HIV Prevention and Heterosexual African American Women

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Epidemiology of HIV/AIDS Among African American Women

Early in the epidemic, HIV infection and AIDS were diagnosed among relatively few women and female adolescents. Currently, women account for more than 25% of all new HIV/AIDS diagnoses in the U.S. Heterosexually acquired HIV/AIDS is the predominant route of transmission for African American women. Among African American women diagnosed with HIV/AIDS during 2001–2004, 78% contracted the infection via heterosexual contact.[1,2] Unfortunately, African American women are being devastated by the HIV/AIDS epidemic. Thus, designing effective HIV prevention programs for this population is crucial. Theoretical frameworks are critical components of HIV prevention programs because they serve as guides for developing the core elements, vignettes, and activities of HIV prevention interventions.

Theoretical Frameworks Assessing Women's Risk of HIV

Many theories have been used to design HIV prevention interventions including Social Cognitive Theory, AIDS Risk Reduction Model, and the Information Motivation Behavior Model. One theoretical framework underlying several proven evidence-based HIV prevention efforts for African American women is the theory of Gender and Power.[3] Later we discuss the Theory of Gender and Power, and describe a research study, known as *SHAWL (the Social Health of African American Women)*, to investigate the theory's application to understanding African American women's HIV risk.

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The Social Health of African American Women

To facilitate our understanding of how risk factors and exposures influence African American women's risk of HIV, the chapter authors conducted a nationally representative random-digit dial telephone household survey of 1,509 women between October 2006 and May 2007. Potential participants who self-reported being female, African American, or white, of age 20–45, and unmarried or not currently in any relationship equivalent to marriage were eligible for inclusion.

Sampling employed a dual-frame design, incorporating two selection stages without stratification in each frame. The larger frame was designed to provide coverage of the eligible population (both white and African American) on a national basis, defined as all counties with an eligible household incidence of 10% or greater; this frame included 1,096 of 3,140 counties. The second frame targeted areas containing a high density of African American women and was restricted to counties with a household incidence of African American women of 7% or greater. Within each residential household contacted, a female adult in the target age range was selected via simple random sampling, and screened for remaining eligibility criteria. Those agreeing to participate were compensated $50 for completing the assessment. A total of 1,068 interviews were completed with African American women. Analysis is currently in its initial stages. Since the aim of the study was to assess variables known to increase exposure to HIV risk among African American women, the primary study outcomes were unprotected sexual intercourse, defined as the number of times they had vaginal sex with a steady partner in the past 3 months and the number of times they used condoms during vaginal sex with a steady partner in the past 3 months. A second study outcome, having multiple sexual partners, was defined as the number of different male sexual partners (men other than the women's steady partner) a woman has had in the past 6 months. In addition to these outcome variables, a range of critical risk factor and exposure variables related to the Theory of Gender and Power were assessed.

The Theory of Gender and Power: An Overview

The theory of Gender and Power is a social structural model that attempts to understand women's risk as a function of three different interlinked structures (none of which can be independent of the others) that characterize the gendered relationships between men and women. These three structures are (1) the sexual division of labor, which examines economic inequities that favor men, (2) the sexual division of power, which examines inequities and abuses of authority and control in relationships and institutions that favor men, and (3) the structure of cathexis, which examines social norms and affective attachments.

The three structures exist at two levels, the societal and the institutional level. The societal level is the highest level in which the three social structures are embedded. The three structures are rooted in society through numerous abstract, historical,

and sociopolitical forces that consistently segregate power and ascribe norms on the basis of gender-determined roles. The three structures are also evident at a lower level, the institutional level. Social institutions include, but are not limited to, families, relationships, religious institutions, the medical system, and the media. The social structures are maintained within institutions through social mechanisms such as unequal pay for comparable work, the imbalance of control within relationships, and the degrading images of women as portrayed in the media. The presence of these and other social mechanisms constrain women's daily life by producing gender-based inequities in women's economic potential, in their control of resources, and in gender-based expectations.

