

HIV Prevention for Intimate Couples: A Relationship-Based Model

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Abstract

HIV prevention programs targeted to heterosexuals have most often been delivered in individual or group modalities that principally focus on women as the agents of change. To date, most HIV risk-reduction interventions are not specifically designed to address issues involving intimate couples or to include both partners. Approaches which take into account relationship dynamics and communication patterns are needed to enable women to initiate or sustain condom use with their main steady partners. In this paper, we present a relationship-based HIV intervention, Project Connect, delivered to 217 African American and Latino heterosexual couples recruited from primary healthcare settings. The paper will first discuss the rationale and the conceptual framework underlying the intervention and then elaborate on the intervention components. Finally, lessons learned in the implementation of the project and implications of Project Connect to future practice and policy making for HIV interventions for heterosexual couples will be discussed.

Introduction

The majority of U.S. women with HIV have been infected via heterosexual intercourse in an intimate relationship (CDC, 2000). Although HIV/AIDS-related deaths have decreased steadily since 1995, AIDS remains among the leading causes of death for all U.S. women aged 25 to 44 and is the leading cause of death among African-American women aged 25 to 45 years (CDC, 2000).

The literature suggests that being in an intimate relationship is associated with many barriers to practicing safer sex. Numerous studies have found that lower condom use has been reported among intimate heterosexual partners compared to casual partners (Baker, Morrison, Gillmore, & Schock, 1995; Catania, Coates, Golden, Dolcini, Peterson, Kegeles, Siegel, & Fullilove, 1994; Ickovics & Yoshikawa, 1998; Marin & Marin, 1992; Misovich, Fisher, & Fisher, 1997; Schilling, El-Bassel, Schinke, Gordon, & Nichols, 1991). Even when condom use at first

intercourse with a new partner is relatively common, use declines with subsequent episodes of sex with the same partner (Pleck, Sonenstein, & Ku, 1993). The development of HIV prevention strategies for intimate couples continues to lag. While HIV prevention interventions have been moderately successful in promoting condom use in casual and commercial relationships, several studies have shown condom use remains low among men and women in established relationships, particularly among African-American and Latino couples (Baker, Morrison, Gillmore, & Schock, 1995; Catania, et al., 1994; Ickovics & Yoshikawa, 1998; Marin & Marin, 1992; Misovich, Fisher, & Fisher, 1997; Schilling, et al., 1991).

HIV prevention programs targeted to heterosexuals have most often been delivered in individual or group modalities that principally focus on women as the agents of change. Opportunities for couple intervention are rare within public and mental health clinical and research settings, particularly in settings that serve urban, low-income, minority clients. This may be due to financial or logistic concerns or institutional biases overlooking this potentially important point of intervention. Approaches which take into account relationship dynamics and communication patterns are needed to enable women to initiate or sustain condom use with their main steady partners. Relationships provide support, strength, and protection in many aspects of couples' lives. Risk reduction interventions should highlight the important role our intimate relationships afford and emphasize that partners can work together to address mutual needs while keeping their relationship and each other safe and strong.

In this paper we present such a relationship-based HIV intervention, Project Connect, designed for heterosexual couples recruited from primary healthcare settings. The paper will first discuss the rationale and the conceptual framework underlying the intervention and then elaborate on the intervention components. Finally, lessons learned in the implementation of the project and implications of Project Connect to future practice and policy making for HIV interventions for heterosexual couples will be addressed

Why develop an HIV intervention for intimate couples?

Several issues led to the design of this relationship-based HIV intervention for heterosexual couples. First, research suggests that women acting unilaterally to introduce safer sex practices, such as condom use, may be confronted with negative reactions from their partners including isolation, threats to terminate the relationship, or even physical violence. Condom use is often associated with infidelity and mistrust, making it difficult for one intimate partner to persuade the other of the health benefits and merits of safer sex practices. Concerns about negative reactions may prevent individuals from conveying the intervention content to their partners. Participating as a couple allows information to be introduced by an objective, "expert" facilitator who frames the need for protection outwardly—on the certainty that HIV and other sexually transmitted diseases (STDs) are a fact of our current reality—not on one or the other participant's past or present risky behaviors. Instead, partners can be motivated together to protect each other and their relationship.

Second, the expectation that women or men participating alone in interventions can convey their new knowledge and skills to their sexual partners assumes that they have the prerequisite relationship-specific communication skills. Research has shown that this is often not the case,

either because they do not have opportunities to develop these new skills or because they are inhibited by other factors, such as gender role expectations or relationship power imbalances, that interfere with their ability to negotiate condom use (Amaro, 1995; Fullilove, Fullilove, Bowser, & Gross, 1990). When both partners receive the intervention they have the opportunity to learn and rehearse new communication and negotiation skills together. This process may effectively enable couples to integrate intervention knowledge and skills into their unique relationship context (O'Leary, 1999; O'Leary & Wingood, 2000).

Third, the supportive environment of couple counseling may enable those in intimate relationships to more safely disclose extra-dyadic relationships, STD histories, injection drug use, or other relevant highly personal information to their partners, which will enable them to gain a more realistic appraisal of their risks for HIV transmission as a couple. Although individual and group-based approaches may be effective in empowering women to confront their partners about their need to practice safer sex, these approaches offer little protection to women in instances where this confrontation is met with a violent response. Facilitation to the couple can normalize the fact that intimate partners do sometimes engage in risky behaviors and that they may be fearful to disclose such behaviors if they risk losing the relationship. This may lead to a mutual understanding that individuals in intimate relationships can still be at risk for HIV and can put each other at risk, motivating an obligation to protect each other. In this case, relationship factors which have been found to be risk reducing (e.g. love, respect, commitment) can be used to promote safer sex among couples. A facilitator can help reframe condom use to couples as a positive demonstration of the couple's love and commitment to each other, rather than a symbol of infidelity. When both partners develop a more realistic appraisal of their risk for HIV, they may become more motivated to stay healthy and protect each other from transmission. Helping the couple to express a commitment to taking care of and protecting each other encourages them to be sources of support for one another rather than obstacles to safer sex practices (Basen-Engquist, 1992; Fisher & Fisher, 1993).

