HIV/STD Prevention Interventions for Couples and Families: A Review and Introduction to the Special Issue

Willo Pequegnat
National Institute of Mental Health, Bethesda, Maryland

James H. Bray
Baylor College of Medicine

While tremendous progress has been made in the prevention and treatment of HIV, individuals continue to be at risk of acquiring HIV. There is increased recognition that interventions need to target couples and families in at-risk populations. This article provides an introduction to this special issue on couples, families, and HIV and a review of research on couple and family interventions for prevention of HIV. The section on couples focuses on prevention programs for heterosexual couples while the section on families focuses on family based prevention programs for adolescents. This review demonstrates the efficacy of couple and family interventions to reduce HIV risk behavior and to increase other HIV-related behaviors in couples and to prevent HIV risk behaviors in families. Implementation of these evidenced-based interventions in couple and family practice are discussed.

Keywords: HIV/STD prevention, couples, families, evidence-based interventions

Tremendous progress has been made in HIV prevention and treatment during the last three decades because of a “Manhattan Project” level of commitment (Pequegnat & Stover, 2000). Even with these efforts a person dies every eight minutes from HIV/AIDS and for every individual who initiates antiretroviral treatment (ART), two to three individuals will become HIV infected. In the 1980s, there were strategies from behavioral medicine (smoking cessation, social–cognitive theory) that were adapted to jumpstart HIV prevention programs, but investigators were initially hampered because there was a limited database on sexuality and determinants of specific risky behaviors that put people at risk for HIV.

While the first decades of HIV/AIDS prevention programs were designed for individuals, recent research indicates interventions for couples and families have more impact in both preventing the spread of HIV and its consequences (El-Bassel et al., 2010; Pequegnat, 2011). As the epidemic continues, the age at which individuals become infected is reduced, so 50% of all new HIV infections occur among young people aged 10–24 who are dependent on their family for care (UNAIDS/WHO, 2005). Second, women, especially monogamous, minority women, who are major caregivers for their families, represent an increasing number of new HIV cases. Another trend is the focus of HIV prevention and intervention research with couples, especially HIV serodiscordant couples (El-Bassel et al., 2005; El-Bassel et al., 2010; Cohen et al., 2011; Donnell et al., 2010). There is greater understanding that couples’ relationship patterns and dynamics determine whether safe sexual practices are adopted. This article focuses on two areas. First, this article reviews the literature on couple and family interventions for prevention of HIV. Second, this article provides an introduction to this special issue on couples, families, and HIV. The articles in this issue represent state of the art evidence-based practices for couple and family based practice.
Levels of Prevention

To prevent an epidemic in HIV or sexually transmitted diseases (STDs), individuals must change their risky behaviors. However, the intervention does not need to be delivered to individuals to ensure they change their behaviors. Interventions at multiple levels: individuals, couples, families, communities, and societal (technology, policy, laws, built environment), are necessary to mount an AIDS prevention social movement (Pequegnat & Stover, 2000).

In addition to identifying the most effective level to deliver the prevention program, the developmental level and gender of the target population must be considered. If a preadolescent is not yet sexually active, a prevention program delivered to the parents that teaches them the skills to help their children delay their sexual debut is appropriate (Krauss & Miller, 2011). If the adolescent is sexually active, then a sexual education program is more appropriate when reinforced by effective parenting and monitoring skills (DiClemente, Salazar, & Crosby, 2006). Prevention programs for young adult couples focus on use of condoms and negotiating safer sexual behaviors (Harvey et al., 2004).

Couple and family interventions have been developed to prevent HIV transmission and its consequences. The section on couples focuses on prevention programs for heterosexual couples while the section on families focuses on prevention programs for both parents and adolescents. In the text we review and discuss the studies; summaries of all of the studies are provided in Tables 1 and 2.

