

Women and Children with HIV/AIDS

THE IMPACT ON WOMEN

The HIV/AIDS epidemic is a growing health crisis among women in the United States. In the early stages of the epidemic, relatively few women and female adolescents were diagnosed with HIV infection and AIDS. Today, women, especially women of color, represent an increasing proportion of new diagnoses and deaths.

The Centers for Disease Control and Prevention's (CDC) HIV/AIDS surveillance system collects reports of cases of HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome) as they are diagnosed. *AIDS surveillance* consists of a uniform system in which the CDC receives reports of AIDS cases from all U.S. states and territories. According to these data, an estimated 436,693 adults and adolescents (≥ 13) were living with AIDS through 2006; of these, 23% were women (CDC, 2008). Between 2001 and 2005, the estimated number of AIDS cases increased by 7% among females and 7% among males (CDC, 2007c).

For *HIV surveillance*, 38 areas (33 states and 5 U.S. dependent areas) have been reporting HIV infections to the CDC long enough to monitor trends. These 33 states represent approximately 63% of the HIV epidemic in the United States (CDC, 2007c). From 2003 through 2006, an estimated 491,727 persons were diagnosed with HIV infection. In 2006, women accounted for 27% of all HIV cases among adults and adolescents (CDC, 2008).

These data, however, provide an incomplete picture of the HIV epidemic even in the areas where data is collected. This information does not capture cases not reported to the CDC, such as those in which the HIV testing was conducted through anonymous means or through the use of home-based test kits, or individuals who have not been tested and, as a result, do not know their HIV status (CDC, 2007c).

The latest trends indicate that people are living longer with this disease—a change resulting primarily from the widespread use of highly active antiretroviral therapy (HAART), introduced in 1996, which has delayed the progression of AIDS to death (CDC, 2007c). As a result, an increasing number of women are *living* with HIV in the U.S. This is born out by statistics. For example, among women 25 to 44 years old, AIDS was the third leading cause of death in 1995, when it caused more than 5,000 deaths, or 11% of all deaths in this age group. Thereafter, the rate of death due to AIDS dropped, and, in 2006, an estimated total of 3,784 women died due to AIDS (CDC, 2002a; CDC, 2005a; CDC, 2008). AIDS dropped down to the sixth leading cause of death, from 2000 through 2003, for U.S. women between the ages of 20-44 (National Center for Injury Prevention and Control, 2006).

THE IMPACT ON AFRICAN AMERICANS AND HISPANICS

Women of color, especially African Americans and Hispanics, are disproportionately affected by this epidemic and represent an overwhelming proportion of new cases among women. In 2005, African Americans accounted for 66% of newly reported AIDS cases among women, while Hispanics accounted for 16% (CDC, 2007b). Although African Americans and Hispanics combined comprise about 24% of all women in the United States, they totaled about 82% of AIDS diagnoses among women reported in 2005 (National Center for Health Statistics, 2007; CDC, 2007b). Moreover, the number of AIDS cases is higher among African American women than all other racial/ethnic groups combined (CDC, 2006b).

Further evidence highlighting the disparity among women of color is illustrated in the HIV case rates for 2005. The rate of HIV cases per 100,000 for African American women (60.2) was 20 times higher than that for non-Hispanic whites (3.0); whereas the rate for Hispanics (15.8) was more than 5 times higher than the rate for non-Hispanic whites (3.0) (CDC, 2007c). African American and Hispanic women constitute 80% of all women living with HIV—far out of proportion with their representation in the general population (CDC, 2007b). Of note, however, are recent reports that point to a possible reversal of racial disparities with regard to HIV. The CDC noted that the rate of new HIV diagnoses decreased for African Americans and Hispanics between 2001 and 2005, while increasing for all other groups.