Finally, although few studies have evaluated the effectiveness of couple-based HIV interventions with untested couples at risk, there are a growing number of studies that have found couples counseling to be effective in promoting condom use among HIV discordant couples (Padian, O'Brien, Chang, Glass, & Francis, 1993). Padian, et al. (1993) found that among 144 heterosexual couples with discordant HIV serostatus who received intensive couple counseling, consistent condom use reported by couples rose from 49% to 88% from pre to post-intervention. Deschamps, Pape, Haffner, Hyppolite, & Johnson (1991) found that among 148 sexually active couples (89 HIV serodiscordant) receiving couple counseling, couple condom use reports rose from 9% to 40% from pre to post-intervention. In a meta-analysis of longitudinal studies evaluating the effectiveness of HIV counseling and testing on condom use, Higgins, Galavotti, O'Reilly, Schnell, Moore, Rugg, & Johnson (1991) found that HIV discordant couples that received joint HIV counseling and testing reported substantial improvement in condom use over time. In contrast, individuals at high risk for contracting HIV such as injection drug users or STD patients showed little, if any, improvement following HIV counseling and testing (Higgins, Galavotti, O'Reilly, et al., 1991).

Theoretical framework

Two theoretical frameworks, the AIDS Risk Reduction Model (ARRM) (Catania, Kegeles & Coates, 1990) and the ecological perspective (Bronfenbrenner, 1979), guide the intervention. The ARRM was developed as a conceptual framework to organize behavior change information and skills directed at HIV risk reduction. This eclectic model integrates constructs from the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Middlestadt, 1989), social cognitive theory (Bandura, 1986; 1994), and health-belief approaches (Becker, 1974; Janz & Becker, 1984). The ARRM incorporates three stages: (a) recognizing and labeling one's sexual behaviors as high risk for contracting HIV, (b) making a commitment to reducing high risk sexual behaviors and increasing low risk activities, and (c) seeking and enacting strategies to attain these goals, such as communicating with one's sex partner about change, initiating condom use, and seeking help from one's network for changing risk behaviors. Although separated for conceptual purposes, these stages may occur concurrently (Catania, et al. 1990). In our intervention, we modified the ARRM by adding an additional stage: the "maintenance" of behavioral change. While ARRM focuses on changing individual behavior, the emphasis on improving communication and negotiation skills for risk reduction may best occur with partners together in relationship-based sessions.

The ARRM recognizes that knowledge of how to reduce risk and the motivation to act on such knowledge is not adequate without cognitive and behavioral preparedness and the ability to communicate with a sexual partner. Necessary self-regulatory skills include the ability to recognize situations likely to lead to unsafe sex, avoiding situations leading to risky behavior, controlling impulses that lead to risky sex, and anticipating sexual encounters so that one is prepared to use condoms. Also required are the abilities to assert a commitment to safer sex, reduce the partner's opposition to these activities (i.e., problem solving, communication, and negotiation skills) and develop and maintain relationships that are supportive of safer sex behavior (Kelly, St.Lawrence, Hood, & Brasfield, 1989). Structured, skill-based, experiential strategies enable individuals to anticipate problem or high-risk situations and develop specific behavioral competencies in solving problems, overcoming challenges, or avoiding risks. Skills training includes introduction and definition, modeling, and behavior rehearsal with coaching and feedback. Homework assignments promote generalization of skills. Positive reinforcement and social support facilitate "trying out" new behaviors and help maintain motivation over time.

The ecological perspective (Bronfenbrenner, 1979) emphasizes the importance of multiple levels of influence in human development and behavior, including HIV risk and protective behaviors (Moss & Tarter, 1993). These may include an individual's background, their relationship context, the immediate social context, and the broader cultural values and beliefs in which behaviors occur. According to ecological theory, these four nested analytical levels of sexual risk and protective factors are: (a) the ontogenetic level, which refers to the personal factors that are unique to an individual's developmental history, such as trauma (childhood sexual abuse, rape), psychological distress, self-efficacy, and communication skills; (b) the micro system level, which refers to the interactional and relationship factors that are part of the immediate context in which sexual activity takes place (i.e., power imbalances, intimacy, closeness, physical and sexual coercion); (c) the exosystem level, which refers to all risk factors both formal and informal that impinge upon the immediate setting by acting as external stressors or buffers on the likelihood of engaging in risky behavior, such as socio-economic and employment status, peer norms about safer sex, social networks and support, and access to HIV related services; and (d) the macro-

cultural level, which includes the broad cultural values and belief systems that interact with all the other analytical levels and macro-level factors, such as social norms towards HIV and attitudes toward gender roles. Project Connect intervention components were designed to address predominantly micro and exosystem risk and protective factors, keeping ontogenetic and macro level factors in mind for cultural and community relevance.

While comprehensive, the challenge of applying an ecological perspective to HIV risk reduction is that risk and protective factors are analytically “nested” within each other (i.e., one factor operates within the limits set by other factors). Individual factors incorporated into the model have been empirically demonstrated to be associated with HIV risk or protective strategies (i.e., social support, condom use, self-efficacy, etc.), although there is room for interpretation as to where any particular factor fits most appropriately into the multi-level framework (e.g., the lines between micro- and exo-level factors are not always clear). However, we believe that the significance of a nested ecological perspective resides not so much in the precise location of the factors but rather in their dynamic interplay.