Dissemination and Implementation of Evidence-Based Practices

Much of the research reviewed in this article was supported by grants from the National Institute of Mental Health (NIMH) Office on AIDS. The NIMH is committed to developing evidence-based practices for preventing and

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Design</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen et al., 1992</td>
<td>60 serodiscordant couples</td>
<td>Prospective</td>
<td>HIV voluntary counseling and testing (VCT); condoms</td>
</tr>
<tr>
<td>Padian et al., 1993</td>
<td>144 serodiscordant couples</td>
<td>Trial with no control group</td>
<td>Intensive couples counseling</td>
</tr>
<tr>
<td>De Vincenzi et al.,</td>
<td>304 HIV− subjects with HIV+ partners (196 women, 108 men)</td>
<td>Prospective</td>
<td>HIV VCT; condoms</td>
</tr>
<tr>
<td>Deschamps et al.,</td>
<td>475 serodiscordant couples</td>
<td>Prospective</td>
<td>HIV VCT; condoms</td>
</tr>
<tr>
<td>Coates et al., 2000</td>
<td>586 couples</td>
<td>Randomized controlled trial</td>
<td>2 arm: HIV VCT or basic information</td>
</tr>
<tr>
<td>El-Bassel et al.,</td>
<td>217 couples</td>
<td>Randomized controlled trial</td>
<td>3 arm: 6 session with women alone; 6 sessions with regular male partner; 1 session with women alone</td>
</tr>
<tr>
<td>Harvey et al., 2004</td>
<td>146 women and partners</td>
<td>Randomized controlled trial</td>
<td>2 arm: couples-focused HIV risk reduction vs. couples focused education standard of care</td>
</tr>
<tr>
<td>Farquar et al., 2004</td>
<td>308 women and their partners</td>
<td>Prospective</td>
<td>2 arm: individual or couples VCT</td>
</tr>
<tr>
<td>El-Bassel et al.,</td>
<td>535 African American serodiscordant couples</td>
<td>Randomized controlled trial</td>
<td>2 arm: 8 session Eban HIV/STD Risk Reduction Intervention or 8 session Eban Health Promotion Intervention</td>
</tr>
<tr>
<td>Study</td>
<td>Sample</td>
<td>Design</td>
<td>Intervention</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>CHAMP I</strong></td>
<td>639 families (parents and 4th and 5th graders)</td>
<td>Quasi-experimental</td>
<td>2 arms: 12 session family-based education and skills-building: (1) parents only (parental monitoring, conflict resolution) and (2) children only (social problem solving, identifying risk situations and control)</td>
</tr>
<tr>
<td>(McBride et al., 2007; McKay et al., 2004)</td>
<td></td>
<td>posttest-only</td>
<td></td>
</tr>
<tr>
<td><strong>CHAMP II</strong></td>
<td>500 families and 324 children (4th and 5th graders)</td>
<td>Randomized controlled trial</td>
<td>2 arms: 12 week family based program (see above) and control</td>
</tr>
<tr>
<td>(McKay et al., 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CHAMP IV</strong></td>
<td>450 South African pre-adolescents (9–12 years old) and adult caregivers</td>
<td>Randomized controlled trial</td>
<td>2 arms: 10-session intervention based on Theory of Triadic (interpersonal, social normative, cultural/attitude) focusing on HIV information, less stigmatizing attitudes, parental monitoring, comfort discussing difficult topics; a school-based HIV information.</td>
</tr>
<tr>
<td>(CHAMPSA) (Bell et al., 2008)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CHAMP V</strong></td>
<td>32 parents/caregivers and youth (average age 12 1/2)</td>
<td>Pre-test and post-test</td>
<td>2 arms: Adaptation of family-based program for Trinidad and Tobago</td>
</tr>
<tr>
<td>(Baptiste et al., 2005, 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Families Affected by HIV (FAH) (Rotheram-Borus et al., 2006)</td>
<td>307 HIV + parents and 420 children</td>
<td>Randomized controlled trial</td>
<td>2 arms: 12 sessions covering 3 modules totaling 24 sessions focused on adapting to serostatus; stopping risk behaviors; and bereavement.</td>
</tr>
<tr>
<td><strong>Mother-Daughter Risk Reduction</strong> (Dancy, 2003)</td>
<td>262 mother and daughter (11 to 14 years old) pairs</td>
<td>Randomized control trial</td>
<td>3 arms: 62-hour sessions covering reproductive health, STDs, HIV knowledge, assertiveness and decision-making, condom use.</td>
</tr>
<tr>
<td><strong>Keepin’ it R.E.A.L!</strong></td>
<td>277 fathers and 11 to 14 year old sons</td>
<td>Randomized controlled trial</td>
<td>3 arms: 14 week with 4 sessions mother and daughter 3 sessions separately; Social Cognitive Theory-based and Problem Behavior Theory-based programs compared to a Life Skills Program.</td>
</tr>
<tr>
<td>(Responsible, Empowered, Aware, Living) (Dilrio et al., 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PATH</strong></td>
<td>238 parents and 10 to 13 child dyads (mother-daughter, mother-son; father-son, father-daughter)</td>
<td>Randomized controlled trial</td>
<td>2 arms: Parent Training Program with detailed program material and facilitators or materials.</td>
</tr>
<tr>
<td>(Parent/Preadolescent Training for HIV Program; Krauss et al., 2000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Keepin It R.E.A.L.</strong></td>
<td>277 fathers and 11 to 14 year old sons</td>
<td>Randomized controlled trial</td>
<td>2 arms: 7 2-hour sessions; 6 sessions; social cognitive theory based programs focused on person factors such as self-efficacy for parenting and communication skills.</td>
</tr>
<tr>
<td>(Responsible, Empowered, Aware, Living) Men (Dilrio et al., 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*table continues*
adapting to HIV/AIDS. The Office on AIDS had a special focus on couple and family oriented research. Beginning in 1994, the NIMH convened an annual conference, The Role of Families in Preventing & Adapting to HIV/AIDS, to disseminate the findings from these research projects. The conference rotated around the United States in cities where the research was conducted. A separate Community Day was later developed to help local service agencies, HIV prevention service providers, and other clinicians implement the interventions into practice. Workshops were offered by key researchers to disseminate the prevention programs and interventions during Community Day to clinicians. To further disseminate this research, a community day was incorporated into the annual convention of the American Psychological Association beginning in 2009 (APA, 2009, 2010). Dissemination materials and information about local services for prevention and treatment of HIV