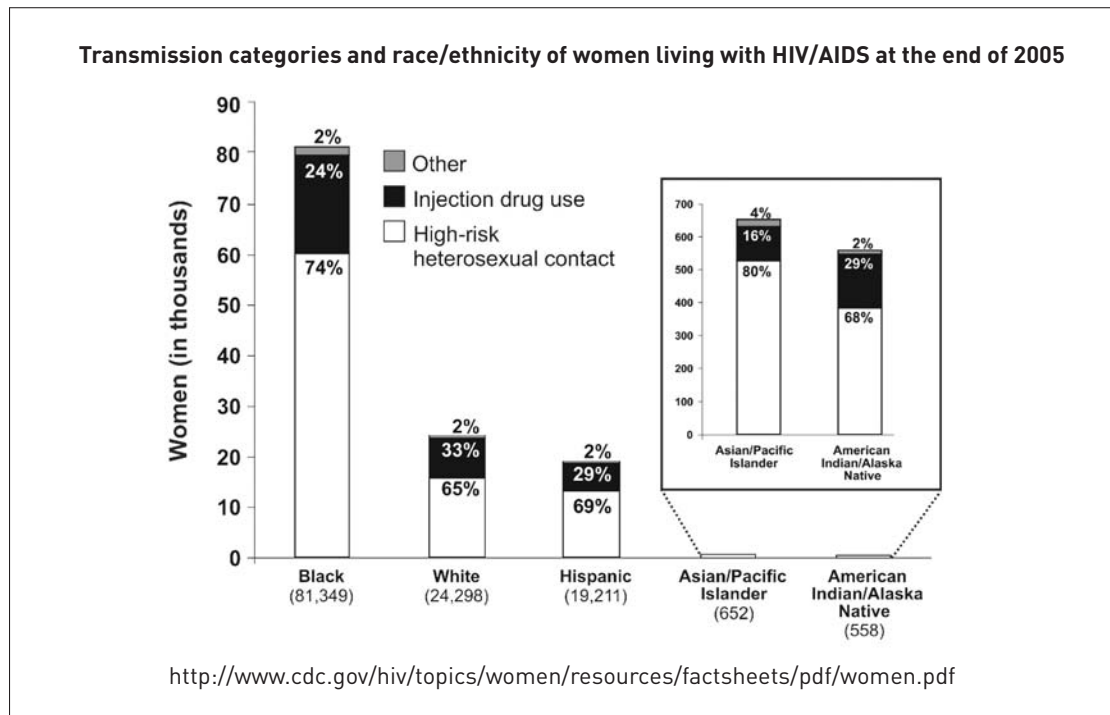
TRANSMISSION OF HIV TO WOMEN

The most frequent routes of HIV infection in women have shifted since the beginning of the epidemic. Currently, most women are infected with HIV during sexual intercourse with an HIV-infected man. In 2006, the majority of women living with HIV (73%) were exposed through high-risk heterosexual contact, up from 44% in 1994. Use of HIV-contaminated syringes for the injection of drugs has also contributed to the spread of HIV infection. In 2006, 26% of HIV-infected women were exposed through injection drug use, down from 52% in 1994 (CDC, 2008; CDC, 2004; CDC, 2005a).

HIV PREVENTION

With the rate of HIV infections decreasing from 150,000 in the mid-1980s to around 40,000 per year now, HIV prevention efforts appear to be working. However, the rate of HIV infection is still unacceptably high, especially among African American and Hispanic women (National Prevention Information Network [NPIN], 2007).

There is a strong link between high-risk behaviors, such as unsafe sex and illicit drug use to psychosocial, behavioral, and emotional factors among women. For example, women may find intimacy in their relationship to be more important than protection against HIV (Center for AIDS Prevention Studies [CAPS], 1998). Stigma, discrimination, and gender inequality among women infected with HIV also contribute to women's vulnerability by restricting what women can do to protect themselves from HIV. Programs and intervention strategies that address HIV education, stigma, sexuality, family, culture, empowerment, self-esteem, and negotiating skills are critically important in preventing the spread of this disease (CAPS, 1998; Avert, 2007).



CHILDREN WITH AIDS AND HIV INFECTION

Cumulative through 2006, an estimated 9,144 children (≤ 13) in the U.S. have been diagnosed with AIDS. The majority (92%) of these cases were acquired through perinatal transmission (CDC, 2008).

From 2000 to 2004, the number of deaths among children with AIDS decreased by 21%; an estimated 61 children died as a result of AIDS in 2004 compared to 77 in 2001 (CDC, 2005a). Of the 9,144 children younger than 13 years reported with AIDS, 4,889 (53%) have died through 2006 (CDC, 2008).

Additionally, in 2006, an estimated 135 cases of HIV in children (≤ 13) were reported from 33 states and 5 U.S. dependent areas with confidential name-based HIV infection surveillance. Cumulative through 2006, an estimated total of 6,703 children (≤ 13) are living with HIV (CDC, 2008).