Methodology

Recruitment and eligibility

Project Connect was a randomized clinical trial funded between 1997–2001 by the National Institute of Mental Health. The purpose of the study was to examine the efficacy of a relationship-based intervention for heterosexual couples. Participants were recruited in a primary healthcare setting in a low income, urban neighborhood in Bronx, New York. Bilingual recruiters approached women in a waiting room of the primary care clinics, handing them flyers with information about the study. Women interested in participating in the study completed a brief face-to-face screening to determine their eligibility. A woman (aged 18 to 55) was eligible for the study if she: (a) had a main steady male sexual partner with whom she had been involved for at least six months, (b) was confident that she would stay with this main steady partner for at least one year, (c) had had vaginal or anal sex with this partner in the past 30 days, (d) had not always used condoms with this partner in the past 90 days, and (e) reported no life-threatening abuse by this partner within the last 6 months. A woman also had to report knowledge or suspicion that her partner had at least met one of the following risk criteria: that he (a) had had sex with other men or women in the last 90 days, (b) had been diagnosed with or exhibited symptoms of an STD in the last 90 days, (c) had injected drugs in the last 90 days, or (d) was HIV positive. By using these eligibility criteria, we aimed to recruit a sample of women in primary care who would be at risk of heterosexual HIV transmission and, thus, representative of women who would benefit from HIV prevention. Eligible women were asked to invite their male partners to participate in the study. Strategies offered to women and used on an as-needed basis to enhance recruitment of partners included hand-delivering or sending him a formal invitation in the mail, asking a male recruiter to call her partner directly, and/or bringing the partner in to discuss the study with recruitment staff.

Of the 2416 women screened for the study, 388 (16%) were eligible. Two hundred seventeen (56%) eligible women and their partners completed baseline interviews and were randomized to one of three conditions: (a) six weekly relationship-based sessions (orientation plus five couple

sessions), where the woman and her partner received the intervention delivered by a female facilitator; (b) a woman alone (with no partner) received the same intervention delivered by a female facilitator; or (c) a woman alone (with no partner) received one AIDS information session delivered by a female facilitator. Participants received compensation for completing interviews and intervention sessions. Prior to baseline interviews, all participants signed a consent form specifying confidentiality procedures and their rights as research participants. The institutional review boards of both the research and participating community-based institutions approved the study protocol.

Profile of study participants

Of the 217 couples randomized to the study, 47.5% were African-American couples, 29.5% were Latino couples, and 23% were mixed ethnic couples. The mean age of participants was 38 years, most (57%) were never married, and most (57%) had annual incomes of less than \$5,000. Half of participants had less than 12 years of education, while 14.5% of women and 34.9% of men were employed. The majority (67.9%) were HIV negative couples; in 17% of couples both partners were positive, while in 15% one partner was positive, the other HIV negative.

Intervention

The manualized intervention consists of an orientation session and five relationship-based sessions. It combines content related to safer sex practices and prevention of HIV and all other STDs, as well as joint HIV testing and an emphasis on communication and negotiation skills. In addition to being informed by the two theoretical frameworks discussed, the intervention was designed with the assistance of several couples recruited from the primary healthcare setting where the study was conducted. We incorporated their input and voice in the design of the intervention components in order to make the intervention culturally sensitive (for a more complete discussion see Sormanti, Pereira, El-Bassel, Witte, & Gilbert, 2001.). The intervention emphasizes responsibility for self, for each other as a couple, for community, and for family. The intervention focuses on a positive future orientation, for example, addressing change for preventive health as opposed to past risky behaviors. It also emphasizes the importance individual contribution makes to enhancing the future health of ethnic communities hardest hit by AIDS, for example, addressing the adverse effects of AIDS in the African-American and Latino communities and linking behavior change to commitment to one's community (Kelly, 1995; Jemmott, Jemmott, & Hacker, 1992; El-Bassel, Ivanoff, Schilling, Gilbert, & Borne 1995; Schilling, El-Bassel, Hadden, & Gilbert, 1995; DiClemente & Wingood, 1995; van der Straten, King, Grinstead, Serufilira, & Allen, 1995).

Orientation session: "Preparing for the journey"

The purpose of the orientation session is to increase the couple's motivation to attend the remaining sessions together and to give each participant an opportunity to explore his or her concerns and questions about the intervention. Drawing from the ARRM model, the orientation session serves to heighten awareness of risk and to begin the cognitive preparedness required for risk reduction behavior change. Sessions are provided one-on-one to women and their partners separately, by a same-sex facilitator. HIV prevention for couples is normalized through discussion of the relevance of the intervention for regular, intimate partners and presentation of

current, local HIV and STD rates among long term partners. In this individual session, facilitators work with participants to reduce anxiety and clarify misperceptions about the intervention. Facilitators also highlight confidentiality procedures and reassure participants that they will not be compelled to share any information that they want to keep from their partners. Drawing from the ecological perspective, the session emphasizes how important the individual's relationship context and dynamics (microsystem) will be to the sessions. The facilitator emphasizes that the intervention will focus on the strengths of their relationship and will provide options and alternative ways of protecting themselves and their partners. In this individual session, participants are encouraged to weigh the pros and cons of participation and discuss attendance, thus strengthening their motivation to complete the intervention. At the end of this session participants sign a contract of commitment to attend the sessions. This session is well received by participants and has been found useful as a cohesive mechanism to prepare the woman and her partner to work collaboratively with the facilitator.

Session 1: "Identifying risks and vulnerabilities in our relationship"

The objectives of this session are to (a) increase perceptions about vulnerability to STDs, including HIV, as a couple; (b) increase motivation for change by focusing on the couple's risk factors as well as their strengths; (c) set ground rules and confidentiality procedures; and (d) introduce a couple communication skills-building technique. These objectives draw from both the ARRM and ecological models as they integrate knowledge building, risk identification and awareness, and strengthening of communication skills.

Session 1 begins with a discussion of the pros and cons of session participation. Next, the facilitator helps the couple to clarify individual roles and expectations. Ground rules are discussed, with an emphasis on the importance of confidentiality and the right to ask questions. Participants are discouraged from using drugs prior to the sessions and asked to withhold judgment and avoid "put downs." The couple is invited to share as much as they feel comfortable sharing, and advised that the more they participate, the more they should benefit.