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Description</th>
<th>Design</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Informed Parents and Children Together)</td>
<td>237 parents and 12 to 16 year old children</td>
<td>Randomized controlled trial</td>
<td>2 arms: 1-hour session with 20-minute video focused on adolescent’s behavior, facts on sex, risk reduction strategies and condom use, parental monitoring or attention control.</td>
</tr>
<tr>
<td>ImPACT (Stanton et al., 2000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familias Unidas (Pantin et al., 2003)</td>
<td>167 parents and youth</td>
<td>Randomized controlled trial</td>
<td>2 arms: intervention focused on increasing parental involvement, family communication and reducing adolescent behavior problems (sexual risk, drug use)</td>
</tr>
<tr>
<td>Familias Unidas + PATH (Prado et al., 2007)</td>
<td>266</td>
<td>Randomized controlled trial</td>
<td>3 arms: Familias Unidas + PATH, English for non-English speakers + PATH; English for non-English speakers + Heart program</td>
</tr>
<tr>
<td>Strong African American Families (SAAF) (Murry et al., 2007)</td>
<td>285 parents and adolescents</td>
<td>Randomized controlled trial</td>
<td>2 arms: 7 2-hour sessions; parent sessions focus on monitoring, parental practices, communication about sex, racial socialization; adolescent sessions focus on reducing risk behavior, peer pressure, dealing with difficult situations, racism and a control group focused on stress management</td>
</tr>
<tr>
<td>Project STYLE (Donenberg et al., 2001)</td>
<td>Parents and 13–18 male and female adolescents with psychiatric disorders</td>
<td>Randomized controlled trial</td>
<td>2 arms: based on Social-Personal Framework emphasizing personal attributes, family context, peer and partner relationships; 3 modules focused on Learning about HIV/STDs, parent-teen communication; parent-teen communication, identify/manage risky behaviors; condom skills, parent-teen about sexual values</td>
</tr>
</tbody>
</table>

Note. CHAMP = Chicago HIV Prevention and Adolescence Mental Health Project.
were developed and are available by contacting the first author or authors cited in this article.

Interventions for Couples

Heterosexual contact is a major route of HIV transmission. Wyatt, Moe, and Guthrie (1999) reported that almost three out of four HIV-positive African American women were infected by their husbands or steady partners. Dunkle et al. (2008) estimated that 60% to 94% of new heterosexually acquired HIV infections occurred within marriage or cohabitation. Therefore, an intervention for couples that reduces transmission in serodiscordant cohabiting couples from 20% to 7% every year could avert 35% to 60% of heterosexually transmitted HIV infections.