Because the vast majority of cases among children are attributed to perinatal exposure to HIV, the incidence of this disease in children closely resembles that of women; children of color are overrepresented. Cumulatively through December 2005, African American and Hispanic children respectively accounted for 62% and 19% of *all* reported pediatric AIDS cases (CDC, 2007c).

Mother-to-Child Transmission of HIV

Mother-to-Child Transmission (MTCT) accounts for the vast majority of the cumulative pediatric HIV cases reported through the end of 2006 (CDC, 2008). MTCT can occur at any one of three stages:

antepartum (during pregnancy), intrapartum (during labor and delivery), or postpartum (after birth) via breastfeeding. Transmission during the intrapartum period is the most common means of infection (Perinatal HIV Guidelines Working Group [PHGWG], 2005).

The risk of transmission can be reduced to less than 2% with effective antiretroviral (ARV) therapy, formula feeding, and elective cesarean section delivery, when appropriate (PHGWG, 2005). Significant advances have been made in reducing MTCT in the U.S., and these declines reflect the widespread success of public health efforts to address this problem (CDC, 1999). In fact, the number of new perinatally transmitted HIV cases has decreased 90% since ARV therapy was introduced in 1992 (CDC, 2004).

The Women and Infants Transmission Study examined HIV-infected pregnant women who gave birth between January 1990 and June 2000. Results of the study showed HIV transmission rates of 20% for those not taking ARV therapy, 10.4% for those receiving ARV monotherapy, 3.8% for those receiving dual ARV therapy, and 1.2% for those receiving HAART (Cooper, Charurat, Mofenson, Hanson, Pitt, Diaz, et al., 2002). Combination therapy for HIV has become the standard, with the large majority of the women (86%) taking more than one antiretroviral during the third trimester of pregnancy (Shapiro, Tuomala, Samuelson, Burchett, Ciupak, McNamara, et al., 2002).

While research has demonstrated the reduced risk and incidence of MTCT, certain barriers remain. Cooper et al. (2002) found that women not receiving HIV treatment during pregnancy had certain salient characteristics associated with perinatal transmission of HIV. These women were likely to be under 30 years of age and to have used drugs during pregnancy. In fact, approximately 40 percent of mothers who give birth to infected infants do not know their own HIV status before labor and delivery (CDC, 2003a).

HIV TESTING: REVISED RECOMMENDATIONS

In September 2006, the CDC recommended universal, voluntary HIV testing of adults, adolescents, and pregnant women ages 13-64 in health care settings. The shift from testing only high-risk individuals to routine testing is an attempt by the CDC to reach an estimated 250,000+ Americans who are infected with HIV but are unaware of it. Knowledge of HIV infection can allow people the opportunity to take advantage of therapies that can keep them healthy and extend their lives, and also promote healthy decision-making regarding safe sexual practices and drug use (CDC, 2007d).

A primary strategy to prevent perinatal transmission is to maximize prenatal HIV testing of pregnant women and include voluntary testing as a routine component of medical care (CDC, 2007d). Given the high percentage of women who are unaware of their HIV status, the CDC recommends that all pregnant women in the U.S. be screened for HIV infection. This approach, known as "opt-out," would notify women that an HIV test will be included in a standard battery of prenatal tests and procedures, but that they may refuse testing (CDC, 2006c; CDC, 2002b). The CDC also recommends "repeat screening in the third trimester for certain high-risk women and in certain jurisdictions with elevated rates of HIV infection among pregnant women." Pregnant women should also receive "oral and written information that includes an explanation of HIV infection, a description of interventions that can

reduce HIV transmission from mother to infant, and the meanings of positive and negative results” (CDC, 2007d). Immediate initiation of appropriate ARV treatment is recommended to women upon positive HIV results (CDC, 2006c).

The CDC also recommends that newborns be tested for HIV, with or without the mother’s consent, if the mother’s HIV status is unknown at delivery (CDC, 2002b). Although newborn HIV testing is recommended, jurisdictions must consider whether a mandatory screening policy for these infants is the best way to achieve such routine screening (CDC, 2003b). Rapid testing of newborns is recommended at birth, so that ARV prophylaxis can be offered to HIV-exposed infants. The benefits of neonatal ARV prophylaxis are best realized when it is initiated within 12 hours of birth (CDC, 2006c). To aid in the implementation of the revised recommendations, the CDC released an implementation guide in spring of 2007, which provides examples and information on implementing HIV screening in specific health care settings (CDC, 2006a).