HIV/AIDS information is provided focusing on how the epidemic affects them (as a couple), their children, friends and community. A myths and facts game format is used to initiate discussion of basic HIV/AIDS transmission information. Information about STDs other than HIV is provided in a video format, followed by a discussion of the couple's STD history and knowledge base. Facilitators emphasize that HIV is only one of many STDs from which couples must protect each other.

The couple is asked to identify any past individual risk factors for HIV (e.g., drug use, alcohol abuse, sex with risky partners). This exercise is critical to intervention success as it establishes the starting point of risk for each couple upon which they will build a repertoire of safer behaviors. As an introduction to communication skills, couples face each other and take turns speaking and listening, telling each other the qualities they value in each other and what they each hope to be doing five years in the future. Through coaching, feedback, and rehearsal, the couple is trained in the Speaker/Listener Technique (Markman, et al. 1996), a communication skill designed to help them listen to and understand each other's differing perspectives better.

This technique is first practiced with a relatively easy issue identified by the couple, then practiced with an issue specifically related to safer sex goals.

Session 2: “Protecting our relationship”

The objectives of this session are to (a) identify how relationship factors (closeness, love, respect, power imbalances) might be barriers to protected sex, (b) understand the importance of safer sex practices in the context of an intimate relationship, (c) learn the spectrum of behavioral options for safer sex, and (d) practice condom use negotiation. More cognitive preparation, education, and motivation from the ARRM is addressed, while the objectives expand to incorporate additional elements of the ecological perspective, specifically, relationship context, power imbalance, patterns of sexual behavior, communication about sexual comfort and desire, and traditional gender/sex roles. These elements of the ecological perspective will be addressed through sessions three, four and five.

In session two, the myths and facts game format is again used, this time to normalize societal challenges to the maintenance of a long-term, monogamous relationship (i.e. if your partner loves you she will not have sex with someone else) and to normalize the risks facing women and men in long-term relationships (i.e. if you only have sex with your main, regular partner, you are not at risk for HIV). Through this exercise, the facilitator emphasizes that it takes both partners in the couple working together to establish one solid, protective plan.

Moving to preparation for behavioral risk reduction, individual and couple strengths as well as the ability to make behavioral change are emphasized by asking the couple to share an experience where they (individually and together) have already taken control over their lives and made a positive change.

Later in this session the couple also explores issues related to “unspoken rules” in the relationship (e.g., relationship factors, gender differences, sexuality, fidelity in the relationship), and condom use between steady partners. The facilitator helps the couple to acknowledge that love for each other and a desire for intimacy may constitute barriers to condom use. The facilitator focuses on strengths by emphasizing the message that taking care of oneself and protecting each other as a couple is a sign of love and respect.

Under the topic “sexual decision-making,” the facilitator leads an active discussion about how (stereotypically) men and women differ in terms of sexual decisions, condom use decisions, and sexuality (issues of comfort in talking about sex, requesting condom use, desire for pregnancy and condom use, etc.). This exercise is used as a starting point for the couple’s discussion on areas within their own relationship that they are more or less satisfied with, such as existing patterns of decision-making and power.

The facilitator introduces the New York State Department of Health Safer Sex Hierarchy (New York State Department of Health AIDS Institute, 1992), a spectrum of sexual behaviors ranked from the safest way to prevent transmission of HIV to no prevention or protection. With the help of the facilitator, couples start exploring the complexity of safer sex and choose the best option for their situation. The hierarchy makes clear that the most protection is offered by abstinence or

mutual or parallel masturbation. The second safest option is male or female condom use with spermicides. The third requires following the New York State Health Department HIV testing protocol: the couple goes together for HIV testing and uses condoms for every sexual encounter for the next three months. At that point, the couple goes for testing again. If both partners test HIV negative, then they can stop using condoms provided that neither partner is injecting drugs, both are committed to being monogamous, and both agree that they would use a condom if they engaged in extra-relationship affairs. The fourth option is for the woman to use a diaphragm with a vaginal spermicide. A fifth option is for the woman to use a vaginal spermicide alone.¹ The worst option is no protection at all.

The couple is asked to indicate where they fall on this hierarchy of risk and to select where they would like to be on the hierarchy. Because the couple's desire for a pregnancy may be a barrier to condom use, a discussion on how to conceive safely is initiated. They sign a contract of commitment to work together to achieve their goal of movement along the Safer Sex Scale. Through coaching and feedback the couple again practices the Speaker/Listener technique, this time with respect to challenging gender differences or unspoken rules within their relationship that act as barriers to safer sex behaviors.

Session 3: "Making choices that strengthen our relationship"

The objectives of this session are to help the couple (a) learn about male and female anatomy, (b) practice proper use of male and female condoms, (c) acquire information about the safest condom and lubricant types available, (d) increase couple safer sex options, and (e) discover how to make safe sex fun and enhance sexual communication skills. Skills and strategy building consistent with the ARRM are addressed, while the various contextual factors of the ecological model highlighted in session two continue to be addressed.

The anatomy knowledge exercise names sexual and reproductive organs, encourages communication about anatomy, and aids in understanding how male and female condoms work to prevent STD infection and pregnancy. With coaching and feedback from the facilitator, anatomy and condom use knowledge and skills are reviewed and practiced by the couple together.

In this session the facilitator also encourages the couple to examine their sexual routines or everyday practices with regard to intimacy and communication around sexual issues: Do they ever explore barriers to communication? How might they be confined by social constructions to gender and culture? (In the language of the intervention, how often might their actions or choices be predetermined by what is the expected behavior of a man or of woman?) The goal of this exercise is to encourage the couple to consider new sexual options, specifically, the adoption of safer sex practices.