Clinical Issues in Couples at Risk for HIV Infection

There are multiple issues that must be considered when implementing prevention programs or providing clinical services for couples at risk for HIV infection. Knowledge of these issues and contextual factors are important to successfully implement the interventions. First, in many cases, one of the partners can be placed at risk by the other partner’s HIV risky behavior. A monogamous woman may be at risk because her partner has a concurrent partner (male or female) or visits prostitutes. This has led to a major investment in female-controlled methods (e.g., female condoms, microbicides) that can be used by the at risk partner (Abdool Karim et al., 2010). The other major transmission issue is encountered by individuals who have coupled with someone of the opposite HIV serostatus (Cohen et al., 2011; Donnell et al., 2010; El-Bassel et al., 2010).

Second, studies have noted low rates of condom use in couples in committed relationships (Catania et al., 1992); women with steady male partners (Wingood & DiClemente, 1998); HIV-positive women (Wyatt, Moe, & Guthrie, 1999); HIV-negative partners of HIV-positive women (Hunt, Myers, & Dyce, 1999); and couples with low education (Maharau & Cleland, 2005). Assessing correct and consistent condom use is therefore an important element of any prevention effort.

Third, evidence suggests that STDs facilitate the spread of HIV (Grosskurth et al., 2000). Deschamps, Pape, Hafner, and Johnson (1996) corroborated that seroconversion to HIV was more likely when an STD was present in the seronegative partners than when it was present in the HIV-infected partners. A person with an STD is two to five times more likely to be HIV positive than a person without an STD.

Fourth, male-to-female transmission is estimated to be eight times more likely than female-to-male transmission. In one study, 38% of women contracted HIV through heterosexual contact, as opposed to 7% for men (Padian, Shiboski, Glass, & Vittinghoff, 1997). Increased male-to-female transmission may occur because of the greater exposed surface area in the female genital tract combined with the fact that semen contains more virus than seminal fluid (WHO, 2000; 2009). Infection with STDs has also been associated with an increased risk of women acquiring new HIV infection because genital ulcers and the immune response associated with an STD infection make it easier for HIV to enter the body.

Couple Intervention Studies

Studies with couples have provided compelling evidence of the utility of relationship-oriented interventions. The basis of the interventions is voluntary counseling and testing (VCT) programs, in which couples are given health information about HIV, STDs and the importance of condom use for prevention of HIV and STD transmission. Regular testing for HIV and STDs provides additional accountability and feedback to the couples. Some of the programs include communications skills to help the couples discuss these sensitive issues in a more effective manner and deal with the power imbalance between men and women. Treatment manuals or protocols were developed by the research teams and can be used for implementation in clinical practice. It is important to note that these interventions have been demonstrated to be effective with a broad range of couples from diverse ethnic and socioeconomic backgrounds. Table 1 summarizes the studies reviewed in this section.

Allen et al. (1992) offered a confidential HIV testing and condom program for 60 serodiscordant couples in Rwanda. The proportion of dis-
cordant couples using condoms increased from 4% to 57% 1-year after the intervention ended. During the follow-up assessment, two of the 23 HIV negative men and six of the 30 HIV negative women seroconverted. This rate for women was less than half that estimated for similar women in discordant couples whose partners had not been serotested. Condom use was less common among those who seroconverted. In subsequent studies there was strong confirmation of the public health value of interventions at the couple level. Men’s participation was also associated with significant reductions in HIV and gonorrhea rates among the women (Allen et al., 2003). The strongest predictors of condom use were a seropositive test result in women and HIV testing and counseling of the male partners. At the 2-year follow-up, HIV-negative women whose partners had participated were 50% less likely to become seropositive than were those whose partners had not participated.

In one of the first studies to evaluate couples voluntary counseling and testing (VCT) in the United States, Padian, O’Brien, Chang, Glass, and Francis (1993) corroborated Allen’s results in a longitudinal intervention with mixed serostatus couples. Although the study lacked a control group, the proportion of couples reporting consistent condom use increased from 49% at baseline to 88% at follow-up. At the 16-month follow-up, no seronegative partner had become HIV positive.