Each Structure Comprises Exposures and Risk Factors

The gender-based inequities and disparities in expectations that arise from each of the three structures (sexual division of labor, sexual division of power, structure of cathexis) generate different "risk factors" and "exposures" that influence women's risk for HIV. While the term *risk factor* is traditionally used to denote *any influence* that enhances risk for HIV, the theory of Gender and Power reserves this term specifically to denote intrapersonal variables that emanate from within women and influence their risk for HIV. We define *exposures* as variables that are external to women, which may influence their sexual risk behavior. Exposures include, but are not limited to, having an abusive male partner, and having limited pool of available partners. Later, we define each structure in the theory and variables assessed as part of the *SHAWL* study. We also further refine the theory of Gender and Power by bringing macrosocial factors into focus (Fig. 1). We define macrosocial factors as dimensions of "the social, economic, and political environments that shape and constrain individual, community, and societal health outcomes."[4] These factors have also been referred to as "structural determinants of health" and "contextual factors." In the theory of Gender and Power, macrosocial factors are conceptualized as a domain of exposures. Consonant with exposures within this theory, macrosocial exposures arise from the sexual division of labor, the sexual division of power, and cathexis. We bring this domain of exposures into focus here because macrosocial factors are widely posited to be potent determinants of racial/ethnic disparities in sexually transmitted HIV. To date, however, empirical investigations lag behind these propositions.

HIV-Related Factors Associated with the Sexual Division of Labor

The inequities resulting from the sexual division of labor are manifested as economic exposures and risk factors. According to the sexual division of labor, as the economic inequity between men and women increases and favors men (making

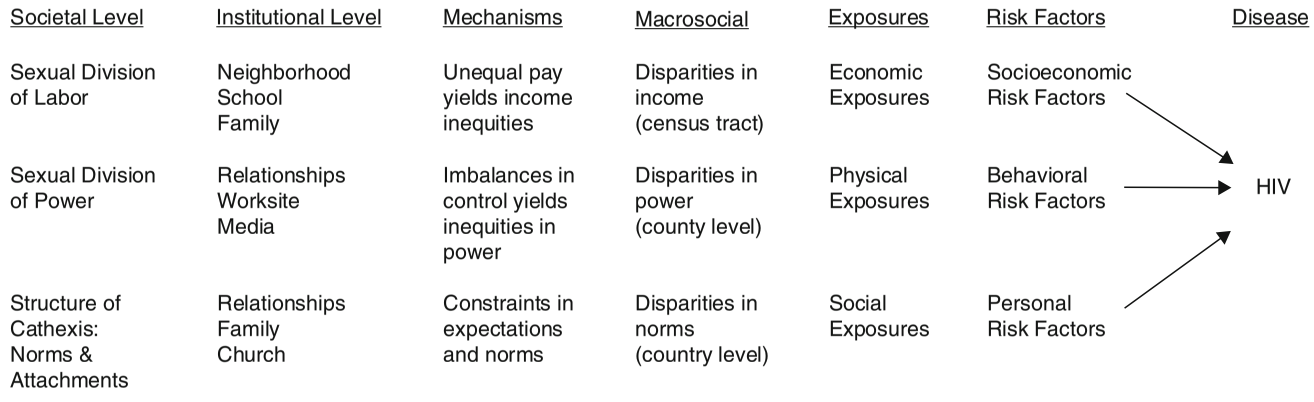

Fig. 1 Influence of theory of Gender and Power on women's HIV risk

women more dependent on men), women will be at greater risk for HIV. Nearly 1 in 4 African Americans live in poverty.[5] Socioeconomic problems associated with poverty including having a limited education,[6] having a lower income,[7] being underemployed,[8–10] having limited access to high-quality health care,[11] consuming alcohol,[8–10,12] and using noninjection drugs[13,14] have all been associated with increased HIV risk behaviors among African American women. Other individual-level factors associated with African American women's risk of HIV include having personal attitudes and beliefs unsupportive of safer sex[15,16] and having a low perceived risk of HIV infection.[17]

Thus, several of the exposures and risk factors examined as part of the *SHAWL* study included residing in a poor neighborhood, income disparities between women and their partners, being younger, unemployed, and having a limited education. Plans to elaborate exposures within the Theory of Gender and Power include intensifying efforts to explore the role of select macrosocial processes, arising from the sexual division of labor in shaping African American girls' and women's risk of HIV. These processes include local rates of poverty, wealth, high school graduation, and income inequality.

HIV-Related Factors Associated with the Sexual Division of Power

The inequities resulting from the sexual division of power are manifested as physical exposures and behavioral risk factors. According to the sexual division of power, as the power inequity between men and women increases and favors men, women's sexual choices and behavior may be constrained enhancing their risk for HIV. Numerous studies have demonstrated that having poor communication skills,[8–10,16] having a male partner who abuses drugs or alcohol,[18,19] having a sexually[20] and/or physically abusive male partner,[21,22] having a male partner who disapproves of practicing safer sex,[8–10] and having an older male partner[23] all significantly increase African American women's HIV risk.

