HIV transmission from a woman to a fetus during pregnancy or to a child during or after labor is a significant risk. It is important for test counselors to understand this and to know that there are treatment interventions that greatly reduce this risk. This issue of PERSPECTIVES discusses reproductive issues related to HIV infection. The Implications for Counseling section examines ways in which counselors can address issues of pregnancy and reproductive decision-making.

Research Update

AIDS is the third leading cause of death in the United States among women between 25 and 44 years old. Women represented 20 percent of all AIDS cases reported in 1996, and approximately 80 percent of all women with HIV are of child-bearing age (generally between 13 and 44 years old). In California, the highest rates of HIV infection are among African-American women. In addition, women who are socioeconomically disadvantaged are at particularly high risk for infection.

For various reasons, including a lack of access to health care, women appear to be diagnosed and to seek treatment later in the course of HIV infection than men, leading to more serious medical problems.

Through 1993, about one-third of women 18 to 44 years old had tested for HIV. Rates of testing among women are higher for African Americans and Latinas than Whites, and studies show that testing rates are higher among women who perceive themselves to be at “high” or “medium” risk for infection than among women who perceive themselves to have little or no risk for infection.

An HIV-uninfected woman who has intercourse with an HIV-infected man is at least 10 times more likely to become infected with HIV than an uninfected man who has sex with a woman with HIV. This is largely a result of semen having a higher concentration of HIV than vaginal fluid. In addition, the vagina and labia are prone to cuts, tears, and sores, which may provide easy access for HIV to enter the body.

Preventing HIV infection can be complicated for women because the main method of preventing sexual transmission of HIV is condom use, traditionally a male-controlled method of protection. For many women, especially those facing domestic violence, negotiating safer sex can be especially challenging. The Reality brand “female” condom, which a woman can place inside of the vagina and wear for up to eight hours, may be an option for some women, but the cost of this condom may be prohibitive, it may feel uncomfortable, and partners may object to it, leading to further challenges in a relationship. Support groups and other resources that are designed to help a person negotiate safer sex with either “male” or “female” condoms may be useful.

Discussions of HIV with women of child-bearing age often cover reproductive issues. Both HIV and pregnancy are related to sexual
activity, and prevention of both use many of the same methods. Beyond these concerns, women with HIV must deal with the possibility of HIV transmission to a fetus or child, the use of treatments during pregnancy, and personal motivations in deciding whether to have a child.

**Perinatal Transmission**

Mother-to-infant HIV transmission can occur before birth, during labor or delivery, and through breast-feeding. Perinatal transmission rates in the United States are estimated to be 17 percent to 25 percent when a woman and child do not receive HIV treatments. Studies have shown that when a woman receives treatment with AZT (also known as zidovudine; ZDV) beginning in the second trimester of pregnancy and her child receives the drug for six weeks following delivery, the risk of transmission is dramatically lowered.

Results of a 1994 perinatal clinical trial of women who had not previously taken AZT showed that transmission rates among women receiving AZT were as low as 8 percent in contrast to a 23 percent transmission rate in a group receiving a placebo. This data reflects only the efficacy of AZT monotherapy. Therapies combining several drugs are currently the standard recommended treatment for HIV-infected adults who are not pregnant. Since the potential effects of many antiviral drugs other than AZT on the fetus are still unknown, pregnant women considering combination therapies should discuss the known and unknown benefits and risks with a health care provider before making a decision.

An unpublished report from a San Francisco program that deals exclusively with HIV and perinatal care, including social support and medical intervention using combination therapies, shows dramatic success in preventing HIV transmission from a mother to a child. Of 56 babies born to HIV-positive pregnant women in the program since April 1995, none has been infected with HIV. The program’s director attributes this success to the use of combination antiviral therapies, counseling, support, and the careful monitoring of female patients and their fetuses throughout pregnancy and through the birthing process.

Perinatal transmission rates are higher for women who have decreased CD4+ cell counts or who experience severe illness during pregnancy. Other factors that may increase transmission risks include low levels of vitamin A, drug use, and an extended period during which the membrane is ruptured during labor.