In another VCT study with men and women who had seropositive partners (De Vincenzi, 1994), 130 couples (42.8%) ended their sexual relationship, usually because of partner’s illness or death. Of the 256 couples that had sexual relations, 121 (48.4%) used condoms consistently and none of the seronegative partners became infected with HIV, despite a total of about 150,000 episodes of intercourse. Among the couples that did not use condoms consistently, 9.9% seroconverted.

Further evidence of the utility of couple interventions comes from a study in Haiti (Deschamps, Pape, Hafner, & Johnson, 1996). Among the 177 couples that remained sexually active, 20 seroconversions occurred but only one seroconversion occurred among the 42 sexually active couples that always used condoms. In contrast, the incidence in the 135 couples that remained sexually active but infrequently or did not use condoms, 19 individuals seroconverted.

The first multicountry randomized controlled trial (RCT) to test the efficacy of VCT with couples was conducted in Africa and the Caribbean (VCT, 2000). The couples assigned to VCT reduced unprotected intercourse with their enrollment partners significantly more than couples assigned to the health information group. The proportion of men who reported unprotected intercourse with nonprimary partners declined significantly more for those who received VCT (35% reduction) compared with those who received health information (13% reduction). HIV-infected men in the VCT condition were more likely than uninfected men to reduce unprotected intercourse with primary and nonprimary partners, whereas HIV-infected women were more likely than uninfected women to reduce unprotected intercourse with primary partners.

El-Bassel and colleagues (2003) conducted one of the first RCTs to test the efficacy of a relationship based HIV/STD prevention intervention with low-income urban couples in the United States. The 6-session intervention for couples or women alone was efficacious in reducing unprotected sex at both the 3- and 12-month follow-up assessments.

While most of the studies have focused exclusively on HIV risk reduction in couples, some studies have looked at other couple-based issues. Few studies have worked with Hispanic couples. Harvey et al. (2004) designed the Partners Project that focused on HIV risk reduction with high risk Hispanic couples and more effective contraceptive use. At the 3-month follow-up, couples in both the HIV risk reduction group and the education standard of care group did not report using more condoms, however the number of unprotected sexual acts decreased in both groups. These results may be due to the fact that this couple intervention was delivered in a group format that may not have permitted the acquisition of couples skills building that have been identified as important to sexual behavior change. Also, because the initial face-to-face evaluation interview was conducted for one hour, it may have functioned as an intervention that sensitized couples in the control group to issues of HIV risk reduction.
Farquhar et al. (2004) conducted another test of VCT effectiveness at an antenatal clinic. Participating couples were randomly assigned to a couples VCT or individual VCT program. Among 2,104 women accepting testing, 308 (15%) had partners who participated in VCT, of whom 116 (38%) were couple counseled. Partner notification of HIV positive results was reported by 138 women (64%) and was associated with fourfold greater likelihood of condom use. Partner participation in VCT and couple counseling increased the uptake of nevirapine and formula feeding.

The NIMH Multisite HIV/STD Prevention Intervention for African American Couples Trial focused on low-income older serodiscordant African American couples (El-Bassel et al., 2010). Condom-protected intercourse was practiced significantly more often among couples in the intervention group (77%) than in the comparison group (47%). The percentage of couples using condoms consistently was higher in the intervention group (63%) than in the comparison group (48%). The number of unprotected intercourse acts was lower in the intervention group than in the comparison group. The STD incidence did not differ between groups at the 12 month follow-up.

Several interventions examining treatment as prevention in serodiscordant couples have had excellent results and are extremely important studies (Cohen et al., 2011; Donnell et al., 2010). However, the emphasis of the studies was testing a biomedical intervention and, therefore, are not included in this review of behavioral interventions.

**Summary of Couple Interventions**

While few of these studies were randomized controlled trials, the preponderance of the evidence demonstrates that couple HIV prevention interventions are more efficacious in promoting condom use among HIV-serodiscordant couples and preventing HIV seroincidence than traditional HIV prevention interventions aimed at individuals (Allen et al., 1992). More contemporary couples-based approaches are also associated with commitment to reduce gender-power imbalances that impact condom use and to increase sexual communication and negotiation skills (El-Bassel et al., 2010; El-Bassel et al., 2003).