To facilitate exploration of safer sex options and continue enhancement of couple sexual communication, couples are introduced to the "Connection Café Menu." This "menu" is a tool to

¹ Since trial inception, the Centers for Disease Control no longer endorse that the vaginal spermicide, non oxynol-9, be used alone or in conjunction with condoms as a barrier to HIV infection. Studies have shown that this product may enhance HIV infection in women due to irritation of vaginal mucosa.

help the couple identify ways to communicate intimate wishes in a non-threatening way. The menu offers several ways of having protected sex, including a number of “outercourse” (mutual and parallel masturbation) options, eroticizing female and male condom use, and a number of intimate behaviors not necessarily related to intercourse (reciting poetry, bathing together, walking in the moonlight). Participants apply the Speaker/Listener technique by taking turns “ordering” from the menu.

Session 4: “Working together to keep our relationship, family, and community safe”

The purpose of this session is to help couples to (a) identify triggers for unsafe sex, with an emphasis on relationship contexts (e.g., people, places, drug use, and moods and feelings such as love, trust, fear of rejection, loneliness, heightened or depressed sexual desires), and (b) introduce problem-solving skills to avoid or negotiate high risk situations. Skills and strategy building consistent with the ARRM are addressed, while the various contextual factors of the ecological model highlighted in sessions two and three expand to include the couple’s impact on their broader community of family and friends.

The facilitator works with the couple to identify personal and couple risk triggers and helps them devise ways to prevent or address triggers through problem solving. Problem solving involves a five step approach, including (a) identifying the problem, (b) identifying the trigger(s) leading to the problem, (c) brainstorming potential solutions to avoid the problem, (d) evaluating and choosing the best solution, and (e) developing an action plan to avoid the problem in the future. After presenting the model, the facilitator coaches the couple through their own risky behavior scenarios. The couple applies the Speaker/Listener technique to work through safer sex problem-solving scenarios. The safe sex hierarchy is reviewed, and the couple discusses where they are on this hierarchy once more. Again, joint HIV testing is reinforced as an approach to prevention and an important way to determine current risk status. Finally, the couple is reminded of the importance of their role in supporting the health and welfare of their family, friends, and community by sharing their STD-related knowledge and skills. They are presented with personalized cards indicating that they are “prevention promoters” and encouraged to consider ways they can use what they have learned to impact prevention in the lives of family and friends.

Session 5: “Sustaining our relationship strength and supports”

The objectives of this final session are to assist the couple in (a) identifying social supports, both as individuals and as a couple in order to assist each one in coping and maintaining safer sex behavior; (b) learning how to cope with challenges to maintaining safer sex practices over time in a long-term relationship; (c) enhancing social support from families and friends for initiating and maintaining positive behavior changes in reducing sexual risk behavior; and (d) promoting HIV risk reduction in their community. The addition of the “maintenance” stage of the ARRM is addressed in this session, while the important role of the exosystem (specifically social supports) of the ecological perspective is emphasized.

The facilitator highlights the progress that the couple has made since the first session. The couple is invited to talk about whether they have relapsed into unsafe sex. The skill of self-talk, telling oneself positive thoughts in an effort to maintain behavior change, is demonstrated and practiced.

Three coping strategies (self-talk, problem-solving, and the Speaker/Listener technique) are discussed as ways to avoid relapse triggers or ways to begin implementing risk reduction again should the couple relapse. They are asked to renew their commitment to protected sex as a couple and to review any new eroticizing skills they have employed as a result of the intervention. In order to promote maintenance of behavior change, the couple is encouraged to review issues related to their commitment to stay healthy. Again, the facilitator discusses how they can teach other people in their community to stay healthy. The couple identifies people in their network who will be supportive to healthy behaviors and safer sex practices. Couples are encouraged to promote safer sex messages to other couples, friends, family, children, and their community. Through discussing these issues with their friends, relatives, and children, the participants are encouraged to sustain the changes that they have decided to make in their lives and also share and compare their successes and failures and renew their determination to do things differently in the future. Project Connect provides each couple with a certificate indicating completion of the intervention and suggests that their new knowledge and expertise about safer sex practices can be informatively shared with others in their community.

How sessions were conducted

All sessions took place in a private office within the hospital outpatient setting where participants were recruited. Sessions lasted two hours and included didactic and experiential materials and were conducted in English. In each session, one facilitator worked with one couple, providing feedback and coaching as well as allowing the couple to practice the skills together. Most sessions included a modeling or educational video for variety in presentation media. Each session had several exercises and ended with goal setting, in which the couple was asked to select a goal for the next session that was related to the safer sex and communication skills content covered in the current session. Participants were provided with a selection of male and female condoms at the end of every session and reminded of places in the community where they could access free condoms.

Facilitators employed a number of couple-counseling skills. First, an attempt was made to provide equal attention to the two members of the couple throughout sessions. Second, facilitators maintained an “observer” stance to maximize productive interaction between the couple, but interceded as necessary and appropriate to clarify issues or concerns. Couples would sometimes disagree and digress into an argument. Disagreement between the couple was normalized and used to initiate and encourage compromise leading to behavior change. Third, facilitators created a “safe” context where the participants could express their thoughts and feelings but not feel compelled to speak or participate. Facilitators capitalized on the couple’s own dynamics to enhance communication and interaction between the dyad. One of the challenges that facilitators faced was balancing the need to adhere to the session content with the need to address specific issues and life concerns raised by each couple. To address extraneous concerns, facilitators were instructed to refer clients to treatment in the community. Such referrals were monitored and assessed.

Session attendance

Most couples or women alone who attended at least one session following the orientation completed all sessions. Seventy-eight percent of participants randomized to either couples or woman-alone treatment attended at least one session. Fifty-nine percent attended all sessions while another 19% attended between 1 and 4 sessions (following orientation). Twenty-two percent of participants randomized to treatment ($n = 33$) attended no treatment sessions.

