34 HIV and African American Women in the U.S. South¹ A Social Determinants Approach to Population-Level HIV Prevention and Intervention Efforts

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The year 2011 marks the 30th anniversary of the discovery of the HIV/AIDS virus (Centers for Disease Control and Prevention [CDC], ¹1981; Gottlieb, 1981; Gottlieb, Schanker, Fan, Saxon, & Weisman, 1981). Although the United States has invested substantial efforts in reducing and eliminating HIV infections and AIDS-related morbidity and mortality, these efforts have had less than optimal success among subpopulations of some racial/ethnic minorities (Dean & Fenton, 2010; Mays, Cochran, & Zamudio, 2004; Sutton et al., 2009). Indeed, CDC surveillance data paint an alarming picture of increasing disparities in HIV/AIDS cases both in terms of such individual characteristics as race and ethnicity and by geographic region. Sadly, for some subpopulations, such as African American women, the incidence and prevalence of HIV infections is worse now than in the early years of the HIV epidemic (Mays & Cochran, 1987, 1988, 1993). In recent data examining new infections from just 2005 to 2008, African American women accounted for 64% of new infections. This trend of increasing proportions of new cases of HIV occurring in African American women arcian women accounted for 64% of new infections. This trend of increasing proportions of new cases of HIV occurring in African American women and intervention (CDC, 2010).

Throughout the history of the HIV epidemic in the United States, different subpopulations of Black women have experienced a level of vulnerability unmatched by women of other ethnic and racial groups. In the early years of the epidemic, the enormous impact of the disease among men who have sex with men (MSMs) and the rapidly emerging epidemic among injection drug users were readily apparent. This drew research dollars as the public health system mounted a multipronged attack on the new population health threat. Black women, initially small in number in the HIV statistics, were sometimes an afterthought as scientific attention concentrated elsewhere. Some Black women were infected by sexual parmers who were injection drug users or MSMs, behaviors in their partners that the women may or may not have been aware of fully. Some Black women were at risk from their own unsafe injection practices, often without full knowledge of or control over methods to effectively reduce their risks. And some were part of the sex work industry, fueled by the pernicious crack epidemic raging coincidentally in poor urban communities (Cochran & Mays,

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1989; Cochran, Mays, & Roberts, 1988; Mays & Cochran, 1988, 1993; Mays, Cochran, & Bellinger, 1989; Mays, Cochran, & Roberts, 1988a, 1988b).

Eventually, knowledge of how to reduce risk of transmission and effective interventions to do so were developed in the course of the public health response. With maturation of the epidemic, interventions in the intravenous drug use (IDU) community became more effective, especially in urban areas. Hence, for the last two decades, the greatest risk for African American women has increasingly been associated with known heterosexual transmission. However, African American women continue to have the highest number of cases attributed to unknown causes (CDC, 2004; Millett, Malebranche, Mason, & Spikes, 2005). The latter route creates special problems for developing efficacious individual-level public health interventions as it is particularly difficult to counsel women on how to reduce their personal risk when the source of that risk is to them unknown and not necessarily personal. Even more challenging is the complex picture emerging that the cause of these infections is not just male sex partners on the "down low," as previously assumed, but also that there is a greater risk profile in general of heterosexual Black men (Millett, Malebranche, Mason, & Spikes, 2005) with an overall lower rate of condom usage (CDC, 1990; Cornelius, Okundaye, & Manning, 2000; Grinstead, Peterson, Faigeles, & Catania, 1997; Peterson, Catania, Dolcini, & Faigeles, 1993), higher rate of sex partners compared with other racial and ethnic groups (Dolcini, Coates, Catania, Kegeles, & Hauck, 1995; Leigh, Temple, & Trocki, 1993; Peterson et al., 1993), greater participation in concurrent and nonmonogamous sexual relationships (Adimora & Schoenbach, 2002; Norris & Ford, 1999), trading of sex for drugs or money (Lewis & Watters, 1991), active sexually transmitted infections (STIs), and even participation in anal sex (Adimora & Schoenbach, 2002; Jaffe, Seehaus, Wagner, & Leadbeater, 1988). In the face of these dynamics, compared to other racial/ethnic groups' heterosexual women, African American women have the highest numbers of cases. Figure 34.1 shows that of new HIV

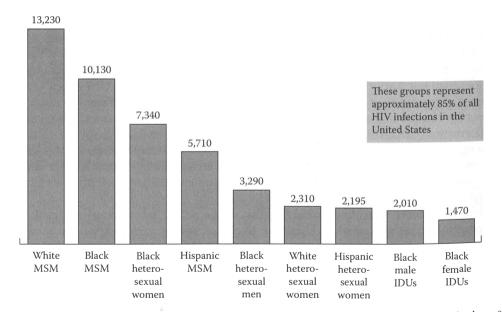


FIGURE 34.1 Numbers of annual HIV infections by high-risk groups (2006). MSM, men who have sex with men (gay and bisexual men); IDU, injection drug user. Sources: *Morbidity and Mortality Weekly Report*, October 3, 2008 and June 5, 2009, with the addition of incidence data from Puerto Rico based on an analysis by Holgrave, D., Johns Hopkins Bloomberg School of Public Health. For this analysis, all Puerto Rico cases were classified as Hispanic. Chart based upon Centers for Disease Control, *HIV Prevention in the United States at a Critical Crossroads*, 2009. (From Office of National AIDS Policy, National HIV/AIDS Strategy for the United States, *The White House Office of National AIDS Policy*, http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf, 2011.)

infections in 2006, the pattern is that of all women, African American women have the highest number of cases, a pattern that is continuing in the epidemic. These numbers argue against HIV prevention efforts for African American women continuing to rely heavily on individual responsibility for condom use. To change the circumstances that serve to fuel the infection rate in African American women, we need population-based strategies to address the population vulnerabilities that exist within African Americans communities (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009; Mays, Cochran, & Barnes, 2007; Mays, Cochran, & Zamudio, 2004). It is from within the boundaries of the African American population that most African American women draw their sexual partners, their confidants for social support who serve as their sources of health information, and their social community-based norms.

Despite the memendous gains in the public health fight again the HIV/AIDS epidemic in the United States, Black women remain a vulnerable population for HIV infection. In this chapter, we focus on two major issues in understanding the HIV epidemic among African American women. The first is context: Over the last three decades, many excellent papers have been published highlighting the importance of individual and social factors in the HIV/AIDS epidemic (Adimora & Schoenbach, 2002; Lightfoot & Milburn, 2009), including as it affects Black women in particular (Bhatta, Vermund, & Hoesley, 2010). Here, we add to the mix the intersection of place—in this instance, the American South-to highlight how social and individual determinants are also shaped by their physical location in America (Qian, Taylor, Fawal, & Vermund, 2006; Whetten & Reif, 2006). We argue that the concentration of overlapping sources of disadvantage and pathways to HIV infection in the South have created an environmental threat to the health of Black women living there. Our second focus is on the ways in which a social determinants approach at a population level can be employed by various branches of the federal government, which must be enlisted to break the cycle of HIV transmission in the South, where the context of HIV risks requires interventions beyond the individual level. The branches of government are oft-overlooked as potential partners in HIV prevention that could, under the leadership of the Department of Health and Human Services, move beyond the traditional focus on individual-level health interventions. Given our focus here, we hope to highlight a potential pathway to improving HIV prevention for the future that can meet and exceed the goals of the President's National Strategy for the Elimination of HIV Infection. (Office of National AIDS Policy [ONAP], 2010).

In this chapter, we propose eliminating and reducing HIV/AIDS disparities in African American women in the South through efforts made at the population level. Often the focus for reducing and eliminating health disparities for African American women is individual, dyadic, or familial, even involving circles of influence of family, friends, and community groups. We have chosen to employ a social determinants approach emphasizing how the confluence of issues cluster together to create a "risk environment" (Blankenship, Bray, & Merson, 2000; Diez-Roux, 1998; Farley, 2006; Rhodes, 2002; Rhodes, Stimson, & Ball, 2001). This notion of thinking about risk environment in the reduction of HIV infection has been employed in developing countries, where we realize that women who have no economic means of sustaining themselves need jobs in order to protect themselves against HIV infection. In developing contexts, we realize the importance of women going to school and becoming educated, the importance of clean water and viable methods of transportation to sell goods, and so on, as necessary structural interventions for reducing women's risk of getting infected. We have also seen an emphasis on HIV prevention at a multivariate structural level that emphasizes risk environment as a framework for reducing drug-related harm (Rhodes, 2002). Whereas we recognize these approaches as sensible to use in developing countries, we fail to understand that they also apply here, in the United States. There are many conditions in the U.S. South, for example, that come together for women in a unique and compelling way that creates an almost inescapable set of risks for HIV infection that require structural interventions at a policy level.