**Family Interventions**

Both researchers and health professionals recognize the importance of the family in health promotion and disease prevention. The family has a role in preventing HIV transmission among its members and is also the de facto caretaker for HIV-infected members who are facing a chronic illness (Pequegnat & Szapocznik, 2000). Health care and mental health service providers are being challenged by the need for comprehensive family based programs because multiple family members can be at risk and already HIV infected (Pequegnat, Bauman, Bell, Bray, DiIrio, Icard, ... Wyatt, 2009).

In recognition of the changing demographics of families, the NIMH Consortium on Families and HIV/AIDS defines family as “a network of mutual commitment” (Pequegnat & Bray, 1997). Family networks include foster parents, extended family members, and nonblood members who function as relatives. Family membership can be fluid, but it is essential to specify who the members of the family are when conducting research or providing clinical services. Using a traditional biological or legal view of families may not capture the important relationships that are central to helping families at risk or infected with HIV. Researchers and clinical providers can use the genogram (pictorial display of a person’s family relationships and medical history) to identify members of the index person’s family (as defined above) and patterns of behavior among them (Bray & Frugé, 2000; Mitrani, Szapocznik, & Batista, 2000).

**Clinical Issues in Working With Families at Risk for HIV**

Certain family dynamics and relationship patterns are consistently related to positive or negative adjustment and health of family members (Bray, 1995; Robbins, Szapocznik, Alexandra, & Miller, 1998). Reciprocal communication, problem solving, warm affect, social support (within and outside the family), and caregiving are predictive of positive outcomes, while conflict, negative affect and psychological separation are associated with behavioral problems (e.g., early sexual debut, alcohol and drug abuse, delinquency, etc.; Bray, 1995; Donenberg, Emerson, Bryant, Wilson, & Weber-Shifrin, 2001; Szapocznik & Kurtines, 1993).
Parents are usually adolescents’ primary sex educators because they are best able to time their discussions to when their children are open to learn new information (“teachable moments”; Szapocznik & Coatesworth, 1999). Parents do a lot more than present information about sex; they communicate values, model appropriate behavior, encourage bonding to family and school, monitor the behavior of their children and their friends, and encourage children to form a long-term view of their behavior (Bell, Flay, & Paikoff, 2002). Because parents can continue to deliver HIV risk reduction messages, over time preventions can have an increased impact (Prado et al., 2010)

**Family Influences on Adolescent Sexual Behavior**

Families influence adolescent sexual behavior in four primary ways, and these are the focus of family based HIV prevention programs: (a) parental monitoring and control; (b) affective parenting behavior (warmth, support); (c) parental attitudes about sex; and (d) parent-adolescent communication.

**Parental monitoring and control.** Parental monitoring and authoritative parental style are consistently associated with less risky sexual behavior, fewer sexual partners, less pregnancy, and increased condom use among youth (Miller, Levin, Whitaker, & Xu, 1998; Bell et al., 2008) and delaying sexual activity among adolescents (Stanton et al., 1993). Donenberg, Wilson, Emerson, and Bryant (2002) found low levels of parental permissiveness, rates of risky sex among boys and girls did not differ, but at high levels of permissiveness girls reported more sex while using drugs and alcohol without a condom.

**Parental warmth and support.** Higher parental warmth and support predict less adolescent risk taking (Donenberg et al., 2001; Whitbeck, Conger, & Kao, 1993). Conversely, family conflict and early pubertal maturation are associated with earlier sexual debut (Paikoff, 1995). Further, higher levels of mother’s coercive behavior and withdrawal of love predict earlier age of first intercourse for women (Miller et al., 1998).

**Parental attitudes about sex.** Parents are the role models for their children’s attitudes toward sex and sexual behavior, and influence their sexual debut, activity, and condom use (Wilder & Watt, 2002). Frequent parent–child discussions about sex and health topics are associated with a delay in initiating sex and more responsible sexual behaviors (Dilorio, Pluhar, & Belcher, 2003; Stanton et al., 1993).