All infants born to HIV-infected mothers have HIV maternal antibodies at birth because antibodies passively transfer from the woman to the fetus prior to childbirth. However, the presence of these antibodies does not necessarily indicate that an infant is infected with HIV; if an infant is uninfected, HIV antibodies will disappear by the age of 18 months. Consequently, it is difficult for providers to determine the true HIV status of an infant at birth through antibody testing. Providers commonly assess the presence of HIV with a polymerase chain reaction (PCR) test on infants at risk for HIV at three different stages after birth to determine infection: within the first 48 hours, after four to six weeks, and again after three months.

**Breast-Feeding**

Based on four studies of mothers who acquired HIV after giving birth, researchers estimate a 29 percent HIV transmission rate from mothers who consistently breast-feed their children. The World Health Organization does not support breast-feeding by HIV-infected women in the United States, where safe alternatives to breast-feeding are available. For parents who do not want to use bottled, non-human milk, clinicians suggest milk from human milk banks. These banks routinely screen donors for HIV and heat-treat milk samples to prevent HIV transmission while retaining nutritional benefits.

**HIV Treatment for Women with HIV**

For the most part, federal treatment guidelines are the same for pregnant HIV-infected women as
For other adults. Combination antiviral therapy is standard treatment for HIV-infected adults with CD4+ counts below 500, viral loads greater than 10,000, or clinical symptoms of HIV disease. Clinicians emphasize that it is important for women to discuss treatments with their care providers, and to consider factors such as general health, progression of HIV during pregnancy, and what is known and not known about the potential effects of antiviral drugs on the fetus.

Because the first three months of pregnancy involve the most significant development of fetal organs and limbs, and because this is the period of highest risk for birth defects, clinicians encourage women to consider federal guidelines that suggest that women not already taking antiviral treatments wait until after the 14th week of pregnancy to begin treatments. Some women already receiving antiviral therapy early in pregnancy may decide to discontinue therapy until after the 14th week of pregnancy to avoid the possible risk of birth defects. There is no data, however, addressing whether temporarily stopping therapy might accelerate disease progression, generate viral resistance to drug therapy, or increase the chance of HIV transmission to a fetus.

Of the currently approved HIV treatments, researchers have evaluated only AZT, 3TC (Epivir), and nevirapine (Viramune) in terms of their physiological interactions in pregnant women. AZT and 3TC appear to be physiologically well-tolerated at normal adult doses and both cross the placenta, the organ through which nutrients pass from a woman to a fetus. Nevirapine was well-tolerated after a single dose given to pregnant women in labor; data from multiple dosing trials during pregnancy are not yet available.

Reproductive Decision Making

While the possibility of perinatal transmission may be a key factor in an HIV-infected woman’s decision to have a child, other factors, including knowledge and beliefs about HIV, attitudes toward pregnancy, and availability of financial resources, may also affect decision-making related to becoming pregnant or responding to unplanned pregnancies.

Studies suggest that women who are more knowledgeable about both HIV transmission and the benefits of maternal antiretroviral therapy are more likely to choose to continue or continue and, if possible, to switch to combination antiretroviral therapy.
Implications for Counseling

Counselors can provide clients with valuable information related to HIV risks in the context of pregnancy and an opportunity to discuss this subject. This discussion may be useful for any client who is pregnant or considering pregnancy, and is relevant in either the risk assessment session or after a client has received a positive or negative result.

Counselors must understand issues of reproductive health care, including the risks of HIV transmission to a fetus, and a client’s use of and access to reproductive health care, clients’ support systems, and the potential adverse effects of pregnancy on women at advanced stages of HIV infection. With this understanding, counselors can assess when and how to address issues of reproductive health with both female and male clients and know what particular topics to address. In the case of a woman who engages in risk behaviors without intending to become pregnant, for instance, a counselor can assess the client’s understanding of the risk of pregnancy and related health concerns. A similar discussion of the risks of pregnancy is appropriate for a woman in a heterosexual relationship, while a man’s role in a partner’s pregnancy is relevant for male clients.