Facilitator training and supervision

All facilitators were women who were skilled clinically and possessed a Masters in Social Work (MSW) degree or were social work graduate students. A third of facilitators ($n = 4$) were women of color (3 Latina, 1 Asian-American). In order to control for facilitator gender while comparing an individual against a couple intervention in the research design, male facilitators were excluded. We believed that the nature of the intervention content (i.e. review and discussion of sexual risk and histories, male and female anatomy, etc.) precluded having a male facilitator work one-on-one with a female participant. Such a design might severely compromise feelings of safety on the part of women participating in the woman-alone sessions. To ensure the quality and consistency of interventions, facilitators received a standard training course, used structured intervention protocols, met on a weekly basis with a clinical and task supervisor, and had routine monitoring (via audiotape) and feedback by an onsite-supervisor (a random 10% of sessions were monitored). A criterion of 80% compliance with intervention content and delivery process (timing of elements, etc.) was considered an acceptable standard. No facilitator failed to perform up to this standard. However, had it occurred, the facilitators whose performance deviated in quality or adherence would have been retrained, assisted, or replaced.

In addition, process evaluations assessing intervention content and client satisfaction were conducted by surveying participants in the final session (Schiff, Witte, & El-Bassel, in press).

Discussion

Lessons learned

Although the outcome data have yet to be analyzed, the assessment and intervention implementation of Project Connect was a logistic success with broad implications for the future of human service interventions. The ability to recruit and retain 217 African-American and Latino heterosexual couples into a multi-session HIV intervention study challenges prevailing assumptions that it is difficult to engage both men and women together in HIV prevention or other human services. Two decades into this epidemic, there are still few opportunities for men and women to come together for HIV prevention services. Heterosexual transmission of HIV is the largest single risk factor worldwide, yet most U.S.-based intervention services are still individual or group-based. The opportunity to expand modalities to incorporate couples may significantly enhance our ability to curb new HIV infections. If logistically feasible, relationship-based services may be successfully applied in a range of human service settings providing HIV prevention interventions.

Additionally, the study successfully applied ecological systems theory, surveying men and women from the same couple on a range of factors, from personal to macrosystem levels. These

data should provide critical insight to enhance our understanding of the role of these individual, dyadic, family, and community level factors on HIV prevention. In addition to these two major findings, a number of lessons regarding implementation of a relationship-based intervention were learned.

Involve research participants as consultants

A critical lesson learned in the design and successful implementation of this intervention was the incorporation of multiple sources of information in the final protocols. In addition to empirical literature and prior experience, the research staff held focus groups with couples self-identified as at high risk for STD/HIV infection to identify culturally-and gender-sensitive approaches to intervention. Participating couples described their consultant role in terms indicating a sense of empowerment. They explained that they wanted to help the community and their friends and family, while at the same time learn to protect themselves and each other. This information helped to make specific intervention components more relevant to the experience of high risk couples in this urban community and fostered a strong sense of community involvement in the project.

Working with an ethnically diverse sample

One key element to developing a prevention protocol that will address the needs of an ethnically diverse sample is to incorporate research participants as consultants, as above. Although the research design required that session content be standardized, facilitators were also encouraged to draw on the life experiences and cultural contexts of individual couples in the application of intervention materials. This process allowed for each couple to explore the limits and boundaries of risk-reduction skills and information within their own level of cultural and personal comfort. Participant evaluations from both African-American and Latino men and women revealed consistently high ratings of satisfaction with the intervention elements and facilitation (Schiff, et al., in press). Although ethnically diverse, all couples were predominantly English-speaking and had been living in the U.S. for several years. Future work should expand application of Project Connect to monolingual Spanish couples, more recent U.S. immigrants, or to other areas of the world.

Involving hospital staff as collaborators

Due to the logistical challenges of providing research-based services in a practice setting, involvement of site staff as collaborators was key to the study's success. Prior to research implementation, nursing, social work, medical, and administrative staff at the site were invited to several luncheon meetings describing the purpose of the study and exploring any staff concerns related to the project. Staff was invited to provide feedback regarding the most effective way to implement the study, identify participants, assure confidentiality, and other study protocols. Staff reciprocated by assisting with referrals to the study. Study staff updated site staff regularly about the progress of the study and kept an open ear to any issues or concerns arising among site staff concerning the study. This collaborative effort played a major role in our ability to successfully recruit and retain the sample, while providing staff with a sense of satisfaction that some clients were receiving HIV preventive services.

Use experienced facilitators

Although innovative and potentially effective, relationship-based interventions that include couples should be facilitated by experienced clinicians. Dyadic interventions involve basic presentation skills joined with the skill to manage the complex and emotional dynamics between intimate partners. Successful delivery of a manualized intervention while attending to couple-specific and individually-specific needs requires a number of years experience and/or a graduate level degree. Although the use of experienced staff may be more expensive, the cost savings of implementing the prevention program should outweigh these costs, should the intervention demonstrate effectiveness.

Focus on relationship strength

Focusing on the relationship of two participants was a powerful and moving experience for many couples. Relationship-based issues are particularly important and relevant for women (Jordan, 1997; Miller, 1976) and may open up new opportunities for service provision. Relationship-based services are relatively rare in human service settings, particularly in urban communities. One of the reasons for such resistance to relationship-based services is the seeming lack of relevance or direct application to the lives of those under study. The burden is on the researcher to engage urban minority participants so that their participation may result in some benefit to them, to their families, and community. Similarly, entitlement policies, including the former Aid For Dependent Families (AFDC) have historically discouraged partnership among poor, urban families receiving assistance. Unmarried partnerships are often perceived socially as merely convenience and given little respect. Bringing focus back to partnership and encouraging men and women to value and respect their relationship can be a strong motivator for health-related behavior change. Many couples shared feelings of surprise and delight that they were able to discuss relationship issues with their partners, which strengthened their ability to discuss more intimate details together, including a safer sex plan for the future.