Thus, several of the exposures and risk factors examined as part of the *SHAWL* study included, but not be limited to, partner-related and institutional factors, such as having a sexually, emotionally, or physically abusive partner, having an older partner, having a partner who has concurrent partners, having a partner who has had male sexual partners, and having a partner who has had a history of incarceration. In addition to the partner-related exposures, experiences of racial and gender discrimination were assessed as well as HIV-associated behavioral risk factors such as binge drinking, drug use practices, and assertive communication self-efficacy. Plans to refine the Theory of Gender and Power include incorporating macrosocial processes that arise from and capture the sexual division of power, such as, local male to female sex ratios among African Americans, rates of violence against women (both sexual and domestic), and rates of racially motivated hate crimes.

HIV-Related Exposures and Risk Factors Associated with the Structure of Cathexis

The inequities resulting from the structure of cathexis (i.e., social norms and affective attachments) are manifested as social exposures and as personal risk factors. According to the structure of cathexis, women who are more accepting of conventional social norms and beliefs will be at greater risk of HIV. Exposures examined as part of the *SHAWL* study included, but were not limited to, having an older partner, having a partner who desires a pregnancy, having a limited partner pool, being in a long-term relationship, and risk factors such as possessing conservative or traditional gender norms, and perceived stigma associated with various sexual experiences (e.g., asking partner for a condom, asking doctor to conduct an STD exam) was assessed. Plans to refine the Theory of Gender and Power include incorporating macrosocial processes that arise from and capture social norms and affective attachments, including local marriage rates and rates of religious congregation membership among African American adults.

The Theory of Gender and Power is the underlying theoretical framework to several evidence-based HIV interventions. We will now describe several of these evidence-based interventions, and illustrate the application of the theory when it was applied.

HIV Prevention Interventions for Heterosexual African American Women

To reduce African American women's vulnerability to HIV, the examination of risk factors and exposures associated with women's HIV risk must be accompanied by effective behavioral prevention efforts. Since 2000, the Centers for Disease Control and Prevention (CDC) has identified a number of HIV interventions with proven evidence of effectiveness that have been designed, implemented, and evaluated with predominantly African American women.[24] This chapter will focus on five HIV prevention intervention studies that have been conducted since 2000. All of these trials included at least 70% African American women in the sample and used a randomized controlled trial with at least a 6-month follow-up to evaluate the efficacy of the intervention. HIV prevention studies that apply the Theory of Gender and Power articulate the manner in which the intervention applied this theoretical framework.

In 2002, Ehrhardt[25] et al. published a study that assessed the short- and long-term effects of a gender-specific group intervention for women on unsafe sexual encounters and strategies for protection against HIV/STD infection. Family planning clients ($N = 360$) from a high HIV seroprevalence area in New York City were randomized to an eight-session intervention, a four-session intervention, or a control condition and followed at 1, 6, and 12 months postintervention. This gender-specific intervention was designed to decrease unsafe sexual practices among women. It was

based on the AIDS Risk Reduction Model, which was modified to enhance its gender-specificity. The eight- and four-session interventions shared the same format, consisting of 2 hour, small group sessions. The four-session version of the intervention was developed with the objective of making it as similar to the longer version as possible except for the time spent on the group exercises. The following sequence of topics was covered in each intervention, with one topic per session in the longer intervention and two topics per session in the shorter version:[1] Why should I care about getting STDs and HIV?;[2] How do I avoid partners who do not care?;[3] What is the best way to protect myself?;[4] How can I find out if we are infected?;[5] How do I ask my partner to use protection?;[6] How do I influence my partner to use protection?;[7] How do I refuse sex or unprotected sex?; and[8] How do I continue protecting myself and others?