In assessing client knowledge of reproductive health, counselors should evaluate the information clients have. Prevention and outreach efforts often do not target women in general or pregnant women in particular. This may lead women to overlook or deny the possibility of infection, and, therefore, not discuss their risk behaviors. In some cases, counselors may need to address what seem like simple facts about reproduction because both men and women may lack accurate information about how and when pregnancy occurs. For instance, clients may falsely believe that prevention methods such as having a male partner remove his penis from his partner’s vagina prior to ejaculation or having sex only on certain days of a

A Counselor’s Perspective

“I try to help clients understand that a decision about childbirth after careful consideration is better than a decision made as a hasty reaction to a test result.”
woman’s menstrual cycle will provide absolute protection from pregnancy. In addition, clients may incorrectly believe that birth control pills provide protection against HIV and other sexually transmitted diseases (STDs).

Ask each client what he or she knows about HIV and pregnancy issues. Does the client understand the specifics of how a woman becomes pregnant and that these activities can also be the means for transmitting sexually transmitted diseases (STDs), including HIV? To provide basic information on reproductive health, assess the client’s interest or perceived benefit in hearing about this topic before using limited time on a topic the client may not want to address.

As with many topics related to HIV infection, counselors do not need to be experts but do need to be knowledgeable enough to assess clients’ needs for information or guidance, to provide basic support, and to provide appropriate linkage and referrals when a client needs more support.

**Clients and Health Care**

There are compelling reasons for pregnant women to test for HIV, including the wide availability of medical interventions to either prevent HIV transmission during pregnancy or to delay disease progression when transmission does occur.

In California, many health care providers strongly promote HIV testing for pregnant women, and physicians are required to offer testing to patients who are pregnant. Regardless of this, many women do not receive prenatal care at all and consequently do not have the opportunity for input from health care providers. In addition, women who test negative when they become pregnant may seroconvert during pregnancy. HIV testing and counseling settings provide pregnant clients who are not yet in prenatal care settings with an opportunity to learn the importance of both HIV prevention and prenatal care.

Be aware that clients, particularly those who are pregnant, may be testing in response to societal pressure. Assess this possibility by asking clients their reasons for testing and their feelings about testing. While it is valuable to help clients see reasons that testing can be especially useful for someone who is pregnant, be careful not to pressure a woman to take an HIV test. A better prevention strategy is to facilitate a woman’s own thought process and help her reach an acceptable conclusion about testing. This can be done by ensuring that the client understands facts about her HIV risk, the dangers that accompany HIV during pregnancy, and the benefits of knowing her HIV status.

Emphasize that it is important for women to receive ongoing consultation with knowledgeable health care providers during pregnancy. For clients who are pregnant and not receiving medical care, evaluate their reasons for this. If they are not interested in receiving medical care but are unsure of their reasons, explore their history of receiving medical care and the experiences of family members or friends who have received medical care. Ask them to discuss their thoughts on medical providers and the role of medical care during pregnancy.

**Interaction of Pregnancy and HIV**

With female clients who test positive and are pregnant or considering pregnancy, it is important to make clear the following points: consultation with an HIV-knowledgeable health care provider is important after testing positive; rates of perinatal transmission are lower now than they were early in the epidemic, and treatment interventions can significantly reduce the risk of transmission without harming the fetus; and pregnancy itself does not cause disease progression in women with asymptomatic HIV infection.

Receiving prompt medical care is important for anyone who tests positive for HIV. For pregnant women, it is essential to quickly initiate treatment regimens that may prevent perinatal transmission. Additionally, a woman considering terminating her pregnancy must make a timely decision because the opportunities for abortion decrease the longer she waits.

Present clients with data on the risk of perinatal infection, emphasizing that researchers estimate perinatal transmission rates to be between 17 percent and 25 percent when a woman and child do not receive HIV treatments, and that published reports have found transmission rates to be as low as 8 percent for pregnant women receiving specific HIV treatments aimed at preventing transmission. Assess how clients interpret this information. Keep in mind that for some people, the rate of 8 percent, the range of 17 to 25 percent—or any risk, perhaps—may seem high, while to others the same risks may seem low. In addition, people may have questions such as, “Will my baby be infected with HIV?” for
which they will want absolute answers rather than ones involving probability. Percentages may be too uncertain for clients, leaving them frustrated, angry, or confused. Explore this possibility and ask clients to consider what it would mean to them to have a baby infected with HIV.