**Parent-adolescent communication.** Parents and their children do not speak sufficiently about sexuality (Hutchinson & Cooney, 1998). Mother-adolescent discussions regarding condom use prior to first sexual intercourse increase the chances that adolescents will use condoms during first and subsequent sexual intercourse (Miller et al., 1998). The probability of girls engaging in sex increased among those who perceived problems with familial communication, while it remained stable for those perceiving less problem communication (Nappi, Donenberg, & McBride, 2009)

**Family-Based Prevention Programs**

Over the past 20 years, the National Institute of Mental Health has provided important support for research to develop family based HIV prevention programs (Pequegnat & Szapocznik, 2000; Pequegnat & Bell, 2011). The primary prevention programs have been based on systems theories and have borrowed heavily from Bronfenbrenner’s (1986) social ecological theory. This work recognizes that adolescents’ sexual behavior is part of their social development and that parents have a critical role in guiding and shaping the social and sexual development of their children. Parents are the primary influence on children until adolescence, when youth focus on developing autonomy and friends and peers have an increasing influence on their social and sexual behaviors (Stanton et al., 2000). Parents, however, continue to have an enduring and direct impact on their children’s risk taking decisions.

The basis of the family interventions reviewed in this section is to help parents utilize effective parenting and family relationship skills and knowledge. The parenting and relationship skills were identified from general family and parenting research and have been modified to address adolescent sexuality and help reduce HIV risk behaviors. Of note is that these interventions were developed and tested with a broad range of cultural and ethnically diverse families. Treatment manuals and protocols have
been developed by the research teams and are available for use in clinical practice. Table 2 presents a summary of the studies reviewed in this section.

In 1994, Paikoff and colleagues launched CHAMP I (Chicago HIV Prevention and Adolescence Mental Health Project) to address increased rates of adolescent HIV/AIDS exposure in minority neighborhoods (Paikoff, 1995). When compared to the control group, families in CHAMP I showed increased family decision making, improvements in parental monitoring, family comfort in discussing sensitive topics, more neighborhood supports, decreased parental anxiety and depression, and fewer disruptive difficulties with children (McBride et al., 2007). The youth in the families who participated in the intervention reported significantly less frequent and fewer sexual possibility situations than those in the comparison condition. Youth in the intervention group, however, reported significantly higher levels of family conflict than the comparison group, which could be due to the fact that they were having more discussions about important and sensitive topics.

Based on findings from the original study, CHAMP has been adapted in different settings. CHAMP II was developed for the Southside of Chicago. Sixty percent of the youth in the intervention families reported using condoms every time and 72% reported using condoms at last intercourse (Tolou-Shams, Paikoff, McKirnan, & Holmbeck, 2007). The youth also reported less aggressive and disruptive behaviors.

To explore how to transfer this family based prevention program, CHAMP III was designed to adapt the CHAMP program to community service agencies in Chicago and New York (Baptiste et al., 2007). This work highlights the dissemination process of an evidence-based, efficacious intervention in the real world.

CHAMP IV—also known as CHAMPSA or the AmaQhawe Family Project—was a cultural adaptation for families and communities in South Africa (Bhana et al., 2004). Families who participated in CHAMPSA were likely to be better informed about HIV/AIDS transmission, have less HIV stigmatizing attitudes, have greater parental monitoring of children’s activities and adherence to the family rules, and have increased parental comfort communicating about difficult topics. There was also less neighborhood disorganization and greater neighborhood social control and cohesion (Bell et al., 2008).

CHAMP V was adapted for families in Trinidad and Tobago in the Caribbean, which has the second highest rate of HIV per capita in the world. Preliminary results indicated that the youth in the CHAMP group reported increased frequency of discussions about HIV/AIDS, decreased frequency of discussions about gangs, and increased parental expectations that they be at a certain place at a particular time (Baptiste, Voisin, Smithgall, Martinez, & Henderson, 2007).

Rotheram-Borus and her colleagues (2004) conducted a long-term study of Project TALC (Teens and Adults Learning to Communicate) that was designed for HIV-positive parents and their adolescents. Project TALC improved mental health in the parent and adolescents (e.g., reduced conduct disorders, anxiety, and depression) and decreased drug use, the number of sexual partners, and pregnancies among adolescents. The intervention also had an impact on the HIV-positive grandchildren even though they did not receive the intervention directly.