Using an intention-to-treat analysis, women who were assigned to the eight-session group had about twice the odds of reporting decreased or no unprotected vaginal and anal intercourse compared with controls at 1 month (OR = 1.93, 95% confidence interval [CI] = 1.07, 3.48, $P = 0.03$) and at 12-month follow-up (OR = 1.65, 95% CI = 0.94, 2.90, $P = 0.08$). Relative to controls, women assigned to the eight-session condition reported during the previous month approximately three-and-a-half ($P = 0.09$) and five ($P < 0.01$) fewer unprotected sex occasions at 1- and 12-month follow-up, respectively. Women in the eight-session group also reduced the number of sex occasions at both follow-ups and had a greater odds of first-time use of an alternative protective strategy (refusal, mutual testing) at 1-month follow-up. Results for the four-session group were in the expected direction but overall were inconclusive. Thus, gender-specific interventions of sufficient intensity can promote short- and long-term sexual risk reduction among women in a family planning setting.

In 2003, Sterk et al. published a study to evaluate the effectiveness of an HIV intervention for African American women who use crack cocaine.[26] Two-hundred sixty-five women (aged 18–59 years) were randomly assigned to a four-session enhanced motivation condition, a four-session enhanced negotiation intervention, or to the National Institute on Drug Abuse standard condition (which emphasizes epidemiology of the local HIV epidemic, HIV knowledge, and HIV risk and preventive behaviors). The enhanced intervention conditions were conducted in individual sessions; the theory of Gender and Power was one of the theoretical frameworks used in this study; however, it was unclear how the theory was applied.

Session 1 of the motivation condition emphasized the local HIV epidemic, sex and drug-related risk behaviors, HIV risk reduction strategies, and the impact of race and gender on HIV risk and protective factors. The session ended with the request to the participant to consider why she would be motivated to change her life. *Session 2* commenced by reviewing the participant's change list, and short- as well as long-term goals were discussed. Following this discussion, short-term goals for behavior change were set. *Session 3* addressed the participant's experiences with the intended short-term behavioral change, including her sense of control and feelings of ambivalence. *Session 4* reviewed the prior session and introduced the delivery of risk reduction messages tailored to the participant's level of readiness for change.

Session 1 of the enhanced negotiation condition was similar to that described for the motivation condition. However, the session ended with a specific skills-training component of condom use and safe injection, and intended behavioral changes were discussed. In *Session 2*, the list of possible behavioral changes and the level of control were reviewed and general communication skills and strategies to develop assertiveness were discussed. Following this discussion, short-term goals for communication, gaining control, and developing assertiveness were set. *Session 3* introduced the negotiation and conflict strategies. *Session 4* was built on the previous sessions, including the development of tailored negotiation and conflict resolution styles.

A substantial proportion of women reported no past 30-day crack use at 6-month follow-up (100%–61%, $P < 0.001$). Significant ($P < .05$) decreases in the frequency of crack use; the number of paying partners; the number of times vaginal, oral, or anal sex was had with a paying partner; and sexual risks, such as trading sex for drugs were reported over time. Significant ($P < 0.05$) increases in male condom use with sex partners were observed, as well as decreases in casual partners' refusal of condoms. Findings suggest that combined components of the culturally appropriate, gender-tailored intervention may be most effective at enhancing preventive behavior among similar populations.

In 2004, Wechsberg et al. published the results of a randomized, three-arm trial for out-of-drug treatment African American women who used crack ($N = 620$), and women were assessed at 3- and 6-months follow-up.[27] Participants were randomized to one of the three arms: a woman-focused HIV intervention for crack abusers, a revised National Institute on Drug Abuse standard intervention, and a control group. The woman-focused intervention addressed drug dependence as a form of "bondage" and was designed to facilitate greater independence and increase personal power and control over behavior choices as well as life circumstances. The intervention contained psychoeducational information and skills training on reducing HIV risk and drug use, presented within the context of African American women's lives in the inner city, where pervasive poverty and violence limit women's options and increase the likelihood of poor (i.e., high-risk) behavior choices.

All the three groups reported significant reductions in the proportion of women having any unprotected sex in the past 30 days between baseline and 3- and 6-month follow-up. Although the woman-focused group demonstrated greater reductions in unprotected sex than the standard-NIDA intervention and control groups at 3 months, these results were not statistically significant at the 0.05 level. However, at 6 months, this trend was statistically significant relative to controls, with fewer woman-focused group participants reporting any unprotected sex in the past 30 days (odds ratio [OR] $= 0.62$, $P = 0.03$). All study conditions demonstrated significant reductions in the proportion of women reporting trading sex for money or drugs in the past 30 days between baseline and 3- and 6-month follow-up. Both intervention groups showed significant reductions in the percentage of women who traded sex compared with control subjects, with the standard-R group (OR $= 0.48$, $P = 0.007$) having slightly stronger effects than the woman-focused group (OR $= 0.58$, $P = 0.046$) at 3-month follow-up. At 6 months, these trends in reduction continued,