To contextualize the risk of African American women in the South, we have included two mediational models. First, Farley's (2006) clustering risk helps to illustrate that it is not each

risk factor that by itself puts African American women in such great jeopardy for HIV infection but, rather, the circumstances of how the factors cluster together to create an almost inescapable vulnerability. Although these individual risk factors are such regardless of gender, socioeconomic status, and so on, it is the intersectionality of the statuses that African American women bring to the table that makes their vulnerability not only different from but also unique relative to other racial and ethnic groups and relative to other women. It is the intersectionality of Black women's statuses of their race, their gender, and their history in U.S. society, particularly in the Deep South that has left a legacy of vulnerabilities ranging from legal policies that still fail to protect Black women equally even to Black men, to structural forces within the African American community of "color caste" systems, sex ratio imbalances, and overall intimate injustices that are outgrowths of racism and social injustices uniquely experienced by African American women (Rose, 1998, 2004). Then second, Hammonds (1994) helps us to understand the uniqueness of the experience of Black women's sexuality, especially in the Deep South, with its history of Black women's bodies as colonized. Although it is beyond the scope of this chapter to consider in depth, we must note that Hammond (1994) traces themes around Black women's sexuality that in the face of clustering facilitate risk unlike that of any other group. First is the theme of Black women's silence about their sexuality, that is, their inability to give historical voice to their experiences, such that even when abused and raped they found silence far safer than sharing information or seeking justice for these sexual injustices. This tendency of silence about sexualty continues even today in that historical narratives of Black women's sexuality are often alive and well as their sexuality is pathologized, eroticized, and labeled dark when compared to other women, particularly White women. So, in the service of avoiding stereotypes and the negative consequence of being "other," there is a resistance to admitting sexuality as an attempt to portray proper behavior in search of respect. This contested nature of Black women's sexuality, particular in the South, with its set of rules of engagement, reinforces a silence around sexuality that is detrimental to individualized risk reduction.

RACE, PLACE, AND HIV INFECTION

Social determinant models of health (Brunner & Marmot, 1999; Gehlert et al., 2008; Kaplan, Everson, & Lynch, 2000) emphasize that social and individual factors influence both the likelihood that an individual will develop a particular disease or will, having experienced illness or its precursors, receive optimal care from health care settings. Influential social characteristics include such constructs as poverty, family support, cultural values, and availability of health care resources. Influential individual characteristics include a laundry list of demographic characteristics that have been linked repeatedly to health, as, for example, age, race and ethnicity, immigration status, and gender. As well, intrapsychic factors, including attitudes and beliefs, and individual behaviors, such as engaging in HIV risk behaviors, play important roles in the prevention of HIV infection.

In recent years, "place," the focus on *where* people live, has evolved as an additional key contextual factor that is a determinant of health (Acevedo-Garcia, Lochner, Osypuk, & Subramanian, 2003; Acevedo-Garcia & Osypuk, 2008a, 2008b; Acevedo-Garcia, Osypuk, McArdle, & Williams, 2008; Acevedo-Garcia et al., 2004). Place is an organizing structure that reflects the social, cultural, and economic capital locally available to individuals, as well as the contextual forces that help shape their options and experiences of health. Critical to this perspective is that some persons, located in particular geographic spaces, are impacted more than others by policies, procedures, or deficits in social, economic, and legal resources, which hinder them from obtaining optimal benefit of their individual choices. Or in terms of the HIV epidemic, some locations, such as the Deep South, are more efficient incubators than others of the conditions that encourage and facilitate the spread of HIV infection. Further, we assert that this condition is especially relevant for African American women. The South occupies a particularly important place in African American life. In 1870, in the first U.S. census following the American Civil War, 90% of Blacks lived in the South (Gibson & Jung, 2002). Thus, the majority of today's Black population can trace its historical roots to the South. Further, in the 1860 census just prior to the Civil War, 89% of Blacks lived in slavery, including 94% of those slaves residing in the South. The legacy of slavery, too, is thus intimately woven into the Black experience and can be seen in the multiple social, political, and economic race-based disadvantages that persist even today. Although in the eyes of many individuals, and perhaps true for them, slavery is an experience relegated to the past, the legacy of slavery in policies, procedures, attitudes, and resources remains, unfortunately, alive and well.

An example of how past practices influence current economic resources is evident in the states that have adopted or are in the process of developing slavery-era disclosure laws in recognition of how particular businesses built their wealth on commerce related to slavery. The most famous cases of such businesses are insurance companies whose early success and profit came from insuring slaves (Quinn, 2000), thereby allowing the companies to amass wealth. However, modern analyses of the benefits of employment and education exemplify that despite current acquisition of equal salaries or education, Black Americans derive far less benefit in society from their education or salaries compared to Whites (Shapiro & Oliver, 2006). As Shapiro and Oliver (2006) so eloquently illustrate, the foundations of early benefits as well as current policies and procedures continue to disadvantage African Americans such that they derive less benefit per dollar earned or per year of education. The South has a history of enacting policies that range from devaluing African Americans' ability to be free, amass property, and pass those benefits forward to heirs, to maintaining equity policies in education, health care, and other vital support services that are today, by default, both separate and unequal to those who have benefited from early race discrimination. The result is a South, particularly a Deep South, in which African Americans bear a tremendous cumulative disadvantage resulting in higher levels of negative health outcomes.

As Farley's (2006) model of risk clustering (see Figure 34.2) illustrates, several factors associated with the transmission of sexually transmitted infections (STIs) are clustered among African American populations in the southeastern states. These factors include a number of socioeconomic

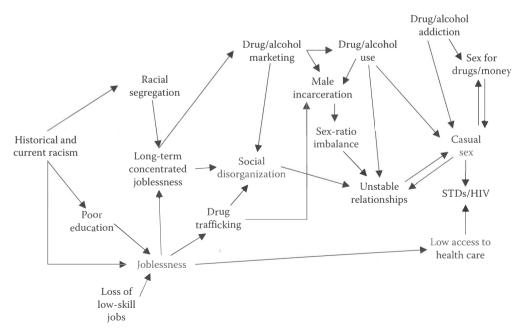


FIGURE 34.2 Risk clustering of social-contextual issues in HIV infection in African American women in the U.S. South. (Adapted from Farley, T., *Sexually Transmitted Diseases*, 33, 7, S58–S64, 2006.)

disadvantages as well as a co-occurring drug network. The intersection of these factors, within the context of social and political neglect born of centuries of racism, provides a ready breeding ground for HIV transmission. In looking at the risk clustering, we also see emerging the intersectionality of different domains of responsibilities that come together to create environments of risk. If the goal were to disrupt or break up connections in this model of risk clustering, doing so would require a multiagency approach to reduce the risk of acquiring HIV infection. Yet we focus more of our efforts on asking individuals alone or in their dyadic relationships to break these connections. Clearly, in the South, this latter approach may be insufficient to stem the tide of STI and HIV in African American women because of the extent to which their social status puts them at the crux of vulnerability in this multisectorial clustering of potential sources of risk. To break or reduce their risk clearly cannot be accomplished only through efforts tailored to those responsible for their own health. Broadening efforts to include prevention strategies spanning multiple levels to simultaneously reduce and eliminate as many of the risk factors in the cluster as possible, as well as by evaluating success as a long-term goal, could increase the country's capacity to reduce the number of new infections in the African American population.

HIV/AIDS IN THE AMERICAN SOUTH

Of the HIV/AIDS epidemic, it has been said that it "moves along the fault lines of our society and becomes a metaphor for understanding that society" (Bateson & Goldsby, 1988, p. 16). Had we heeded that warning more than two decades ago, we would have predicted that the U.S. Southern states, particularly the Deep South, with its unique history and social position of African Americans, would be the harbinger of the conditions that facilitate and complicate the prevention of HIV infection for African Americans (Adimora & Schoenbach, 2002; Adimora, Schoenbach, & Martinson, 2006; Aral, O'Leary, & Baker, 2006; Dean & Fenton, 2010; Doherty, Leone, & Aral, 2007; Hightow et al., 2005; McKinney, 2002; Morris & Monroe, 2009; Reif, Geonnotti, & Whetten, 2006; Reif, Whetten, Ostermann, & Raper, 2006).