Rapid HIV Tests

Historically, a significant barrier preventing routine HIV testing during pregnancy and labor and delivery has been the inability of available HIV testing technology to produce timely results (CDC, 2003a). However, as of 2005, four rapid HIV tests have been approved for use by the Food and Drug Administration (FDA), and are now commercially available in the U.S. (CDC, 2005b). The OraQuick test provides an HIV result in about 20 minutes and costs less than current testing procedures. Additional tests include Uni-Gold Recombigen, Reveal G2, and the Multispot, each of which can be completed in 15 minutes or less (CDC, 2005b).

An accurate rapid test has several potential applications in prenatal and labor and delivery settings to prevent prenatal transmission. Rapid knowledge of the mother’s HIV status provides an opportunity for starting ARV therapy and utilizing other interventions, such as elective cesarean section and avoidance of breastfeeding, to reduce transmission (CDC, 2003a). Additionally, a rapid test can be valuable for women who are unlikely to return for test results. According to the data from publicly funded counseling, many people do not return for their test results: 30% of persons who tested HIV-positive during 2000 and 39% of persons who tested HIV-negative did not return (CDC, 2002c). A rapid HIV test allows the administration of the test and the result given all in one clinic visit. The CDC (2003a) has strongly encouraged the expanded use of rapid HIV testing, explaining that, “the recent approval of a simple rapid HIV test in the United States creates an opportunity to overcome some of the traditional barriers to early diagnosis and treatment of infected persons.”

In addition to implementing rapid HIV testing, researchers suggest that efforts must be directed towards at-risk women in a variety of settings and is not limited to physicians’ offices. According to a recent study by RAND (2005), the primary barrier to women’s testing for HIV was cited as not believing that they were at risk. These women, along with women without regular health care, women at risk for mental illness, and older women, should all be encouraged to be tested (RAND, 2005).

HIV TREATMENT

Medications

In 2006, the Department of Health and Human Services (DHHS) Panel on Antiretroviral Guidelines for Adults and Adolescents released updated guidelines. These outlined considerations for how clinicians should use ARV drugs to treat adults and adolescents with HIV infection, when to initiate therapy, which drug combinations are preferred and which drugs or combinations should be avoided, and the means to continue clinical benefit in the face of ARV drug resistance.

In general, the goals of HIV treatment should be to “reduce HIV-related morbidity and mortality; improve quality of life; restore and preserve immunologic function; and maximally and durably suppress viral load” (DHHS, 2008). The DHHS guidelines state that viral load and CD4+ T cell count blood tests should be used together to help make decisions about starting or changing an anti-HIV treatment regimen. A viral load test measures the amount of HIV in the bloodstream and helps to determine the risk of disease progression to AIDS. A CD4+ T cell count measures the number of a specific type of infection-fighting white blood cell and helps to show the status of the health of the immune system. Effective HIV treatment should decrease the viral load, increase T-cell counts, keep the immune system strong, and prevent HIV from progressing to AIDS (Panel on Clinical Practices for Treatment of HIV Infection, 2005; DHHS, 2007).

Currently, there are 26 federally-approved ARV drugs, which include both single and combination pills (National Institute of Allergy and Infectious Disease [NIAID], 2006; The Body, 2006). The DHHS panel recommendations included the use of HAART, a combination of at least three drugs, and also confirmed that the selection of a regimen should be based on the individual patient and drug-specific factors (DHHS, 2007).

Women and Pregnancy

In October 2006, DHHS released updated recommendations on the use of ARV drugs in pregnant women and interventions to reduce perinatal HIV transmission. These guidelines recommended the use of aggressive combination drug regimens that maximally suppress viral replication, including the incorporation of AZT chemoprophylaxis to prevent perinatal transmission (DHHS, 2008). However, federal guidelines also recommended that pregnant women not take efavirenz (commonly known as sustiva) during the first trimester of pregnancy. Case reports indicated that the use of efavirenz can lead to neural tube defects in infants born to women who took the drug during the first trimester of pregnancy (Kresge, 2005).

Initiation of treatment in pregnant HIV-infected women should be the same as that recommended for non-pregnant adults. Thus, the women’s clinical, virologic, and immunologic status should be the primary factors in guiding treatment decision. Furthermore, in considering the potential for short- and long-term medication effects on the fetus and newborn, the decision should be made by the woman following discussion with her health-care provider regarding the benefits and risks to her and her fetus (DHHS, 2008; Perinatal HIV Guidelines Working Group, 2005).

