1 or 2 babies out of 100). If a woman is already taking ARV medications, the medications may need to be changed or adjusted for pregnancy.
- Pregnancy can increase the risk of passing HIV to an uninfected partner; continue to use condoms during sex to protect yourself and your partner.
- Because HIV can also be passed through breast milk, breastfeeding is not recommended.

Discuss importance of optimizing HIV care and treatment prior to pregnancy.

✓ Discuss options for safer conception

Safer conception options

- The safest time to get pregnant is when you and your partner (if partner is HIV infected):
  - Are taking ARV medications and have a very low viral load (an undetectable viral load is best)
  - Have CD4 cell counts above 350
  - Are healthy – you do not have any opportunistic infections, you are taking vitamins and eating a healthy diet, have had all of your vaccinations, are not using drugs or alcohol, and you and your partner have been checked for sexually transmitted infections (STIs).
- If you decide to try to have a baby, there are options we can discuss for becoming pregnant in the safest way possible by avoiding or limiting unprotected sex (sex without using a condom).

Key to table colors

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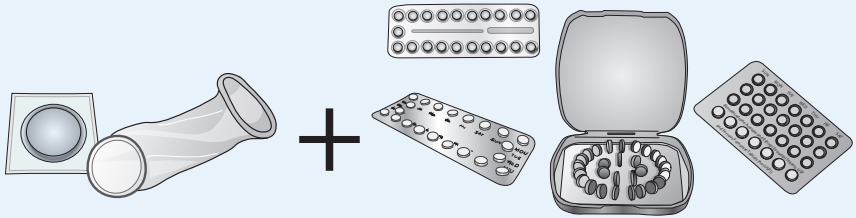
proposed script with patient

Preconception Care for all HIV-infected Women of Reproductive Age

Encourage dual protection	
✓ Encourage dual protection until pregnancy is desired and delay pregnancy until optimal maternal health is achieved.	• Have you had sex with a man in the last 6 months? • Are you currently using condoms? Do you use condoms every time you have sex? • Are you currently using any other form of contraception/birth control? • I recommend using condoms every time you have sex to protect yourself from infections and from transmitting HIV to your partner(s) but use another form of birth control to make sure you don't become pregnant before you are ready.
Discuss contraceptive options	
 ✓ See Tables 1 and 2 (pages 8-11)	• Most forms of birth control are safe and effective for women living with HIV. 

Key to table colors

Provider instructions

proposed script with patient

Discuss contraceptive options (continued)	
✓ Prescribe hormonal contraception, if desired and medically appropriate. (see Table 1 and 2) ✓ Refer for reproductive health care, including screening for cervical cancer and STIs, preconception assessment and evaluation of fertility.	• If you do not want to take a birth control pill or injection, there are other forms of birth control that are safe and effective. We can discuss other forms of birth control if you would like this information. • It's important to have a gynecological exam and cervical cancer screening, even if you don't need birth control and/or don't want to become pregnant. I can refer you to a gynecologist who is familiar with the special needs of women living with HIV.
Preconception health counseling	**Advise:**
✓ Provide counseling on general preconception health.	• To begin taking multivitamins with 400 mcg of folic acid daily • To avoid over-the-counter medicines • On healthy activity level and weight • On ways to improve nutrition • On resources to stop smoking and to avoid second-hand smoke • About substance abuse treatment, if applicable • On partner involvement **AND** • Provide referrals to support services as appropriate.

Key to table colors

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Table 1: Drug interactions between antiretroviral agents and hormonal contraceptives

Antiretroviral (ARV) Drug	Effect on Drug Levels	Dosing Recommendation/ Clinical Comment
Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)		
Efavirenz (EFV)	**Oral ethinyl estradiol/norgestimate:** No effect on ethinyl estradiol concentrations: ↓ active metabolites of norgestimate (levonorgestrel AUC ↓ 83%; norelgestromin AUC ↓ 64%)	A reliable method of barrier contraception must be used in addition to hormonal contraceptives. EFV had no effect on ethinyl estradiol concentrations, but progestin levels (norelgestromin and levonorgestrel) were markedly decreased. No effect of ethinyl estradiol/ norgestimate on EFV plasma concentrations was observed.
	Implant: ↓ etonogestrel	A reliable method of barrier contraception must be used in addition to hormonal contraceptives. The interaction between etonogestrel and EFV has not been studied. Decreased exposure of etonogestrel may be expected. There have been postmarketing reports of contraceptive failure with etonogestrel in EFV-exposed patients.
	Levonorgestrel AUC ↓ 58%	Effectiveness of emergency postcoital contraception may be diminished.
Etravirine (ETR)	Ethinyl estradiol AUC ↑ 22% Norethindrone: No significant effect	No dosage adjustment necessary
Nevirapine (NVP)	Ethinyl estradiol AUC ↓ 20% Norethindrone AUC ↓ 19%	Use alternative or additional methods.
	DMPA: no significant change	No dosage adjustment needed
Rilpivirine	Ethinyl estradiol AUC ↓ 14% Norethindrone: no drug-drug interaction	No dose adjustment necessary