Focus on communication

The single most powerful skill upon which couples were able to build HIV prevention plans was communication. In process evaluations, couples mentioned the Speaker/Listener technique (Markman, et al., 1996) most often as their favorite aspect of the intervention (Schiff, Witte, & El-Bassel, in press). Couples indicated that learning how to be an active listener and experiencing being heard by their partner were very powerful experiences. While many STD/HIV prevention programs encourage safer sex communication with partners, few assess levels and effectiveness of communication on less sensitive areas first. If couples are unable to express themselves effectively and be heard when discussing day-to-day life issues such as household chores, it is unsuitable to expect them to discuss and negotiate more sensitive safer sex issues well. Given the ability to learn and practice communication skills, couples can better integrate safer sex negotiation into their relationship.

Focus on expanding choice

Couples praised the concept of having choices for risk reduction behaviors. An important element of Project Connect was adopting a philosophical stance for harm reduction and a safer sex hierarchy, as opposed to a male condom-only message. This approach helps couples find room for compromise for some harm or risk reduction versus no change in behavior, when one or both partners are averse to male condom use. This approach also opens up a number of other dialogues including harm reduction in other aspects of life (i.e., smoking, drugs, alcohol) and expanding options for lower risk behaviors (i.e. mutual and parallel masturbation, fellatio, and cunnilingus).

Challenges identified

Couple collusion

No prevention program is successful with every participant. Similarly, there were couples in Project Connect whose feedback indicated that they did not intend to adopt or practice safer sex in their relationship. While relationship-based work with couples has great advantages, one disadvantage is having to break through the collusion of a couple where both insist they are not at any STD or HIV risk. Although couples orientation provides more opportunity for intervention, if both participants are firmly in denial of their HIV risk it can be a challenge to persuade them to consider change. At the same time, couples colluding in their denial of risk can be taught information and skills that they would be willing to impart to family and friends. Appealing to a sense of altruism (to teach others preventive practices) still provides the opportunity for skill modeling and practice. This process at least engages the couple in considering risk behaviors and risk-reduction planning, which is better than no consideration. Despite our inability to succeed in every couple adopting safer sex practice, prevention programs must remain motivated to try and make a difference for each one no matter how small.

Safety

Some feminist literature warns against providing couples counseling in relationships experiencing domestic violence (Balcom & Healey, 1990; Bograd, 1984). This recommendation is grounded in real concerns for the abused partner's safety. Although no Project Connect couples reported engaging in severe abuse, some women reported having experienced mild to moderate abuse (i.e. slapping, hair-pulling) by their partner. Couples who reported mild abuse were able to engage successfully in the intervention and develop communication and negotiation skills. No incidents of abuse that occurred as a result of the intervention were reported for these couples.

Resource commitment

Recruiting and retaining couples for study requires a considerable commitment on the part of staff and study resources. At least one male and female recruiter/interviewer should be available each day of recruitment to address any questions or concerns on the part of potential study participants and to assist in scheduling interviews and sessions. In addition to staff commitment, tracking databases that can monitor recruitment and assist in regular mailings and phone contacts should be established and maintained.

Implications for HIV prevention for heterosexual couples

Future HIV prevention interventions targeting men and women in long-term intimate relationships should continue to utilize and build on the concept of relationship as a point of intervention. Moreover, because many intimate relationships come to an end over time, protective and communication skills acquired in the current relationship may be internalized and then generalized to future intimate relationships. HIV intervention for women and their intimate regular partner must consider that relationship factors such as couple dynamics, intimacy, stage of the relationship, power imbalances, etc. have been found to be barriers to condom use.

References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Engelwood Cliffs, NJ: Prentice Hall.
- Amaro, H. (1995). Love, sex and power: Considering women's realities in HIV prevention. *American Psychologist*, 50, 437–447.
- Baker, S., Morrison, D., Gillmore, M., & Schock, M. D. (1995). Sexual behaviors, substance use, and condom use in a sexually transmitted disease clinic sample. *The Journal of Sex Research*, 32, 37–44.
- Balcom, D. A. & Healey, D. (1990). The context of couples treatment for wife abuse. In M. P. Mirkin (Ed.), *The social and political contexts of family therapy*. Boston: Allyn and Bacon.
- Bandura, A. (1986). *Social foundations of thought and action: A social and cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1994). Social cognitive theory and exercise of control over HIV infection. In R. DiClemente & J. Peterson (Eds.), *Preventing AIDS: Theories and methods of behavioral interventions* (pp. 25–29). New York: Plenum Press.
- Basen-Engquist, K. (1992). Psychosocial predictors of “safer sex” behaviors in young adults. *AIDS Education and Prevention*, 4, 120–134.
- Becker, M. (1974). The health belief model and personal health behavior. *Health Education Monograph*, 2, 324–473.
- Bograd, M. (1984). Family systems approaches to wife battering: A feminist critique. *American Journal of Orthopsychiatry*, 54, 558–568.
- Bronfenbrenner, U. (1979). The ecology of human development. *American Psychologist*, 32, 513–531.

Catania, J. A., Coates, T. J., Stall, R., Turner, H., Peterson, J., Hearst, N., Dolcini, M. M., Hudes, E., Gagnon, J., Wiley, J., & Groves, R. (1992). Prevalence of AIDS-related risk factors and condom use in the United States. *Science*, 258, 1101–1106.

Catania, J., Coates, T., Golden, E., Dolcini, M., Peterson, J., Kegeles, S., Siegel, D., & Fullilove, M. (1994). Correlates of condom use among black, Hispanic, and white heterosexuals in San Francisco: The AMEN longitudinal survey. *AIDS in Multi-Ethnic Neighborhoods survey. AIDS Education & Prevention*, 6, 12–26.

Catania, J., Kegeles, S., & Coates, T. (1990). Towards an understanding of risk behavior: An AIDS Risk Reduction Model (ARRM). *Health Education Quarterly*, 17, 53–72.

Centers for Disease Control and Prevention. (2000). *HIV/AIDS Surveillance Report*. Atlanta, GA: U.S. Department for Health and Human Services.

Deschamps, M., Pape, J., Haffner, A., Hyppolite, R., & Johnson, W. (1991). Heterosexual activity in at risk couples for HIV infection (p. 318). Abstract WC3089 presented at the Seventh International AIDS Conference.