Today, 9 of the 16 Southern states are represented among the 15 states with the highest prevalence of HIV cases; 16 of the 20 metropolitan areas, with the highest number of AIDS cases; and for women, 6 of the 10 states with the highest AIDS case rate (Hall & McKenna, 2005; Magnus et al., 2009; Southern AIDS Coalition, 2008). Nationally, although new HIV infections have been occurring at a relatively stable rate since the year 2000, with approximately 56,000 per year (CDC, 2008; Hall et al., 2008), the rate of new infections among Black women is nearly 15 times as great as that of White women and approximately four times that of Latina women (CDC, 2010). It is within this context that one out of every 30 Black women will be HIV infected in the United States, with this likelihood being even higher for those Black women who live in the South (Fleming, Lansky, Lee, & Nakashima, 2006), where the case rate of new infections is increasing.

On another front, the South is home to approximately 68% of all AIDS cases among rural populations but represents only 35% of that population (Phillips & Forti, 2004). The case rate is three times greater in this region than in any other rural area in the United States (Bowen, Gambrell, & DeCarlo, 2006; DeCarlo, 1998).

From the initial years of the HIV epidemic, there were warning signs that the South was an HIV incubator. Data since the mid-1980s consistently showed a growing number of cases of STIs and HIV/AIDS in the South (Rural Center for HIV/AIDS Prevention, 2002). Data from the early 1990s demonstrated as well an increase in cases among rural communities in the South. Yet despite these data, the case numbers continued to grow to become an epidemic for Black women in the South.

So, what is it about the South, particularly the Deep South, that makes control of the HIV/ AIDS epidemic among African American women so difficult? We argue here that it is the intersection of several distinct social conditions and accumulated disadvantages that sets the stage for this occurrence (Diallo et al., 2010; Doherty et al., 2007; Whetten & Reif, 2006). When considered in the context of clustering, theses factors, presented in Figure 34.2, create a unique, place-specific risk context.

THE SOUTH AS AN INCUBATOR OF THE HIV EPIDEMIC

As Farley (2006) has argued, multiple factors contribute synergistically to creating HIV risk in the South. Table 34.1 presents some of the most compelling social determinants identified by community agencies and drawn from research studies conducted in the South. Although each of these social determinants is a problem individually, in its own domain, it is how they cluster together in the South as a function of history, policies, regional attitudes, quality or lack of resources, and even the legacy of the relationships of the South in general with its African American residents that creates the biggest HIV risk. These social determinants are addressed in the next sections.

LOW EDUCATIONAL ATTAINMENT

Even before the appearance of the HIV epidemic, levels of educational attainment among African Americans in the South were persistently low. About half of the African American population of the United States lived in the South, and nearly all (91%) African Americans who reside in rural areas are in the Deep South—623 counties in 11 Old South states: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia (Kismo, 1999). Over half (54%) of all rural African Americans aged 25 or older living in those regions as of the 1990s, when HIV was taking a foothold, did not have high school diplomas (Kuismo, 1999; Wimberley & Morris, 1996). The dreams of liberal America, whose advocates fought so hard in the Southern civil rights movement in the 1960s and early 1970s, were that all Americans, but in particular rural Southern African Americans, would benefit from increased educational opportunity as a result of the Brown v. Board of Education (1954) decision. This result was not the case. Rural African Americans aged 25 to 34 had the least educational attainment in both 1980 and 1990 when compared with urban Blacks and both urban and rural Whites (Kuismo, 1999). This group also had the lowest proportion of college graduates (6.1%, down nearly two percentage points from 1980), and the highest proportion of young adults who had not completed high school (29.4%; Butler, 1997; Kuismo, 1999). When HIV was blazing through the U.S. South, African Americans lacked the ben-

TABLE 34.1 Unique Factors in the HIV/AIDS Epidemic in the U.S. South

- Migration of African American men
- · Low levels of economic opportunities
- · Sex ratio imbalances/unequal relationship opportunities/racial preferences
- · Rural and periurban areas
- High rates of other STDs
- Low educational attainment
- · Lack of cultural competency in HIV prevention, education, and interventions
- Prison complexes
- Drug trade corriders
- HIV/ADS stigma
- Inadequate health infrastructure

Source: Adapted from State AIDS/STD Directors Work Group, Southern States Manifesto,
 1, http://www.southernaidscoalition.org/policy/SouthernStatesManifesto_2003.
 pdf, 2003; Hall, H., Li, J., & McKenna, M. Journal of Rural Health, 21, 3, 2005.

efits of health maintenance that are associated with education (Egerter, Braverman, Sadegh-Nobari, Grossman-Kahn, & Dekker, 2009) to help stave off HIV infection.

This lack of educational attainment reflected a long-standing political disenfranchisement that resulted in race-segregated and inferior schools for African American children. Eventually, the 1954 Supreme Court decision in *Brown v. Board of Education* outlawed discriminatory practices, thereby leading to the desegregation of public schools. In delivering the unanimous opinion of the Court, Chief Justice Earl Warren noted that the aim of ending segregation was not just to eliminate the disparities in resources and educational quality that characterized White and Black schools. It was also to affect the "intangible" qualities that make segregation particularly pernicious. Chief Justice Warren argued, "To separate [children] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone" (*Brown v. Board of Education*, 1954, p. 6).

Although the intervention successfully ended state-sanctioned segregation, school enrollment bifurcated into private versus public settings that retained the effects of segregation. Fifty years later, the South has some of the lowest expenditures per public school student in K–12 grades and the highest drop-out rates in the country (Greenwald, Hedges, & Laine, 1994; Hedges, Laine, & Greenwald, 1994; Morris & Monroe, 2009; Southern Education Foundation, 2007). Indeed, as of 2005, children in the South made up over 40% of all school dropouts in the nation. The legacy of inadequate educational venues for African Americans, restricted by Whites for many years to the teaching of vocational careers and currently receiving low levels of public financing, continues to limit the educational opportunities for African American children (Morris & Monroe, 2009).

Low levels of educational attainment are associated with poorer outcomes for a multitude of health conditions (Currie & Enrico, 2003; Kubzansky, Berkman, Glass, & Seeman, 1998; Mirowsky & Ross, 2003; Reynolds & Ross, 1998; Ross & Mirowsky, 1999; Ross & Wu, 1995, 1996). It is estimated that even a small one-year increase in education for a mother, for example, is associated with a 7%–9% reduction in mortality for children less than 5 years of age (Cleland & Van Ginneken, 1988; Gakidou, Cowling, Lozano, & Murray, 2010; Ross & Van Willigen, 1997). Of particular significance for African American women at risk for HIV is that educational attainment is also associated with a delay in pregnancy. Each year of delay in becoming pregnant at a young age means that more young women are able to obtain the necessary skills and resources to be more capable mothers.

A lack educational attainment also results in a lack of preparation and competitiveness for the workforce that is also associated with difficulties in employment, especially in obtaining and keeping jobs paying a living wage and being covered by health insurance (Wyn & Peckman, 2010). For women, this burden can lead to economic dependence on a man for tinancial support (Adimora & Schoenbach, 2002; Adimora, Schoenbach, & Doherty, 2006; Adimora et al., 2001; Farley, 2006). This economic dependence may, in turn, have direct consequences for the choices that women make surrounding sexual behaviors with sexual partners, behaviors that may put them at risk for STIs and HIV (Annang, Walsemann, Maitra, & Kerr, 2010).