Infants, Children, and Adolescents

There are also unique treatment considerations for HIV-infected infants, children, and adolescents. Compared with adults, infants and young children infected with HIV have fewer medication options, with a total of only 13 FDA-approved drugs (AIDSmeds, 2006). Other important considerations in the medical treatment of children with HIV include the following: evaluation of specific drug dosing and toxicity, modifying doses as the children develop, and optimizing adherence to therapy (Working Group on ARV Therapy and Medical Management of HIV-infected Children, 2004).

Medication Adherence

Because current combination treatments require taking many pills at various time intervals throughout the day, patient adherence becomes a critical component of successful HIV treatment and AIDS prophylaxis. Depression and substance abuse are commonly cited as factors contributing to non-adherence, which is associated with viral resistance; whereas, adherence is found to predict long-term treatment success (Panel on Clinical Practices for Treatment of HIV Infection, 2005; DHHS, 2007). In surveying people with HIV, the most important factors associated with non-adherence included "fear of both short- and long-term side effects," "interactions with other drugs," and "low level of knowledge about HIV and treatment issues." On the other hand, factors associated with being adherent include "knowledge about the importance of adherence," "integration of treatment into the routine of everyday life," and "social support for adherence" (Canadian AIDS Treatment Information Exchange [CATIE], 2002).

Medication adherence in children is found to be related to a number of issues, including school-related concerns and psychosocial factors in families. Caregivers with confidentiality concerns, such as those not informing the child's school of HIV infection status, reported more missed doses of medication (Reddington, Cohen, Baldillo, Toye, Smith, Kneut, et al., 2000). Additionally, factors such as poor parent-child communication, higher caregiver stress, and lower quality of life among caregivers predicted missed dosages of medication among children and caregivers (Mellins, Brackis-Scott, Dolezal, & Abrams, 2004). To address and improve treatment adherence among children, the broader context of children's lives must be considered, including caregiver needs and characteristics (Mellins, et al., 2004).

PSYCHOSOCIAL ISSUES

Poverty

Not only do families affected by HIV have to cope with living with a chronic and potentially fatal illness, they also often face an array of other complex problems. The HIV/AIDS Bureau (2004) cites poverty, poor housing, lack of transportation and childcare, non-HIV-related illnesses, and the lack of a social support system as common challenges faced by populations affected by HIV/AIDS. Comparatively, women infected with HIV also tend to be poorer than their male counterparts. Not coincidentally, children infected with HIV are also likely to live in poverty, and live with a single parent (Davies, Bachanas, & McDaniel, 2002). Social and economic concerns are particularly important to families living with HIV/AIDS because low income, lack of private insurance, unemployment, and low education level are predictors of poorer health and less access to health care (HIV/AIDS Bureau, 2004).

Access to care also appears to be an additional factor facing those affected by HIV. According to the HIV Cost and Services Utilization Study (2000), African Americans and Hispanics received fewer preventative treatments and less outpatient care than Whites. In addition to race, lack of health insurance or Medicaid coverage, lower education level, and low-income level also contributed to poorer access to care (RAND, 2000).

Intimate Partner Violence

Intimate partner violence (IPV) is another complex problem that is directly correlated to women with, or at risk for, HIV infection. Although research on the relationship between HIV and IPV is rather sparse, several studies indicate a number of connections between the two public health problems. A literature review conducted by Gielen (2000) suggested three possible relationships including: a) sexual violence as heightening HIV risk; b) childhood physical and sexual abuse leading to later sexual risk-taking behaviors, and c) disclosure of HIV-positive diagnosis as a precursor to partner violence (Gielen, McDonnell, Burke, & O'Campo, 2000). More specifically, some researchers have suggested that a diagnosis of HIV infection may trigger violence at the time of disclosure to significant social relationships (Zierler, Cunningham, Andersen, Shapiro, Bozette, et al., 2000). In a study by Zierler et al. (2000), 20.5% of the women interviewed reported physical harm since HIV diagnosis. Many of these women also reported that their HIV-seropositive status was a cause of the violence. However, this study suggested that disclosure alone may not be the precipitating factor for heightened risk of violence, but perhaps the presence of additional psychosocial stressors including poverty, social isolation, drug dependence, homelessness, and unemployment (Zierler et al., 2000).