although they were not statistically significant. At 3 months, the odds of being homeless were the lowest in the woman-focused group (OR = 0.35, $P = 0.0002$). In multiple logistic regression analysis controlling for full-time employment at baseline, the odds of being employed full time at 3 months were significantly higher in the woman-focused group relative to both controls (OR = 2.53; $P = 0.0027$) and the standard-R group (OR = 2.02, $P = 0.0175$). The study concluded that a woman-focused intervention can successfully reduce risk and facilitate employment and housing and may effectively reduce the frequency of unprotected sex in the longer term.

In 2004, Drs. Wingood and DiClemente published a randomized controlled trial of the *WILLOW* (Women Involved In Life Learning from Other Women) intervention, which included 366 women living with HIV in Alabama and Georgia.[32] Participants were randomized to either a four-session intervention condition or a four-session comparison condition that focused on adherence and nutrition for women living with HIV. The Theory of Gender and Power was applied in *WILLOW* and application of the theory highlighted social conditions prevalent in the lives of women living with HIV such as having limited practical support (i.e., money for food, childcare), having violent domestic partners, being stigmatized as an HIV transmitter, receiving limited social support from kin and nonkin, and communicating nonassertively about safer sex. *Session 1* of the four-session intervention emphasized gender pride by discussing the joys and challenges of being a woman and by acknowledging the accomplishments of women in society. This session also sought to assist women in identifying people in their social network who have provided social support and in recognizing the essential qualities of supportive network members. *Session 2* discussed ways of maintaining supportive network members, encouraged women to seek new network members, and informed participants about how to disengage from network members who were not supportive of healthy behaviors. Peer educators emphasized that social support could be requested without having to disclose their serostatus. *Session 3* enhanced awareness of HIV transmission risk behaviors and debunked common myths regarding HIV prevention for people living with HIV ("If both partners are HIV positive it is OK to have unprotected sex"). This session also taught participants communication skills for negotiating safer sex, reinforced the benefits of using condoms consistently, and peer educators modeled proper condom use skills. *Session 4* taught women to distinguish between healthy and unhealthy relationships, discussed the impact of abusive partners on safer sex, and informed women of local shelters for women in abusive relationships.

Over the 12-month follow-up, women in the *WILLOW* intervention, relative to the comparison group, reported fewer episodes of unprotected vaginal intercourse (1.8 vs. 2.5; $P = 0.022$), were less likely to report never using condoms (OR = 0.27; $P = 0.008$), had a lower incidence of bacterial infections (chlamydia and gonorrhea) (OR = 0.19; $P = 0.006$), and reported higher HIV knowledge and condom use self-efficacy. In addition, the intervention reported more network members (biologically related kin or nonkin who provide social support), fewer beliefs that condoms interfere with sex, fewer partner-related barriers to

condom use, and demonstrated greater skill in using condoms. This is the first trial to demonstrate reductions in risky sexual behavior, incident bacterial STDs, and enhanced HIV-preventive psychosocial and structural factors among women living with HIV.

In 2004, Drs. DiClemente and Wingood published the results of a randomized, two-arm, single blind, controlled trial of sexually experienced African American females ($N = 522$), 14–18 years of age, conducted at a family medicine clinic.[28] Participants in this study, known as *SIHLE* (*Sistas*, *Informing Healing*, *Living and Empowering*), completed a self-administered survey and a personal interview, demonstrated condom application skills, and provided vaginal swab specimens for STD testing at baseline and at 6- and 12-months postintervention. The Theory of Gender and Power[3] is one of the theoretical frameworks guiding the design and implementation of the SIHLE intervention. *Session 1* activities were created to highlight HIV-related social processes prevalent in the lives of African American female adolescents. Through the examination of poetry written by African American women, discussion of challenges and joys of being an African American female, exposure to artwork from African American women, identifying African American role models, and prioritizing personal values participants were empowered to raise their expectations of what it is to be a woman cognizant of her sexuality regardless of how society may view them. Also this session stressed the importance of completing educational requirements, developing career goals, and writing effective professional resumes, and it was designed to be economically empowering. *Session 2* focused on providing information about STDs and HIV, including a discussion of behaviors that put them at risk for the diseases, and how the diseases can affect their goals and dreams. Correct condom skills were introduced as a means of lowering STD risk. Finally, participants discussed how "triggers" (e.g., having an older partner, gang involvement, sexually degrading media) could increase adolescents' HIV risk. *Session 3* provided the young women with the skills to properly use condoms and refuse risky sex. Through role-plays, women also learned how to eroticize condom use to develop their positive attitudes toward using condoms and enhance their male partner's acceptance of condom use. *Session 4* commenced by distinguishing healthy from unhealthy relationships and defining the words "abuse" and "respect." Subsequently, adolescents were taught coping skills to more effectively handle a verbally abusive or physically abusive partner. Participants were also taught coping skills to more effectively handle abuse that may occur as a consequence of introducing HIV/STD prevention practices (i.e., condom use) into the relationship.