The critical role that educational attainment plays in overall health is illustrated in Figure 34.2, which is drawn from the Robert Wood Johnson Commission on Social Determinants Brief on Education and Health (Egerter, Braverman, Sadegh-Nobari, Grossman-Kahn, & Dekker, 2009). Drawing on results from a series of studies, the commission compiled Figure 34.3 to show three possible models of how educational attainment may be linked with health through three interrelated pathways: (1) Model 1: health knowledge and behavior; (2) Model 2: employment and income; and (3) Model 3: social and psychological factors. Each model has a clear implication for ways to think about how education is related to reducing HIV infection. In Model 1, the assumption is that knowledge increases healthy behaviors. Although knowledge is not by itself sufficient for behavior change, it is nonetheless a necessary component of behavior change. In Model 2, employment and resources act in a protective manner for women by reducing their likelihood of being in positions of

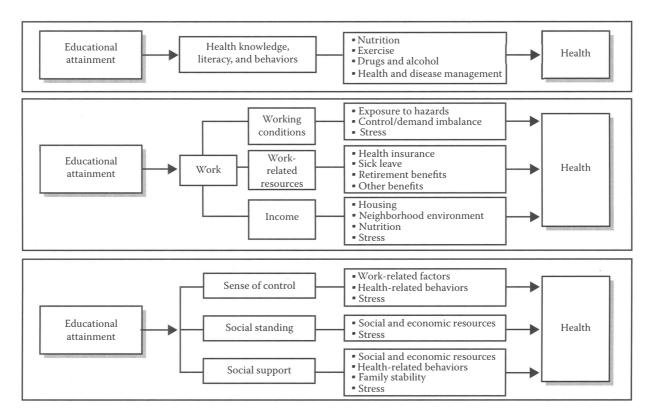


FIGURE 34.3 Models of how education possibly affects health. (From Egerter, S., Braverman, P., Sadegh-Nobari, T., Grossman-Kahn, R., & Dekker, M., *Education matters for health* [Issue Brief No. 6]. Princeton, NJ: Robert Wood Johnson Foundation, 2009.)

vulnerability. As discussed earlier, poverty and a lack of resources place women in risk-prone situations. The third model is one that addresses the socioemotional contributions to risk avoidance and risk engagement. The use of drugs, participation in sexual behaviors, and relationship dynamics are related to a lack of social support, social standing, and sense of personal control.

Educational attainment is a key factor for addressing many of the social determinants that increase the vulnerability of African American women to HIV infection. If school systems are failing African American women, the loss in this country is not just a group of people who fall short on educational standards but also women at greater risk for negative health outcomes.

The importance of education for HIV can be seen in a 2005 study by Peterman, Lindsey, and Selik that compared social factors among counties with the smallest increase in AIDS incidence and those with largest increase in AIDS incidence between the periods 1981–1990 and 1995–1999. The researchers observed that counties with higher incidence included a larger proportion of African Americans, a greater percentage of individuals in the lowest literacy levels, and a higher proportion of individuals reporting less than a ninth-grade education. The education statistics show at least a twofold difference.

FEWER ECONOMIC OPPORTUNITIES

As the United States continues to outsource employment, there are fewer jobs for those individuals without higher levels of education. African American women compared to women of other races are more likely to exceed the national average for living in poverty. Approximately one in four African American women currently live in poverty, including 32% of women aged 18 and older residing in the South (U.S. Census Bureau, 2009). African Americans residing in rural areas in the South have lower incomes than do Whites of similar educational backgrounds (Beaulieu, Barfield, & Stone, 2001; Probst et al., 2002).

Poverty is a known correlate of increasing the likelihood that women and adolescent girls will engage in transactional and nonconsensual sex, use condoms less frequently, and begin sexual activity at an earlier age (Hallman, 2005). As well as being a measure of income, poverty is also a proxy for many things that are related to vulnerability to HIV/AIDS (Smith, 2002). For example, living in poverty decreases resources for the purchase of condoms and for transportation to access condoms. It is also often a sign of lack of employment and the need to rely on others for financial subsidies. Poverty is the underlying basis for many of the factors appearing in Farley's risk clusters, which are the proxies for poverty. In the South, particularly in rural areas, poverty characterizes not only individuals but also large segments of communities, making it difficult for individuals to improve their economic status short of moving out of the area (Probst et al., 2002). A study by the U.S. Department of Agriculture notes that individuals in rural and nonmetropolitan areas are more likely to receive greater funds from the government in the areas of income subsidies (e.g., medical benefits, social security, and public assistance) than are individuals living in metropolitan areas. In contrast, metropolitan centers are more likely than rural areas to receive business assistance and funds for community and regional development. This pattern makes it much more difficult for people in rural areas to change their life circumstances (Probst et al., 2002) and thereby reduce their risk for HIV infection. The characteristics associated with poverty and limited resources are more likely to be associated with HIV infection in African American women in the rural South than with others.

Living in Rural and Peri-Urban Areas

Because in comparison to other regions the South has the greatest proportion of its population living in rural areas, there are unique challenges for HIV-prevention activities (Agee et al., 2006; Crosby, Yarber, DiClemente, Wingood, & Meyerson, 2002; Krawczyk, Funkhouser, KiIby, & Vermund, 2006). These activities include geographic isolation and limited access to health care and social services (Bowen et al., 2006; Decarlo, 1998; Rural Center of HIV/AIDS Prevention, 2002). Social

isolation puts young girls, particularly when they are less socially connected, at greater risk of sexual coercion (Hallman & Diers, 2004) and is characteristic of some rural areas. Some of the issues facing rural areas, such as a lack of economic opportunities, high rates of STIs, and low rates of safe-sex practices, have been discussed at length in the literature (Doherty et al., 2007; Napravnik & et al., 2006; Phillips & Forti, 2004; Rural Center of HIV/AIDS Prevention, 2002; Thomas, 2006; Thomas et al., 1999; Thomas & Sampson, 2005; Thomas & Thomas, 1999). These issues apply especially to African Americans; for although only 12% of African Americans live in rural areas nationally, 90% of that 12% reside in the South (Cromartie & Beale, 1996; Morris & Monroe, 2009). This demographic has implications as well for HIV prevention methods. The great majority of culturally appropriate interventions developed for African Americans are based on urban models. For example, the notion of using condoms is often predicated on the assumption that drugstores and places of condom purchase or distribution are within short distances and therefore condoms are easy to obtain. However, in rural areas getting to a drugstore or a neighborhood store to buy condoms can be difficult and require preplanning. Rural bus service is limited. Many young people have no or restricted access to cars for transportation. Further, the store clerk might be a friend or acquaintance of the family, making if difficult for married males or young adults to purchase condoms without raising suspicions.

Other issues arise with peri-urban areas, which are often transition or interaction zones, where urban and rural activities mix. Peri-urban areas have landscape features that are subject to rapid modifications because as cities develop, much of their growth is located in such areas. Transportation systems are often minimal, restricting the radius of social interactions and access to such simple prevention resources as condoms purchasable from drug stores. In very recent times, the place variable of peri-urban areas has become a focus in health research as studies examine walkability, physical inactivity, and obesity (World Health Organization [WHO], 2001). It may also be to our advantage to consider how accessibility in peri-urban areas affects social networks and access to resources, as well as the role of this space in the development of effective prevention strategies. Studies of peri-urban and rural areas in the South indicate a different picture than that we are accustomed to seeing in urban areas. For example, in the South, rural patients infected with HIV/ AIDS were more likely be female, heterosexual, young, and African American or Latino (Cohn, Klein, Mohr, Van de Horst, & Weber, 1994; Elmore, 2006). Peri-urban spaces may facilitate finding potential sexual partners as a function of restricted access in the neighborhood; but because of their suburban rural nature, such peri-urban spaces do not necessarily facilitate HIV prevention services and educational outreach activities.

HIV/AIDS STIGMA

Several studies have indicated that fear of HIV/AIDS-related stigma plays a significant role in controlling the HIV epidemic (Herek, 2007; Herek, Capitanio, & Widaman, 2002; Mahajan et al., 2008). This type of control happens at multiple levels, including reducing willingness to be tested for HIV infection status and fear that disclosure of one's HIV status will lead to discrimination (Mahajan et al., 2008). However, we have yet to fully investigate experiences with HIV/AIDS stigma in the rural or peri-rural environment (Whetten, Reif, Whetten, & Murphy-Miller, 2008). A qualitative study of persons living with HIV/AIDS (PWH/A) in the Southern town of Wilmington, North Carolina, found that when individuals perceived the community to be nonsupportive, few were willing to reveal their HIV status because they feared being stigmatizated for having HIV/AIDS (Elmore, 2006). Some individuals were even reluctant to share their HIV status with family and close friends for fear that they would then share the information with others. This fear is realistic because in small towns anonymity is likely to be lower than it is in urban settings.

Deficits in economic and job opportunities and low population densities may constrain individuals' opportunities for both privacy and disclosure. Further, it is not entirely clear that providing resources within an HIV/AIDS-specialized context, as is typically done in urban settings, is the best approach in rural and peri-urban areas, where blending prevention, care, and treatment into general public services may work better. There are pros and cons to offering stand-alone HIV education and prevention services, rather than making them a part of other health services or health promotion and outreach community groups, as a method for addressing stigma. Again, much of the research literature that has identified best practices for dealing with concerns around stigma has been developed in urban or international rural settings.