Mental Health

Mental health issues are prevalent among people with HIV infection, especially women. In a study by Evans, Ten Have, Douglas, Gettes, Morrison, et al., (2002), women with HIV infection had more depressive symptoms than HIV-negative women. Research also highlights gender differences, with rates of depression twice as high among HIV-positive women as compared to HIV-positive men (Evans, et al., 2002; Ickovics, Hamburger, Vlahov, Schoenbaum, Schuman, et al. 2001).

Depression has been shown to have a direct impact on women's daily functioning, including child-rearing. Studies have indicated that women's depression is associated with being less able to perform typical mothering tasks (Murphy, Marelich, Dello Stritto, Swendenman & Witkin, 2002). This is of particular concern because large numbers of women with HIV are also mothers of young children (Murphy et al., 2002). More specifically, mothers infected with HIV may have poorer parent-child relationships, a lack of childcare services and support, and high levels of psychological distress that may lead to behavior problems in their children (Bachanas, Kullgren, Schwartz, Lanier, McDaniel, Smith, et al., 2001a; Reyland, McMahon, Higgins-Delessandro & Luthar, 2002; Klinkenberg & Sacks, 2004).

Substance Use

The spread of HIV among women can be attributed to the use of injection (e.g., heroin) and non-injection drugs (e.g., crack/cocaine) and/or alcohol. Women who are substance users may "trade sex for drugs or money, engage in risky sexual behavior due to impaired judgment associated with

alcohol intoxication, or have sexual intercourse with an HIV-infected injection drug user” (Malow, Devieux, Rosenberg, Dyer, & St Lawrence, 2006). Among pregnant women aged 15-44 years, 4.3% reported using illicit drugs during pregnancy—many of whom (32%) reported that they smoke cigarettes and drink alcohol. Pregnant women who participate in these high-risk behaviors greatly increase their chances for HIV infection (Substance Abuse and Mental Health Services Administration, 2004).

Women who become infected with HIV and have co-occurring substance use disorders face additional barriers to HIV care and treatment. They are less likely to use medications prescribed for HIV infection, have more barriers to treatment, and experience poorer HIV-related health outcomes (Klinkenberg & Sacks, 2004; Cook, Cohen, Burke, Grey, Anastos, & Kirstein, 2002). In many cases, non-HIV related stressors such as poverty, inadequate housing, violence & trauma, and grief contribute to or exacerbate these problems (Davies, Bachanas, & McDaniel, 2002; Klinkenberg & Sacks, 2004).

EFFECTS OF HIV INFECTION AND AIDS ON CHILDREN

Although there is agreement that children infected with HIV have a high rate of emotional and psychological problems, there is some debate about the etiology of those problems. Major emotional and behavioral disturbances seen in children with HIV include attention deficit/hyperactivity disorder, oppositional defiant disorder, anxiety, depression, and problems in social functioning relative to their peers (Bachanas et al., 2001b; Mellins, Smith, O’Driscoll, Magder, Brouwers, Chase, & Blasini, 2003; Steele, Nelson & Cole, 2007).

Additionally, the psychosocial functioning of a child infected with HIV can also be affected by disclosure of the diagnosis to the child. In a sample of children (6-16 years old) with HIV, children who had been told of their HIV status self-reported less internalizing problems, less distress, and fewer symptoms of depression than those who had not been informed of their diagnosis (Steele, Nelson, & Cole, 2007). Issues concerning death and dying, particularly worrying about their health and future, also affect children living with HIV. In addition, since almost all mothers of these children are also HIV infected, the children must cope with the potential or actual loss of a parent (Bachanas, et al., 2001a; Steele, Nelson, & Cole, 2007). In a study by Murphy, Greenwell, Mouttapa, Brecht, & Schuster (2006), findings indicated that lower levels of physical functioning and more physical symptoms among mothers with HIV/AIDS were associated with higher levels of children’s depression, anxiety, and aggressiveness at baseline.

However, some studies have found that these problems are not significantly different from those of their healthy counterparts from a similar social background (Bachanas, et al., 2001a). For example, Mellins et al. (2003) found that the high rate of behavioral problems in children with HIV was not significantly associated with HIV disease; instead, the problems were more consistently related to other demographic and environmental factors.