Using population-averaged generalized estimating equations (GEE) analyses for the entire 12-month follow-up period, adolescents in the intervention, in contrast to the comparison group, were nearly twice as likely to report using condoms consistently in the 30 days preceding assessments ($\text{OR} = 1.97$; 95% $\text{CI} = 1.25,\ 3.10$; $P = 0.004$) and were more than twice as likely to report using condoms consistently in the 6 months preceding assessments ($\text{OR} = 2.28$; 95% $\text{CI} = 1.50,\ 3.47$; $P = 0.0001$). Adolescents in the HIV intervention also had a lower incidence of laboratory-confirmed chlamydia ($\text{OR} = 0.17$; 95% $\text{CI} = 0.03,\ 0.93$;

$P = 0.04$). Additionally, adolescents in the HIV intervention also had higher scores on measures of psychosocial mediators of HIV-preventive behaviors.

Disseminating HIV Prevention Interventions for African American Women

While the design, implementation, and evaluation of HIV prevention interventions for African American women is important, perhaps even more critical is the dissemination of these studies. In 2001, the Institute of Medicine published a report recommending that public health agencies use evidence-based HIV prevention interventions.[29] In accordance with the report, the CDC requires CDC-funded agencies, health-departments, and community-based agencies interested in implementing HIV prevention efforts to use evidence-based HIV behavioral interventions. Through CDC's Diffusion of Evidence-Based Intervention (DEBI) program, nationally, more than 650 agencies have received training in *SISTA*,[30] an evidence-based HIV prevention program for African American women.[31] In 1999, *SISTA* was cited as an evidence-based HIV intervention and published in the CDC's Compendium of HIV Prevention Interventions with Evidence of Effectiveness.[32] *SISTA* was a randomized controlled trial in which participants were randomized to a five-session intervention, a delayed control, or no HIV education condition. The theory of Gender and Power was the underlying theoretical framework for *SISTA*. The five-session intervention condition emphasized ethnic and gender pride, HIV risk-reduction information, sexual assertiveness and communication skills, proper condom use skills, and developing norms supportive of safer sex. Despite the delayed HIV education and control conditions, women in the intervention demonstrated increased consistent condom use, greater sexual communication, greater sexual assertiveness, and increased partner norms supportive of consistent condom use.

Agencies seeking certification in implementing *SISTA* can send two staff members to participate in a weeklong training. The 1-week *SISTA* training program is known as the *SISTA* Institute. Trainees in the *SISTA* Institute are provided training on the theoretical frameworks, core elements, intervention activities, and evaluation methods that comprise *SISTA*. Trainees graduating from the *SISTA* Institute are certified to implement this intervention. A technical assistance program has been created to provide additional training and address questions and concerns that may arise during the implementation of *SISTA* in the trainees' local communities. Individuals, who have been certified to implement *SISTA* through the *SISTA* Institute, are eligible to receive a 1-week training and certification to implement a newly published evidence-based HIV prevention program for African American female adolescents described earlier in this manuscript, known as *SIHLE*[28] and an evidence-based HIV intervention for women living with HIV, also described earlier in this manuscript, known as *WILLOW*.[33] All the three programs, *SISTA*, *SIHLE*, and *WILLOW*, target African American females and are designed to reduce HIV sexual risk behaviors and share similar theoretical, core, and methodological elements. Given their