Southern Black culture, too, has a complex but functional set of social rules that operate to offer support as well as sanction behaviors, including homosexuality and sexual infidelities (Glick & Golden, 2010; Herek, Widaman, & Capitanio, 2005). One of the particular pressures on individuals is the push not to bring shame or embarrassment to the race as a group (Gilbert, Harvey, & Belgrave, 2009; Pitt, 2010). Whereas such large urban areas in the Deep South as Atlanta might reflect a mixture of cultures and enhanced tolerance of "stigmatized" sexual behaviors, this situation is not true for much of the Bible Belt. Black conservative church congregations, where traditionally sex outside of marriage and homosexuality are frowned on, abound in the Deep South (Lemelle & Battle, 2004; Pitt, 2010; Wilson & Moore, 2009). Further, sex education is relegated to the purview of parents, and sexual abstinence until marriage might be the preferred method of school-based and parental education for reducing HIV risk behaviors (Haberland & Rogow, 2007; Kirby et al., 1994). These social conditions can make it difficult to address HIV prevention in a forthright manner and can make HIV-infected individuals reluctant to acknowledge their status publicly (Akers et al., 2010).

CONTEXTUAL ISSUES IN INTIMATE RELATIONSHIPS

Among African American women in general, the risk for HIV infection through sexual contact is influenced by the prevalence of the infectious agent in their social networks, their choice of sexual partners, and the intraracial and intrapersonal relationship dynamics that influence both their own choice of behaviors and the normative behaviors of their sexual network (Adimora & Schoenbach, 2002; Adimora, Schoenbach, & Doherty, 2006; Adimora, Schoenbach, Martinson, et al., 2006; Adimor et al., 2001; Adimora et al. 2003, 2004; Aiello, Simanek, & Galea, 2010; Diallo et al., 2010; Mays & Cochran, 1988). Estimates are that approximately 1 in 30 Black women in the United States will become HIV infected, most often through heterosexual sex and often with a partner of unknown HIV status (CDC, 2010). Hence, encouraging these women to take precautions to reduce their risk through behavior change is critical.

But there are a number obstacles African American women face in pursuing this path. Apart from the well-known difficulties in creating individual behavior change, recent efforts to target dyadic change (Karney et al., 2010) are likely to prove especially difficult for African American women. The new focus on dyadic approaches is an attempt to recognize that one of the primary prevention tools for reducing contact with such infectious agents as HIV relies on condom use, which is not under the control of women. Developing dyadic HIV interventions in which protective behavior changes are achieved is best accomplished for African Americans, it has been argued, if these interventions are couched in Afrocentric approaches (Gilbert et al., 2009; Taylor, Harvery, & Belgrave, 2009). Significant support exists for using culturally specific or culturally relevant Afrocentric approaches based in values and beliefs drawn from the religion and philosophy of ancient African traditions—useful mechanisms by which to achieve prosocial and healthy behaviors in African Americans (for a fuller discussion, see the works of Myers, 1988; Nobles, 1980).

However, the efficacy of these Afrocentric dyadic approaches is dependent, to some extent, on whether relationships are long term and monogamous as opposed to short term and serial. Census data analyzed by the Joint Center for Political and Economic Studies (2001) suggest that this limitation is more likely to impact African American women. Black women's marriage rates between 1950 and 2000 dropped from 62% to 36.1%. Although White women experienced

a decline as well (66% to 57.4%), the decline was not as severe. Between 1950 and 2000, the prevalence of never-married Black women doubled, from 20.7% to 42.4%. Thus, the experience for many Black women is that they will never marry but will instead experience a number of serial partnerships over the course of their lifespan. African American women also are least likely, when compared to women in other racial and ethnic groups, to marry or date outside of their race (Adimora et al., 2004; Cornwell & Cunningham, 2006; Mays & Cochran, 1988). Over 93% of African Americans marry within their race, however (Joint Center for Political and Economic Studies, 2001). Finally, even married African Americans are more likely (21%) than similar Whites (16%) to report having had sex outside the marriage at some point (ARDA, 2008). The effect of these factors (i.e., serial relationships and lower rates of marriage, lower rates of monogamous marriage, and same-race partner choices) and the greater prevalence of HIV infection among Blacks (Millett et al., 2005) increases Black women's HIV risk because they are more likely than women from other racial and ethnic groups to be exposed to an HIV-infected partner.

Indeed, one of the ways to quantify the pressures on African American women's choices in intimate relationships is the sex-ratio imbalance. (Cornwell & Cunningham, 2008). The sex ratio is the ratio of partnership-eligible women to partnership-eligible men. As can be seen in Figure 34.4, throughout much of the South, African American women face an intensely competitive market for relationship partners. Findings from one study (Adimora, Schoenbach, & Doherty, 2006) in North Carolina underscore that the sexual networks of African Americans in the South are more likely than among other racial and ethnic groups to be dissassortive relative to STIs, mixing low and high risk for individuals. As well, nearly a quarter of women in the study reported being in concurrent relationships in the previous year. In Figure 34.4 we also see the overlay of the limited market and the prevalence of AIDS, indicating a potential linkage between the two. Place, race, and social determinants of health are clearly at work in the increasing new cases of HIV infection in African American women.

A TRADITION OF INADEQUATE HEALTH CARE SERVICES

The South has long suffered from a lack of major medical centers and from academic programs that turn out large numbers of African American health care providers (Probst et al., 2002). In rural areas in the South, 84% of the counties where African Americans are the majority are health professions shortage areas (Probst et al., 2002). One out of eight African Americans lives in an area without a hospital in comparison to 1 out 10 White Americans in the rural South (Probst et al., 2002). One of the ironies is that a large number of historically Black colleges and medical schools are located in the South. However, they are persistently in need of greater levels of infrastructure assistance in order to expand and increase adequate health care services to African Americans in this geographic region. In the United States, top-ranked hospitals are typically affiliated with major academic institutions, few of which call the Deep South their home.

In parallel with the relative deficiency in health care infrastructure, over the years major investments by the Centers for Disease Control and the National Institutes of Health in HIV prevention efforts typically bifurcated along two lines of attack that bypassed many African Americans in the South. One major focus was predominantly urban MSMs; a second was predominantly urban intravenous drug users. Neither focus was likely to optimally target the needs of many Southern Blacks. The issue is not just delivery of services, such as extra resources for testing and counseling that come with research investments, but also a potential lack of full development of culturally efficacious approaches. What works in New York City among predominantly young, African American MSMs may not have the same effect in a rural or peri-urban African American setting. Even some of the earliest efforts to develop appropriately targeted rural interventions (Heckman et al., 1998; Williams, Bowen, & Horvath, 2005) were often focused on young, White MSMs.

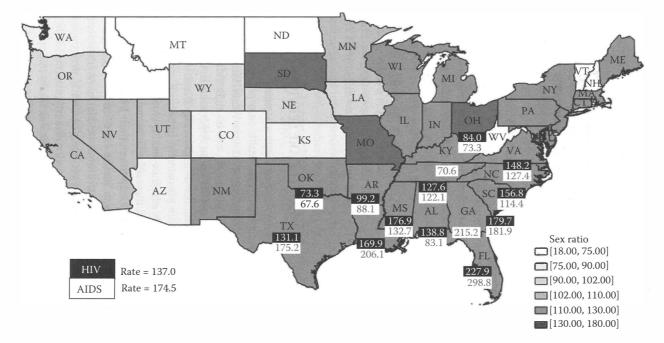


FIGURE 34.4 African American sex ratios (18–24 year olds). (From Cornwell, C., & Cunningham, S. A., *Sex ratios and risky sexual behavior* [Working paper], Department of Economics, University of Georgia, 2006.)