Present information about specific drug treatments to clients who are pregnant. Explain further that providers and treatment information agencies, such as Project Inform, can offer more assistance. San Francisco-based Project Inform operates a treatment information hotline, (800) 822-7422, and has a website that provides treatment information (www.projinf.org).

Clients with HIV who are pregnant or who have a partner who is pregnant may need to deal with additional considerations. It can be especially important for these clients to consider the benefits and drawbacks of caring for a baby and the resulting effect on a person’s energy, stamina, emotional health, and ability and desire to pay attention to one’s own health needs.

In addition, a woman who has been pressured into having a child may decide against it, partly because she has HIV. In some cases, this client may not want to disclose her HIV infection. A counselor can help this client consider how she might approach this situation and help her to assess the extent to which she feels personal power over her decisions and actions.

Recognize that just as HIV-infected clients may struggle with issues about pregnancy, providers may do the same. Providers may project their feelings onto clients, for instance, by questioning how a woman could risk having a baby who might be born with HIV. Prepare clients for this possibility, and encourage them not to settle for it, but to find knowledgable and supportive providers.

Be aware that test counselors may struggle with their own conflicts related to pregnancy and HIV infection. A counselor should set aside personal feelings during a session and work through them another time.

Considering Pregnancy

When a client has been thinking about having a child, receiving a positive result may raise a range of thoughts and feelings about pregnancy or being a parent. Explore these thoughts and feelings, keeping in mind that these may occur for a woman who has been thinking about becoming pregnant, or for someone else—either male or female—who is considering parenthood with a partner. Help the client see that incorporating the knowledge of HIV infection into one’s life is an important and often overwhelming process, and that it may be useful to allow time before making a decision about pregnancy.

Immediately after testing, a person may feel an urgent need to make decisions, for example, either to become pregnant or to make a decision never to become pregnant. This need to quickly make life changes may be based on perceptions that one’s life span will be different as a result of having HIV or that it is advantageous to become pregnant now compared to a time when illness has progressed further. In addition, having a child can give a person a conscious or unconscious sense of control over personal health, which may inappropriately influence decision making.

Clarify if the client feels an urgent need to make a decision regarding pregnancy, and if so, learn why the client feels pressured in this way. Help clients identify the benefits and drawbacks of deciding now compared to waiting a while. Encourage any client, whether positive or negative, to consider the following:

References

What is involved in providing care for a baby? Does the client feel capable and willing to provide the necessary care?

What are ways in which having a baby will change the client’s lifestyle? Is the client ready for such a dramatic change?

Who can the client rely upon to provide support? Encourage the client to discuss with others the specific ways in which they will support the client during her pregnancy, after she gives birth, and as the child grows.

Who will care for the child should the parent or parents die?

Partners and Others

If a client is the partner of someone who is pregnant or is considering parenthood, he or she must consider a similar range of issues: How is the client’s health? What are his or her thoughts about being a parent? Does the client have a realistic view of his or her role? What if he or she becomes ill, or if the biological mother becomes ill?

Who will care for the child should the parent or parents die?

Case Study

Susan is a 24-year-old woman who recently took a home pregnancy test and learned she is pregnant. She has not seen a physician because she does not know whether she wants to give birth, and she does not want her physician to know that she is pregnant. She has had a boyfriend for two years and engages in unprotected sex with him. During the past six months, she has also had unprotected sex on two other occasions with another man. She has heard that HIV testing is important for pregnant women and she is concerned that she may be infected. She is uncertain of the risks of transmission to a child.

Counseling Intervention

Support Susan for seeking counseling and testing. Assess specifically her understanding of how she might have been at risk for HIV. Help her understand that a test result will not determine whether she has been infected during the past six months.