similarities, these programs are being promoted as a suite of HIV interventions for African American women. In an effort to accommodate and expand the intervention suite to new and emerging subpopulations of African American women, the designers of the suite (Drs. Gina Wingood and Ralph DiClemente) have tailored and are evaluating the efficacy of several of the interventions within this suite for use with other subgroups of African American women (i.e., female adolescents attending STD clinics, and young adult women receiving care at health maintenance organizations). Moreover, in an attempt to reach women across the African Diaspora the original researchers are currently adapting and evaluating the efficacy of interventions within the suite for use with women in sub-Saharan Africa and the Caribbean. In an era when fiscal and human resources are severely constrained by competing public health priorities, it would be cost- and time-prohibitive for many public and private sector agencies to develop and evaluate a new program for each subgroup for which they desire to administer an HIV prevention program. Perhaps, promoting clusters of technological innovations, such as an HIV intervention suite, may serve to facilitate adoption and diffusion of evidence-based HIV prevention programs.

Future Directions

While notable research, programs, and services designed to reduce HIV risk among African American women have been developed, public health researchers must expand their agenda. Among the new and emerging issues there is a need to:

1. Explore effective ways to design and implement social structural interventions, such as conducting interventions within faith-based communities to reduce African American women's risk of HIV.
2. Explore how combining behavioral interventions and biomedical interventions can be designed to reduce African American women's HIV risk.
3. Explore how effective primary and secondary HIV prevention interventions for women can be more widely disseminated to African American women at greatest risk.
4. Explore ways to design cost-effective HIV prevention interventions for African American women that can reduce risky sexual practices, as well as biological outcomes such as sexually transmitted infections.
5. Explore alternative formats for conducting and disseminating HIV interventions, such as the use of interactive multimedia.
6. Explore the role of macrosocial factors in shaping African American women's risk of HIV, identify effective interventions to reduce related vulnerabilities, and amplify resilience. Creating a new and expanded agenda to reduce and even halt the feminization of the HIV epidemic needs to be a public health priority. However, prior to creating a new agenda an assessment of the lessons learned from our current prevention efforts conducted among women is required. Several meta-analyses and reviews of HIV prevention programs conducted among

women have demonstrated that HIV prevention programs with African American women are effective. However, without a new vision and forward foresight the HIV epidemic will continue its devastating toll on the health of African American women nationally.

References

1. Centers for Disease Control & Prevention. Trends in HIV/AIDS diagnoses – 33 states, 2001–2004. *Morbidity & Mortality Weekly Report*, 2005; 54, 1149–1153
2. Centers for Disease Control & Prevention. HIV/AIDS Surveillance Report, 2004. Atlanta, GA: *U.S. Department of Health & Human Services*, 2005; vol. 16, pp. 1–46
3. Wingood GM, DiClemente RJ. Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health Education & Behavior*, 2001; 27, 539–565
4. Blankenship KM, Bray SJ, Merson MH. Structural interventions in public health. *AIDS*, 2000; 4: S11–S21
5. U.S. Census Bureau. *Poverty: 1999. Census 2000 Brief.* Issued May 2003
6. Anderson JE, Brackbill R, Mosher WD. Condom use for disease prevention among unmarried U.S. women. *Family Planning Perspectives*, 1996; 28, 25–28
7. Peterson JL, Grinstead OA, Golden E, Catania JA, Kegeles S, Coates TJ. Correlates of HIV risk behaviors in black and white San Francisco heterosexuals: the population-based AIDS in multiethnic neighborhoods (AMEN) study. *Ethnicity & Disease*, 1992; 2, 361–370
8. Wingood GM, DiClemente RJ. Relationship characteristics associated with noncondom use among young adult African American women. *American Journal of Community Psychology*, 1998; 26, 29–53
9. Wingood GM, DiClemente RJ. The influence of psychosocial factors, alcohol, drug use on African American women's high-risk sexual behavior. *American Journal of Preventive Medicine*, 1998; 15, 54–59
10. Wingood GM, DiClemente RJ. Partner influences and gender-related factors associated with noncondom use among young adult African American women. *American Journal of Community Psychology*, 1998; 26, 29–51
11. Diaz T, Chu SY, Buehler JW, et al. Socioeconomic differences among people with AIDS: results from a multistate surveillance project. *American Journal of Preventive Medicine*, 1994; 10, 217–222
12. Graves KL, Hines AM. Ethnic differences in the association between alcohol and risky sexual behavior with a new partner: an event-based analysis. *AIDS Education and Prevention*, 1997; 9, 219–237
13. Fullilove R, Fullilove M, Bowser B, et al. Risk of sexually transmitted disease among black adolescent crack users in Oakland and San Francisco, Calif. *Journal of the American Medical Association*, 1990; 263, 851–855
14. Edlin BR, Erwin KL, Faruque S, et al. Intersecting epidemics: crack cocaine use and HIV infection among inner city young adults. Multicenter Crack Cocaine and HIV Infection Study Team. *New England Journal of Medicine*, 1994; 24, 1422–1427
15. Jemmott JB, Jemmott LS, Spears H, Hewitt N, Cruz-Collins M. Self-efficacy, hedonistic expectancies, and condom-use intentions among inner-city black adolescent women: a social cognitive approach to AIDS risk behavior. *Journal of Adolescent Health*, 1992; 13, 512–519
16. Catania JA, Coates TJ, Kegeles S, et al. Condom use in multi-ethnic neighborhoods of San Francisco: the population-based AMEN (AIDS in multi-ethnic neighborhoods) study. *American Journal of Public Health*, 1992; 82, 284–287
17. Nyamathi A, Bennett C, Leake B, Lewis C, Flaskerud J. AIDS-Related knowledge, perceptions, and behaviors among impoverished minority women. *American Journal of Public Health*, 1993; 83, 65–71