CASE MANAGEMENT AND COMPREHENSIVE SERVICES

Given the social, economic, and psychological challenges faced by families living with HIV infection and AIDS, it is important to provide services that address these issues and nurture the relationship between mothers and children and families living with HIV/AIDS (Kmita, Baranska, & Niemiec, 2002; Leslie, Stein & Rotheram-Borus, 2002; HIV/AIDS Bureau, 2004). Through Title IV of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act, a comprehensive care system has been developed for women, infants, children, youth, and their families, and research demonstrates the importance of a comprehensive and coordinated approach in delivering HIV treatment (HIV/AIDS Bureau, 2004). This care system encompasses primary and specialty care for HIV-positive individuals, supportive care for caregivers, neonatal and pediatric care, substance abuse and mental health services, case management, support services, coordination of services, education, and access to clinical research trials. The experiences of the Ryan White CARE Act providers demonstrate the importance of comprehensive and coordinated care in keeping HIV-positive women and their families in care over time (HIV/AIDS Bureau, 2005b).

For the past 15 years, the Abandoned Infants Assistance (AIA) program has been working to improve systems and address the human service needs of families affected by HIV/AIDS. The AIA program seeks to facilitate access to needed services and resources for family members in order to help them overcome physical, developmental, and emotional effects of HIV/AIDS (National Abandoned Infants Assistance Resource Center, 2006).

Such a system of care for pregnant women is also found to be associated with reducing perinatal transmission rates; moreover, services provided in the context of care for the entire family are associated with the most successful outcomes for HIV-positive infants and children (HIV/AIDS Bureau, 2005a). These findings favor the development of comprehensive, integrated, and co-located services. Researchers suggest that this is particularly important for geographic areas that lack abundant services and integrated delivery systems, such as areas outside of large cities (Lehrman et al., 2001).

CHILD CARE AND CUSTODY ISSUES

Women living with HIV often experience periods of relative health punctuated by periods of acute illness related to an opportunistic infection. As a result, a parent living with HIV may often need a short-term caregiver for her children. In addition, a parent may need someone to provide care to her children in the event of her death (Mellins, Ehrhardt, Newman, & Conard, 1996). As most women infected with HIV are also mothers, creating future care and custody plans for their children is an important consideration (Selbin & McAllaster, 2000). Parents are likely to make custody plans over time, but these plans are also subject to change frequently. Predictors associated with developing such plans include being a female parent, positive-action parental coping, younger age of the child, and a longer time since the parent's HIV diagnosis (Rotheram-Borus, Lester, Wang, & Shen, 2004).

In addition, programs have been developed, with the assistance of federal and state funding, to help these families address the social, emotional, and legal issues involved in making a future care and

custody plan. For example, the U.S. Department of Health and Human Services provides funding for voluntary permanency planning projects for families affected by HIV through both the Abandoned Infants Assistance Act and Title IV of the Ryan White CARE Act (Palmer & Mickelson, 2001).

CONCLUSION

Advances in anti-HIV therapies have offered considerable benefits in maternal and child health, most notably in terms of reducing the number of deaths due to HIV and the rates of MTCT. The recent introduction of accurate rapid HIV testing provides a promising avenue to help prevent maternal transmission and improve the overall process of counseling and testing. In addition, case management and coordinated services have proven to be successful interventions in addressing the needs of families affected by HIV.

However, HIV continues to be a significant problem affecting women and children in the U.S., particularly among African Americans and Hispanics. More women and children are living with HIV today than at any time since the beginning of the epidemic, and they require long-term and complicated medical care and treatments. In addition to coping with a chronic and life-threatening illness, HIV-affected families often face an array of other complex problems (e.g., poverty, inadequate housing, depression, substance abuse, violence, and future care and custody planning) and continue to need comprehensive services to effectively address these issues.

A one-size-fits-all approach will not be sufficient to curb the spread of HIV infection and AIDS among women and children. To effectively address these racial and gender disparities, HIV/AIDS prevention efforts should take into account the myriad factors women and children face on both an individual and societal level while also addressing the heterogeneity of these populations in various communities throughout the U.S.

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The publication of this fact sheet was made possible by grant #90-CB-0126 from the Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services. The contents are solely the responsibility of the authors and do not represent the official views or policies of the funding agency. Publication does not in any way constitute an endorsement by the Department of Health and Human Services. Readers are encouraged to copy and share this material, but please credit the National AIA Resource Center.