Ask about her reluctance to see a physician, and why she does not want a physician to know that she is pregnant. Has she had negative experiences with health care providers in the past? Is she concerned that a physician would pressure her into a decision about continuing or terminating her pregnancy? Would seeing someone now make her pregnancy too real for her, since she is still considering whether or not to continue the pregnancy? Explore her reasons further, and empathize with her resistance, while stating the importance of health care during pregnancy.

Explain to her that seeing a health care provider is important for her physical health regardless of whether she decides to continue the pregnancy and that it can give her valuable information about how advanced she is in her pregnancy. Assess what might lead her to be more willing and provide referrals she might be willing to pursue. Depending on the policies of the test site and the confidentiality or anonymity of the counseling setting, it may be possible, with Susan’s consent, for the test counselor to make a telephone call or otherwise contact a provider during the test counseling session.

Tell her that HIV can be transmitted from a woman to a fetus during pregnancy, or from a mother to a child during labor or delivery. Explain that treatment intervention can dramatically reduce rates of infection. Ask her what this information means to her and how she feels about it.

If the test result will affect her decision about continuing her pregnancy, restate that she will have to wait six months from her most recent risk behavior for an accurate test result. Waiting this long could affect her options and legally preclude her from terminating her pregnancy. To determine her infection status sooner, she will need to see a health care provider who can offer diagnostic tools that detect the presence of HIV itself. Discuss her willingness to see a health care provider for this.

Beyond her pregnancy, learn more about what a positive result would mean for Susan. Learn what factors will affect her decision to continue her pregnancy. If Susan is unsure of her next step following testing, help her determine this.

While raising these issues may be within the purview of HIV counselors, other sources will be more useful for supporting a client through a more thorough exploration. Make use of the linkage and referral process, assessing referral needs and a client’s willingness to follow through with referrals. Those to whom a counselor refers must be knowledgeable about pregnancy, childbearing, and HIV. Identifying such referrals may require research.
Test Yourself

**Review Questions**

1. True or False: A woman is equally as likely as a man to contract HIV during heterosexual intercourse.

2. Perinatal transmission rates for women and children not receiving HIV treatments in the United States are estimated to be: a) 1-2 percent; b) 17-25 percent; c) 60-65 percent; d) more than 90 percent.

3. Results of a clinical trial of pregnant women who had not previously taken AZT showed that transmission rates among women receiving AZT during pregnancy were: 1) 1 percent; b) 8 percent; c) 40 percent; d) 50 percent.

4. True or False: In the United States, health officials do not recommend breast feeding for an HIV-infected mother and her infant.

5. Which of the following are potential factors in an HIV-infected woman’s decision to have a child: a) religious and spiritual beliefs; b) knowledge and beliefs about HIV infection; c) personal health; d) any of the above are potential factors.

6. True or False: Women represented fewer than 1 percent of all AIDS cases reported in the United States in 1996.

7. Mother-to-infant HIV transmission can occur: a) to the fetus before childbirth; b) during labor and delivery; c) both a and b; d) none of the above

8. True or False: HIV-infected women tend to seek treatment later in the course of their illness than men.

**Discussion Questions**

1. How can a counselor assess whether his or her personal feelings about the risks of transmission from a pregnant HIV-infected woman to a fetus or child are affecting his or her work with clients?

2. How can a counselor respond after noticing that his or her personal feelings about HIV transmission risks to a fetus or child are affecting his or her counseling work?

3. How much discussion of pregnancy should test counselors initiate or pursue with male clients or with female clients of reproductive age?

4. How can counselors respond to female clients who say they regularly use condoms, but because they desire to have a child want to stop using them?

5. How can counselors respond to women who test positive and ask about the risks of transmitting HIV to a child if they become pregnant?

**Answers to Test Yourself**

1. False. During heterosexual intercourse, the female partner is at least 10 times more likely to contract HIV than the male partner, due to elevated levels of HIV in semen and the possible bruising or tearing of the female genitalia during intercourse.

2. b.

3. b.

4. True.

5. d.

6. False. Women represented 20 percent of all AIDS cases reported in the United States in 1996.

7. c.

8. True.
DID YOU KNOW?

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