18. Sterk C. *Fast Lives: Women Who Use Crack Cocaine*. Philadelphia, PA: Temple University Press; 1999
19. Sterk CE. *Tricking and Tripping: Prostitution in the Era of AIDS*. Putnam Valley, NY: Social Change Press; 2000
20. Wyatt GE. The sociocultural context of African American and White American women's rape. *Journal of Social Issue*, 1992; 48, 77–91
21. Wingood GM, DiClemente RJ. The effects of an abusive primary partner on the condom use and sexual negotiation practices of African American women. *American Journal of Public Health*, 1997; 87, 1016–1018
22. Wingood GM, DiClemente RJ, Hubbard McCree D, Harrington K, Davies S. Dating Violence and African American Adolescent Females' Sexual Health. *Pediatrics*, 2001; 107, E72
23. Miller K, Clark L, Moore JS. Heterosexual risk for HIV among female adolescents: sexual initiation with older male partners. *Family Planning Perspectives*, 1997; 29, 212–214
24. Lyles CM, Kay LS, Crepaz N, et al. Best-Evidence Interventions: Findings from a systematic review of HIV behavioral interventions for U.S. populations at high risk, 2000–2004. *American Journal of Public Health*, 2007; 97, 133–143
25. Ehrhardt AA, Exner TM, Hoffman S, et al. A gender-specific HIV/STD risk reduction intervention for women in a health care setting: short- and long-term results of a randomized clinical trial. *AIDS Care*, 2002; 14, 147–161
26. Sterk CE, Theall KP, Elifson KW. Effectiveness of a risk reduction intervention among African American women who use crack cocaine. *AIDS Education & Prevention*, 2003; 15, 15–32
27. Wechsberg WM, Lam WK, Zule WA, Bobashev G. Efficacy of a woman-focused intervention to reduce HIV risk and increase self-sufficiency among African American crack abusers. *American Journal of Public Health*, 2004; 94, 1165–1173
28. DiClemente RJ, Wingood GM, Harrington KF, et al. Efficacy of an HIV prevention intervention for African American adolescent girls: a randomized controlled trial. *Journal of the American Medical Association*, 2004; 292, 171–179
29. Institute of Medicine. *Report Brief. No Time to Lose: Getting the Most From HIV Prevention*. Washington, DC: National Academies Press; 2001. Available at http://www.iom.edu
30. Prather C. Personal communications regarding progress of CDC disseminating SiSTA, 2005
31. DiClemente RJ, Wingood GM. A randomized controlled social skills trial: An HIV sexual risk-reduction intervention among young adult African American women. *Journal of the American Medical Association*, 1995; 274, 1271–1276
32. Centers for Disease Control & Prevention. HIV/AIDS Prevention Research Synthesis Project. Compendium of HIV Prevention Interventions with Evidence of Effectiveness. 1999
33. Wingood GM, DiClemente RJ, Mikhail I, et al. A randomized controlled trial to reduce HIV transmission risk behaviors and STDs among women living with HIV: The WILLOW Program. *Journal of Acquired Immune Deficiency Syndromes*, 1992; 37, S58–S67