HIGH RATES OF OTHER STIS

The HIV epidemic in the South co-occurred with other outbreaks of STIs, including gonorrhea and syphilis (Aral, 1996; Newman & Berman, 2008; Thomas, Kulik, & Schoenbach, 1995; Thomas & Thomas, 1999). As noted earlier, several factors in partner selection and opportunities serve to accelerate sexually transmitted disease epidemics among African Americans in the South (Aral, Adimora, & Fenton, 2008; Aral et al., 2006; Crepaz et al., 2009). Sexual mixing across class, age, educational, and risk-behavior status boundaries is fueled by limited partner choices (Blanchard & Aral, 2010; Kraut-Becher & Aral, 2006; Nelson et al., 2007). Further, early detection and treatment is hampered by deficiencies in the health care structure. Indeed, in 2005, approximately 68% of gonorrhea cases and 42% of all primary and secondary syphilis infections in the United States reported to the Centers for Disease Control occurred among African Americans (Newman & Berman, 2008). African American women were nearly 15 times as likely as White women to experience a syphilis infection. To some extent, these statistics reflect reporting bias associated with public clinic use (Newman & Berman, 2008), but other population-based surveys also indicate rates of some STIs 2.6 to 21 times greater in African Americans compared to other racial and ethnic groups. More than a third of these infections occur in the South, where most of the high African American density counties (defined as 15% or greater of residents) exist. In more than 95% of these high African American density counties, rates of reported gonorrhea infections are greater than 100 per 100,000 persons. In contrast, among high White density counties (defined as 80% or greater of residents) in the United States, only 0.5% experience this great a gonorrhea case reporting prevalence. Newman and Berman (2008) note that the effect of this enormous difference in the widespread prevalence of gonorrhea may function to reduce pressure on public health agencies to intervene.

MIGRATION OF PERSONS, DRUGS, AND RISKS

Migration of persons in and out of the South has always been a significant factor in the history of African Americans in the United States (Frey, 2004; Grossman, 2001). Large-scale migrations in the early 20th century to cities in the North, Midwest, and West followed economic and social opportunities that offered better lives. In the end of the 20th century, the migration pattern reversed as Blacks sought economic and social opportunities in the new South. This pattern can be seen in the 2000 census, where compared to all other regions of the United States, the South had the largest net growth in its Black population (Morris & Monroe, 2009; U.S. Census Bureau, 2003). Gang abatement efforts in the Northeast and such other urban areas as Chicago and Los Angeles pushed African American and Latino males with histories of gang affiliation and/or incarceration to live with family members in the South. Migration, too, from high-HIV-prevalence areas like the Northeast brought greater numbers of HIV-infected persons into high Black density communities. Data from 1994 show that even then a large proportion of HIV-infected individuals in the rural South reported that they were infected elsewhere (Cohn et al., 1994).

Not only do people move through the South, but drugs, drug trafficking, and drug cultures do as well. Drug trafficking brings with it increased drug use by persons in the community, transitional sex for drugs or money, increased rates of STIs in general and HIV in particular, and increased rates of incarceration.

In the South, a major drug-trade corridor follows I-95, an interstate highway that runs from New York to Miami (Cook, Royce, Thomas, & Hanusa, 1999). To demonstrate the effects of this drug corridor on syphilis rates, Cook and colleagues (1999) divided counties in North Carolina into one of three mutually exclusive groups: (1) counties transversed by or within 5 miles of I-95; (2) counties not transversed by or close to I-95; and (3) counties containing urban settings, that is, cities of populations greater then >100,000. Counties classified as I-95 counties were the only counties that had syphilis rates above the state average. This finding was so even though many other counties also contained interstate highways. In addition, their yearly average syphilis rates were considerably

higher than those rates found in non-I-95 counties. Thus, this major migration and drug corridor, like truck routes in Africa (Bwayo et al., 1994; Gouws, 2002), concentrates probabilities of infection among a highly mobile population.

Evidence for this mobility of higher risk persons comes as well from a study by McCoy, Correa, and Fritz (1996). In this investigation, the researchers interviewed intravenous drug users and their sexual partners in cities with low, moderate, and high HIV prevalence. Individuals were asked about any travel in the last two years as well as high-risk activities they had engaged in while traveling. McCoy and colleagues observed that two regions evidenced the highest rates of visitation by respondents: the Middle Atlantic (including New York, Pennsylvania, and New Jersey) and the West South-Central (including Texas, Oklahoma, Louisiana, and Arkansas). Both regions reported relatively elevated cases of HIV infoction at the time of the study. Many of their respondents also reported engaging in high-risk activities during their travels. A little over one half reported never using condoms, a third reported engaging in sex for money, about a fourth engaged in sex to obtain drugs, and most concerning, two thirds shared needles. These rates were significantly higher than the rates reported by nontravelers.

CONCENTRATION OF CORRECTIONAL AND PRISON COMPLEXES AND HIGH RATES OF INCARCERATION

The last 20 years have seen an exponential increase in the number people in prison in the United States, with an incarceration rate of 497 per 100,000 persons (Sabol, Minton, & Harrison, 2007). The impact has been greatest in the South, which has a rate of incarceration of 540 per 100,000 persons (Sabol, Contrere, & Harrison, 2007). Further, this increase has had the most impact on the African American population (Hogg, Druyts, Burris, Drucker, & Strathdee, 2008; Rosen et al., 2009). In state and federal facilities, even when stratified by type of facility, the rates are highest among African Americans; Black men are especially affected. In correctional facilities, African American men outnumber White men by a factor of 7; African American women outnumber White women by a factor of 3.5 (Beck, 2000; Beck & Karberg, 2001; Beck, Karberg, & Harrison, 2002; Harrison & Beck, 2006).

Approximately one quarter of HIV positive people in this country have been incarcerated in some type of correctional facility. In addition, HIV seroprevalence in U.S. prisons parallels the uneven geographic distribution found in may regions of the United States (Kantor, 2006). Even though many inmates are infected prior to entry into a correctional system, inmates are still at risk of exposure during incarceration through injection drug use, tattooing, body piercing, or sexual activity. These behaviors, risky on the outside, are even more risky in the incarceration environment because of the much higher numbers of people living with HIV/AIDS in these crowded facilities than in the general U.S. population. Between 1991 and 1997, the prevalence of HIV infection among women who were incarcerated rose 88%, whereas the rate among men rose only 28% (Degroot, Jackson, & Stubblefield, 2000; Gilliard, 1999). During this same period, the South had the second-highest HIV prevalence among inmates, second only to the Northeast. By 2004, Black women made up the largest percentage of female inmates testing positive for HIV in both state (3.4%) and federal facilities (2.6%) nationwide (Maruschak, 2005). The relatively high prevalence of HIV infection in correctional facilities among women is not surprising, given that the majority of women are incarcerated for drug use, prostitution, or both (Hammett, Harmon, & Rhodes, 2002; Maruschak, 2005).

For African American women, the high rate of incarceration of Black men reflects another correlate of HIV risk. Studies have shown that there is a positive relationship between incarceration rates of Black men and HIV/AIDS infection among Black women (Freudenberg, 2002; Johnson & Raphael, 2006). Other work has demonstrated that policies enacting early prisoner release because of prison overcrowding were followed 5 to 10 years later by increases in cases of HIV/AIDS infection among women and African Americans in general (Johnson & Ranhael. 2006). A second study investigating the connection between sexually transmitted infections and rates of incarceration reported that counties with high rates of incarceration also tended to report high rates of gonorrhea, chlamydia, and AIDS (Thomas & Sampson, 2005). A second way in which incarceration has harmful effects on African American women is that it changes the sex ratio. When African American men in large numbers are incarcerated, their removal as eligible mates increases the sex-ratio imbalance, and the very relationship dynamics that leads to risk taking by the women who compete for the relatively few Black men not incarcerated increases the women's risk of HIV infection (Mays & Cochran, 1988; Pouget, Kershaw, Niccolai, Ickovics, & Blankenship, 2010).

The building of prisons, jails, and other correctional facilities is, on the one hand, made necessary by increasing densities of population and local rates of crime and punishment. Further, these facilities are also sources of economic support for the communities in which they are housed. As can be seen in Figure 34.5, the South has become home for numerous incarceration facilities providing well-paying jobs in communities where lost manufacturing, agricultural, and blue-collar jobs have contributed to economic stagnation (Beck, 2000; Beck & Karberg, 2001; Beck et al., 2002; Harrison & Beck, 2006). In addition, incarceration close to home allows inmates better access to family support while incarcerated. Thus, some aspects of the high density of incarceration facilities have positive benefits on local communities. Still, these facilities can also function inadvertently to intensify the effect of the HIV epidemic for African American women. This result can occur in three ways. First, incarceration of Black males contributes to the sex-ratio imbalance described earlier. Stability of relationships can be disrupted by incarceration as well (Harawa & Adimora, 2008). Second, housing men in higher risk HIV environments may lead to avoidable HIV infections and STIs. Also, to the extent that pre-release programs do not target HIV-prevention efforts, a teachable moment in the controlling the epidemic is lost. Third, release of both men and women into communities with few employment or educational opportunities or access to prevention and health care services increases the likelihood of recidivism, including a return to intravenous drug use, prostitution, and HIV-related risk taking (Adkins, 1978). Prison, correctional facilities, and jail can enhance HIV prevention efforts, both in incarcerated setting and in preparing individuals for managing HIV risk postincarceration.