Table 1: Drug interactions between antiretroviral agents and hormonal contraceptives

Antiretroviral (ARV) Drug	Effect on Drug Levels	Dosing Recommendation/ Clinical Comment
Ritonavir (RTV)-boosted Protease Inhibitor (PI)		
Atazanavir/ritonavir (ATV/r)	↓ Ethinyl estradiol ↑ Norgestimate	Oral contraceptive should contain at least 35 mcg of ethinyl estradiol. Oral contraceptives containing progestins other than norethindrone or norgestimate have not been studied.
Darunavir/ritonavir (DRV/r)	Ethinyl estradiol AUC ↓ 44% Norethindrone AUC ↓ 14%	Use alternative or additional method.
Fosamprenavir/ritonavir (FPV/r)	Ethinyl estradiol AUC ↓ 37% Norethindrone AUC ↓ 34%	Use alternative or additional method.
Lopinavir/ritonavir (LPV/r)	Ethinyl estradiol AUC ↓ 42% Norethindrone AUC ↓ 17%	Use alternative or additional method.
Saquinavir/ritonavir (SQV/r)	↓ Ethinyl estradiol	Use alternative or additional method.
Tipranavir/ritonavir (TPV/r)	Ethinyl estradiol AUC ↓ 48% **Norethindrone:** No significant change	Use alternative or additional method.

Table 2: Guideline summary: Use of hormonal contraception in women with coexisting medical conditions

Antiretroviral (ARV) Drug	Effect on Drug Levels	Dosing Recommendation/ Clinical Comment
PI without RTV		
Atazanavir (ATV)	Ethinyl estradiol AUC ↑ 48% Norethindrone AUC ↑ 110%	Oral contraceptive should contain no more than 30 mcg of ethinyl estradiol or use alternative method. Oral contraceptives containing less than 25 mcg of ethinyl estradiol or progestins other than norethindrone or norgestimate have not been studied.
Fosamprenavir (FPV)	**With APV:** ↑ Ethinyl estradiol and ↑ norethindrone; ↓ APV 20%	Use alternative method.
Indinavir (IDV)	Ethinyl estradiol AUC ↑ 25% Norethindrone AUC ↑ 26%	No dose adjustment.
Nelfinavir (NFV)	Ethinyl estradiol AUC ↓ 47% Norethindrone AUC ↓ 18%	Use alternative or additional method.
CCR5 Antagonist		
Maraviroc (MVC)	No significant effect on ethinyl estradiol or levonorgestrel	Safe to use in combination.
Integrase inhibitor		
Raltegravir	No significant drug effect	No dose adjustment necessary

Key to Abbreviations: AUC = area under the curve DMPA = depot medroxyprogesterone acetate

Source: Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. September 14, 2011; pp 1-207. Available at http://aidsinfo.nih.gov/ContentFiles/PerinatalGL.pdf. Accessed January 15, 2012: pp. 9-10, Table 4.

Table 2: Guideline summary: Use of hormonal contraception in women with coexisting medical conditions

Contraindications

In women with the following conditions, use of progestin-only oral contraceptives, including depot medroxyprogesterone acetate, may be safer than combination oral, transdermal, or vaginal ring contraceptives. An intrauterine device also represents an appropriate contraceptive choice for women with these conditions.

- Migraine headaches, especially those with focal neurologic signs
- Cigarette smoking or obesity in women older than 35 years
- History of thromboembolic disease
- Hypertension in women with vascular disease or older than 35 years
- Systemic lupus erythematosus with vascular disease, nephritis, or antiphospholipid antibodies
- Less than 3 weeks postpartum
- Hypertriglyceridemia
- Coronary artery disease
- Congestive heart failure
- Cerebrovascular disease

Adapted from: *ACOG Practice Bulletin No. 73: Use of Hormonal Contraception in Women with Coexisting Medical Conditions, No. 73, June 2006.*
Summary available at: http://www.guideline.gov/content.aspx?id=10924

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