DiClemente, R., & Wingood, G. (1995). A randomized controlled trial of an HIV sexual risk-reduction intervention for young African-American women. *Journal of the American Medical Association*, 274, 1271–1276.

El-Bassel, N., Cooper, D., & Chen, D. (1998). Social support and social networks among women on methadone. *Social Service Review*, 72, 379–401.

El-Bassel, N., Ivanoff, A., Schilling, R., Gilbert, L., & Borne, D. (1995/a). Preventing HIV/AIDS in drug-abusing incarcerated women through skills-building and social support enhancement: Preliminary outcomes. *Social Work Research*, 19, 131–141.

Fishbein, M., & Middlestadt, S. (1989). Using the theory of reasoned action as a framework for understanding and changing AIDS-related behaviors. In V. M. Mays, G. W. Albee & S. F. Schneider (Eds.), *Primary prevention of AIDS* (pp. 92–110). Newbury Park, CA: Sage.

Fisher, W., & Fisher, J. (1993). A general social psychological model for changing AIDS risk behavior. In J. Pryor & G. Reeder (Eds.), *The social psychology of HIV infection*, (pp. 127–153). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Fullilove, R. E., Fullilove, M. T., Bowser, B. P., & Gross, S. A. (1990). Risk of sexually-transmitted disease among black adolescent crack users in Oakland and San Francisco, California. *Journal of the American Medical Association*, 262, 851–855.

Higgins, D., Galavotti, C., O'Reilly, K., Schnell, D., Moore, M., Rugg, D., & Johnson, R. (1991). Evidence for the effects of HIV antibody counseling and testing on risk behaviors. *Journal of the American Medical Association*, 266, 2419–2429.

Ickovics, J., & Yoshikawa, H. (1998). Preventive interventions to reduce heterosexual HIV risk for women: Current perspectives, future directions. [Review]. *AIDS*, 12(Supplement A), S197–208.

Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11, 1–47.

Jemmott, J. B., III, Jemmott, L. S., & Hacker, C. I. (1992). Predicting intentions to use condoms among African American adolescents: The theory of planned behavior as a model of HIV risk associated behavior. *Journal of Ethnicity & Disease*, 2, 371–380.

Jordan, J. V. (1997). A relational perspective for understanding women's development. In J. V. Jordan (Ed.), *Women's Growth in Diversity: More Writings From the Stone Center* (pp. 9–24). New York: The Guilford Press.

Kelly, J. A., St. Lawrence, J. S., Hood, H. V., & Brasfield, T. L. (1989). Behavioral intervention to reduce AIDS risk activities. *Journal of Consulting and Clinical Psychology*, 57, 60–67.

Kelly, J. A. (1995). Advances in HIV/AIDS education and prevention. *Family Relations*, 44, 345–352.

Marin, B., & Marin, G. (1992). Predictors of condom accessibility among Hispanics in San Francisco. *American Journal of Public Health*, 82(4), 592–595.

Markman, H., Stanley, S., & Blumberg, S. (1996). *Speaker/listener technique*. Denver, Colorado: Educational Products, Inc.

Miller, J. B. (1976). *Toward a new psychology of women*. Boston: Beacon Press.

Misovich, S., Fisher, J., & Fisher, W. (1997). Close relationships and elevated HIV risk behavior: Evidence and possible underlying psychological processes. *Review of General Psychology*, 1, 72–107.

Moss, H. B., & Tarter, R. E. (1993). Substance abuse, aggression and violence: What are the connections. *American Journal on Addictions*, 2, 149–159.

New York State Department of Health AIDS Institute. (1992, July). *Focus on AIDS in New York State*. In *Women and HIV Prevention: Methods of Personal Protection*, a policy statement.

O'Leary, A. (1999). Preventing HIV infection in heterosexual women: What do we know? What must we learn? *Applied Preventive Psychology*, 24, 89–98.

O'Leary, A., & Wingood, G. (2000). Interventions for sexually active heterosexual women. In J. Peterson & R. DiClemente (Eds.), *Handbook of HIV prevention* (pp. 179–197). New York: Kluwer Academic/Plenum Publishers.

- Padian, N., O'Brien, T., Chang, Y., Glass, S., & Francis, D. (1993). Prevention of heterosexual transmission of human immunodeficiency virus through couple counseling. *Journal of Acquired Immune Deficiency Syndromes*, 6, 1043–1048.
- Pleck, J., Sonenstein, F., & Ku, L. (1993). Changes in adolescent males' use of and attitudes toward condoms, 1988–1991. *Family Planning Perspectives*, 25, 106–110, 117.
- Schiff, M., Witte, S. S., El-Bassel, N. (in press). Client satisfaction and perceived helping aspects of an HIV/AIDS preventive intervention for urban couples. *Research on Social Work Practice*.
- Schilling, R., El-Bassel, N., Schinke, S., Gordon, K., & Nichols, S. (1991). Building skills of recovering women drug users to reduce heterosexual AIDS transmission. *Public Health Reports*, 106, 297–304.
- Schilling, R. F., El-Bassel, N., Hadden, B., & Gilbert, L. (1995). Skills-training groups to reduce HIV transmission and drug use among methadone patients. *Social Work*, 40(1), 91–101.
- Sormanti, M., Pereira, L., El-Bassel, N., Witte, S. S., & Gilbert, L. (2001). The role of community consultants in designing an HIV prevention intervention. *AIDS Education and Prevention*, 13(4), 311–328.
- Van der Straten, A., King, R., Grinstead, O., Serufilira, A., & Allen, S. (1995). Couple communication, sexual coercion and HIV risk reduction in Kigali, Rwanda. *AIDS*, 9, 935–944.
- Van der Straten, A., Vernon, K., Knight, K., Gomez, C., & Padian, N. (1998). Managing HIV among serodiscordant heterosexual couples: Serostatus, stigma and sex. *AIDS Care*, 10(5), 533–548.