SUMMARY

In 2008, 87% of new HIV infections in African American women likely arose from heterosexual transmission and 69% women with presumptive heterosexual transmission were African American (CDC, 2008). Many of the individual factors that shape African American women's risk that we describe in the foregoing sections are not limited to the South. But what is unique about the South is the concentration of contextual issues that are linked to risk for HIV within a relatively confined geographic place. Individuals are often resilient in the face of one social disadvantage, or even two or three social disadvantages. As the layers of disadvantage deepen, however, threats to health become endemic and targeting one risk or another in isolation can rapidly lose effectiveness. For the past 30 years, much of the investment in the control of the HIV epidemic has done just that, focusing on control and change of individual risk behaviors, particularly within known high-risk populations (Dean & Fenton, 2010). But for African American women, a reliance on changing individual exposures, individual lifestyles, and individual risk is unlikely to be optimally effective. Many women are concerned about the sexual histories of their partners (Adimora, Schoenbach, & Doherty, 2006). African Americans, in general, are more concerned than other ethnic and racial groups in the HIV epidemic. However, since the 1990s, personal concern about getting an HIV infection has declined among Blacks (Kaiser Family Foundation, 2007). This response does not portend well for HIV control efforts in the future that continue to rely on individual or even dyadic interventions to reduce HIV risk. We offer next several recommendations to better help reduce Black women's risk for HIV infection by targeting contextual risk factors. Our suggestions focus on the additional opportunities available in institutional structures targeting interventions at the population level.

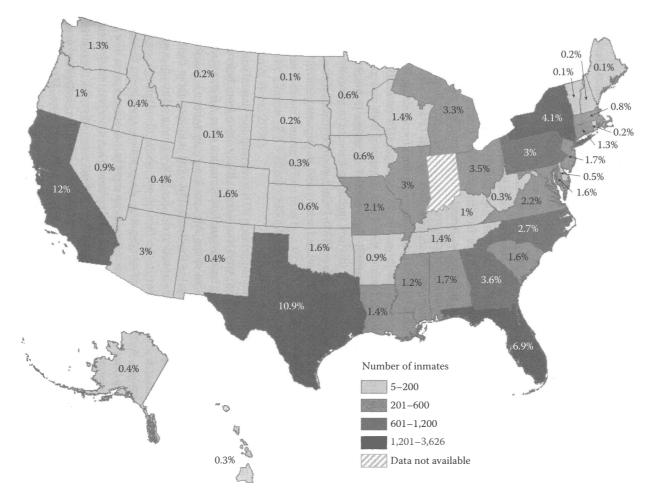


FIGURE 34.5 State-level HIV/AIDS statistics: number of prison inmates with HIV. #%, percentage of total inmates in the United States. According to U.S. Department of Justice, Bureau of Statistics data, 2,292,133 inmates were incarcerated in U.S. prisons and jails at the end of 2009 (Glaze, 2010; International Centre for Prison Studies, 2011; U.S. Bureau of Justice Statistics, 2011).

FEDERAL LEADERSHIP OPPORTUNITIES TO REDUCE SOUTHERN BLACK WOMEN'S RISK FOR HIV INFECTIONS

African American's women's societal inequities often place them in dependent relationships with governmental institutions and systems (e.g., prisons, health care facilities, and federal assistance program), where policies and procedures can either enhance or reduce their risk for HIV infection (Albarracin, Tannenbaum, Glasman, & Rothman, 2010; Aral et al., 2008; Auerbach, 2009; Dean & Fenton, 2010; Diallo et al., 2010; Gupta, Parkhurst, Ogden, Aggleton, & Mahal, 2008; Hillemeier, Lynch, Harper, & Casper, 2003; Latkin, Weeks, Glasman, Galletty, & Albarracin, 2010; Mays & Cochran, 1987, 1988). The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (an ineffective program that resulted in the loss of support and subsidies for women and their families), National Drug Control Strategies (the so-called war on drugs and the criminalization of drug use without access to treatment), Three Strikes Sentencing (which increased incarceration of men of color), state laws criminalizing HIV/AIDS transmission (thus pregnant women are convicted of exposing their babies, jailed during pregnancy, and in danger of losing their children)—all are examples of policies that make women more vulnerable in society to some of the social determinants that can increase risk of contracting HIV infection.

Many of the issues examined in this chapter are not about the individual-level determinants of sexual risk taking or unsafe injection use, practices that from an infectious-agent disease model are the principal drivers of the HIV/AIDS epidemic. We instead focused our attention on the social, structural, and psychological determinants that serve to increase the vulnerability of African American women in the South to HIV/AIDS. However, focusing on a social determinants perspective for the prevention and reduction of HIV/AIDS means taking a culturally relevant approach in examining social determinants in which we understand how factors associated with the South are related to HIV vulnerability for African American women. Taking this perspective is about realizing that confining our efforts to the parameters of a biomedical model with leadership predominantly from only the U.S. Department of Health and Human Services (DHHS) will serve only to continue the disproportionate cases of new HIV infections in African Americans. Why? Because DHHS does not have responsibility for many of the contextual factors discussed earlier. In a commentary on socially determinant health and HIV/AIDS, former surgeon general David Satcher (2010) advocated that social determinants of health be integrated into all policies, not just health policies. He called for public health to create and establish better working partnerships with nontraditional partners among governmental entities, in the private sector, and in industry (Satcher, 2010). Government entities have previously crossed into partnerships in both industry and business, but only with modest success (Satcher, 2010). This success is often modest because the U.S. government, which should be the natural leader in the fight against HTV/AIDS for vulnerable populations, has yet to effectively institute Satcher's (2010) call for a social determinants health perspective in all policies that require cross-agency partnerships. In order to successfully engage a social determinants health perspective in HIV/AIDS for women for whom social determinants often leave them more vulnerable to structural and social factors, leadership is needed across federal departments previously ignored in HIV/ADS efforts. In the White House's Office of National AIDS Policy (ONAP) HIV/AIDS Strategy Federal Implementation Plan of July 2010, there is a clear and compelling call for federal agencies to develop not only cross-agency partnerships but also a culture where working relationships are geared toward policy and functional operations that can best change the rate of new HIV infections and facilitate efficacious care and treatment. Numerous federal agencies were targeted for efforts in 2010 and 2011: Agency for Healthcare Research and Quality (AHRQ), Bureau of Prisons, Centers for Disease Control (CDC), Centers for Medicare and Medicaid Services (CMS), Department of Justice (DOJ), Department of Labor (DOL), Equal Employment Opportunity Commission (EEOC), Health and Human Services (HHS) and HHS Office of the Secretary, Health Resources and Services Administration (HRSA), Department of Housing and Human Development (HUD), National Institutes of Health (NIH), Office of the Global AIDS Coordinator, Office of Management and Budget (OMB), President's Advisory Council on HIV/AIDS, Substance Abuse and Mental Health Services (SAMSHA), Social Security Administration, and the Department of Veterans Affairs (VA).

This demand for cross-agency partnerships has emerged as a central recommendation in the response of several women's organizations to DHHS's request for comments on the July 2010 National HIV/AIDS Strategy Federal Implementation Plan (henceforth, the National HIV/AIDS Strategy; ONAP, 2010; Office of Women's Health [OWH], 2010). Thirteen women's organizations came together to issue the report card on the National HIV/AIDS Strategy, "A Gender Monitoring Tool for the U.S. National HIV/AIDS Strategy" (Positive Womens Network, 2010). Similarly, the Office of Women's Health brought a national group of women together to provide feedback. The National HIV/AIDS Strategy and the women's groups identified DOL, DOJ, CDC, and HRSA as critical partnership agencies. However, when we come back to the issues of place, race, and HIV infection, even though the requested partnerships are with the same agency specified in the National HIV/AIDS Strategy, in some instances what is needed from that agency to reduce new HIV infections and increase efficacious care and treatment for African American women in the South would differ. Conspicuously absent from suggested partnerships is the U.S. Department of Education. Although educational attainment alone is not a magic bullet in the prevention of HIV/AIDS in women, particularly African American women in the South, it is probably an important and necessary factor for resource-poor women.

Schools are often a site for HIV education and sexuality as a part of health curriculum. One study across developed and undeveloped countries found approximately two thirds of HIV- and sex-education programs reduced risk associated with sexual behaviors (Kirby, Laris, & Rolleri, 2006). Sex-education programs can be the vehicle for teaching about gender awareness, gender norms, and gender equality, all of which have a positive effect on men's condom use and men's more egalitarian behaviors in their interpersonal relationships with women (Haberland & Rogow, 2007; Karim, Magani, Morgan, & Bond, 2003; Pulerwitz, Barker, Segundo, & Nascimento, 2006; Pulerwitz et al., 2010). Partnerships with the U.S. Department of Education promoting policies for evidenced-based sex-education programs in early grades would benefit African American women in efforts to reduce HIV infection.

How partnerships with agencies other than DHHS can help in reducing HIV infections in African Americans is best thought about by matching agency responsibilities to the social determinants that result in Black women's greater vulnerability to HIV infection. We have, thus far in our chapter, attempted to illustrate some of the social determinants that put African American women in the South at greater risk for HIV infection (see Figure 34.4). We now illustrate actions that could, if taken by federal agencies, address some of these social determinants. For example, although the National HIV/AIDS Strategy did not mention the U.S. Department of Agriculture as a potential partner in the South, it might consider doing so, particularly because rural-area food insecurity is a serious problem experienced by all. The DHHS could encourage the U.S. Department of Agriculture to examine how its policies and procedures intersect with race, place, and HIV infection in areas where women are having sex to feed themselves and their families. Through the Office of Rural Development, the U.S. Department of Agriculture is responsible for developing programs to improve the economy and quality of life in rural America. Thus, in partnership with this department, DHHS could launch programs that decrease the very conditions that create negative social determinants of HIV infection for Black women in rural areas. A number of federal as well as foundation efforts specifically designed to determine the social determinants that can create healthy communities in order to reduce the incidents of particular health crises could be tried in rural areas in the South where we see growing numbers of cases of new infections and AIDS death (Lank & Pritchard, 2010; Mokdad & Remington, 2010; Parrish, 2010).

Another sector of the U.S. Department of Agriculture, the Rural Housing Program, could also aid in intervention efforts through cross-agency collaboration at the population level. The Rural Housing Program which is responsible for encouraging homeownership options and housing rehabilitation. as well as helping developers of multifamily housing projects, overseeing assisted housing for the elderly and disabled or apartment buildings and such community facilities as libraries, child care centers, or schools, could be engaged much like HUD, with allocations for the provision of housing for African American women who are uninfected but highly vulnerable to HIV infection. In the early days of examining women's vulnerability to HIV infection, discussion centered on whether providing resources specific to HIV/AIDS was creating exceptionalism. The concern was that women who were poor, minority, and without many social options in taking care of themselves and their families were intentionally becoming infected to access the resources associated with HIV (Mays, 1993). However, creating profiles for African American women in rural areas of risk for HIV infection and the likely benefit and success of interventions—that is, marrying education and information to housing and such other benefits as education, vocational training, and health literacy, for example, much along the lines of the healthy cities efforts—could reduce uew infections.

Not mentioned in the National HIV/AIDS Strategy but, as already noted, one of the key partnerships that could contribute to reducing HIV infections in African American women in the South is with the U.S. Department of Education. The department could, as a partmer in the battle against new HIV infections, be engaged to develop policies that specify best practices for the teaching of health and sexual-health literacy. The Office of Women's Health consultation to the National HIV/AIDS Strategy recommended specific activities for the U.S. Department of Education (OWH, 2010). These activities included a request for comprehensive sex education for all school-aged children, with sex education mandated in juvenile detention centers and foster care facilities. They recommended that mandated comprehensive health and sex education be included in the reauthorization of the Elementary and Secondary Education Act (ESEA). These health and sex-education programs, which should be age and gender appropriate and culturally relevant, could become part of the yearly assessment that students must pass to be promoted. The U.S. Department of Education could examine ways to enrich schools in states with low pupil expenditure either through encouraging partnerships with foundations or identifying community efforts that can raise the proportion of Black women who complete some level of college education in fields where there are highly employable careers.

The U.S. Department of Justice could work with DHHS to ensure case management as HIVinfected individuals move from the correctional system back into society. All too often HIVinfected individuals who were treated in the correctional setting may find that upon release, they are provided with a limited supply of medication and expected to find their own way into treatment. Linkage to care as these individuals transition out of correctional custody to general society could help prevent new infections. When this is lacking, opportunities for the management of treatment and care and the reduction in the spread of new infections are lost. The DHHS is working with the U.S. Department of Justice and the Bureau of Prisons to fund the development and evaluation of family reunification programs (which prerelease inmates, whether or not they have tested positive) in which HIV testing, counseling, and education about safer sex and sexual health are part of the curriculum.

Another department, the U.S. Department of Labor, could focus on skill development and job training to move women along a path of a livable wage with benefits and could develop programs for women engaged in high-risk activities driven by economic needs. Training programs developed with not only DHHS but also the U.S. Department of Education to provide completion of GED, if needed, along with entrance into college associate-degree programs, could provide training for career paths with livable wages. Further, the U.S. Department of Transportation, with its Research and Innovative Technology Administration, could be charged with employment impact assessments in Southern rural areas where HIV infections are high. The department could monitor whether public transportation meets individuals' needs to wavel to where jobs are developing and could address gaps that affect the chronically unemployed, especially in rural areas, where people may have no way to reach suburban growth areas that are often the site of new jobs. Although many people tout the improved quality of life outside inner urban cities, sometimes these areas are unreachable because of the lack of public transportation. This situation might be remedied by engaging the U.S. Department of Housing and Urban Development, which already works with DHHS through the Housing Opportunities for Persons with AIDS (PWAs) Program, to use its power to reengineer inner urban neighborhoods with high indicators of crime, violence against women, and broken windows and other indicators of neglect. This area of development is ripe for partnership with the foundations currently engaged in developing healthy communities. Also, we should not forget to call upon the U.S. Department of Commerce to enact small-business microloan systems, especially in rural areas and tribal communities, where economic stimulation and infrastructure building are critical interventions to reducing vulnerability to the risk of HIV infection.

The U.S. Department of Commerce also includes among its offices the National Telecommunications and Information Administration, which advises the president on telecommunication policies. An area where we have seen the benefits of technology for young adults has been SEXTECH (http://sextech.org) run by ISIS, which develops the technology and messages for HIV prevention virtually, such as texting to find answers to questions about health and sexuality. Technology should be more in the forefront of bringing to women and girls information to keep them safe, help them make decisions about how to reduce their STI risk, and tell them where they can go for testing. counseling, and support. One can imagine a free service that allows accessing HIV information by anyone who owns a phone, rather than envisioning only a bricks-and-mortar center where women must go to ask for resources. Why has the U.S. Department of Defense, which is home to some of the most cutting-edge national laboratories in the world, not lead efforts to model the HIV epidemic and thereby develop projections that can identify the spread and risk of the disease so other departments can intervene in the structural ways necessary to slow down the rate of the epidemic? Our suggestion requires unprecedented leadership by the federal government, which appears not to be up the challenge. Our suggestion is, in short, about realizing that the strategies employed to help women in underdeveloped countries—that is, approaches that seek to reduce women's vulnerability through skill attainment, employment, and ability to earn income, all hampered by their poverty and lack of infrastructure—would actually work in some U.S. communities, particularly in the rural South.

CONCLUSION

Race and geographic place also form a critical nexus for the conditions of HIV infection because, as so eloquently pointed out by Dean and Fenton (2010), the conditions that increase the likelihood of the risk of infection occur because of the nature of people's lives, such as where they live and work, as well as where and with whom they carry on their social relationships (Mays, Cochran, & Barnes, 2007). Equally true is that the likelihood of HIV infection or, conversely, the ability to protect against it is connected to societal resources in place for assistance, education, and health care, resources that are shaped by social, political, legal, racialized, and economic dynamics (Dean & Fenton, 2010; Gupta et al., 2008; Morris & Monroe, 2009).

If we are to accomplish the White House vision of the National HIV/AIDS Strategy (2010) namely that "the United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination" (p. 4)—we must employ a social determinants approach to strategies that are multisectorial and population based.

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