Dancy (2003) developed the Mother/Daughter HIV-Risk Reduction (MDRR). At the 2-month posttest, compared to adolescents in the health promotion control condition, the adolescents in the mother-daughter intervention and the health expert risk reduction had significantly higher scores on HIV transmission knowledge, self-efficacy to refuse sex, and intention to refuse sex. The adolescents in the health promotion condition were more likely to be sexually active than in the other two conditions (Dancy, Crittenden, & Talashek, 2006).

Dilorio, McCarty, Resnicow, Lehr, and Denzmore (2007) also developed a prevention program for mothers and adolescents called Keep’ it R.E.A.L.! (Responsible, Empowered, Aware, Living) made up of two programs based on social–cognitive theory (SCT) and problem behavior theory (PBT). The results indicate that there were no differences in delay of sexual intercourse between the two programs. However, the adolescents in the PBT program reported an increase in condom use and those in the SCT and control group demonstrated higher levels of knowledge about HIV. Mothers in the SCT program reported talking about more sexual topics, and mothers in the SCT and PBT program indicated greater intent to discuss and
more comfort in discussing sexual topics than those in the control group.

Dilrio and her colleagues (2007) also developed a version of \textit{R.E.A.L.} for fathers and their sons to enhance the father’s role in postponing the sexual debut of their adolescent sons. Adolescents whose fathers participated in the SCT program reported significantly higher rates of sexual abstinence, condom use, and intent to delay initiation of sexual intercourse. Fathers in the program reported significantly more discussions about sexuality, greater intention to discuss sexuality in the future with their sons, and reported more confidence discussing sexual issues and more positive outcomes associated with those discussions (Dilorio et al., 2007).

While most family based prevention programs have been developed for mothers, Krauss et al. (2000) designed the PATH (Parent/Preadolescent Training for HIV) program for both mothers and fathers. This study demonstrated that an intervention delivered by either a mother or father to either adolescent boys or girls can reduce the HIV-risk-associated sexual behaviors (Krauss et al., 2007). This intervention also demonstrated a protective effect in increased delay of first intercourse for male and female youth. As the youth matured to age 15, approximately 25% of control and intervention youth became sexually active. The delay in sexual initiation, however, was longer for children of parents offered training (a protective effect of 25–30 months) for both boys and girls.

The Informed Parents and Children Together (ImPACT) was designed by Stanton and colleagues (2004) to reduce adolescent truancy, substance abuse, and sexual risk behaviors by improving parenting skills. After 24 months, the adolescents who participated with their parents in ImPACT had significantly higher self-efficacy to engage in low risk HIV behaviors. However, adolescents in both groups did not differ on school truancy, substance abuse, and sexual risk behaviors (condom use).

In the \textit{Familias Unidas} program parents assume the role of AIDS educators. This intervention was evaluated in two randomized controlled trials. In the first trial Pantin et al. (2003) found that their 9-month intervention was efficacious in decreasing behavior problems, although it did not improve academic achievement. In the second trial, Prado et al. (2007) demonstrated the efficacy of \textit{Familias Unidas + PATH} on improving communication, positive parenting and family support compared to two attention controls. The results showed that \textit{Familias Unidas + PATH} were efficacious in reducing current illicit drug use, reducing current cigarette use, and unprotected sexual behavior at last sexual encounter. \textit{Familias Unidas + PATH} also had a positive effect on smoking. Improvements in positive parenting (reward contingencies offered by parents) and in parent-adolescent communication explained some of the effects of the interventions on cigarette and illicit drug use. These findings provide strong evidence for the importance of family based interventions.

Based on a decade of research with rural African American families and youth, Murry, Berkel, Brody, Gibbons, and Gerrard (2007) designed the Strong African American Family (SAAF) to prevent HIV-related risk behaviors. Results demonstrated that SAAF was efficacious in reducing rural African American youths’ vulnerability to HIV-related risk behavior through the intervention’s effect on parenting practices and its effect on youth intrapersonal protective factors. Families who participated in SAAF experienced increases in better family communication. The youth experienced heightened racial identity, elevated self-esteem, increased acceptance of body image and physical attractiveness, and deterrence to substance use and sexual intercourse.

Project STYLE fills a gap because it is a family based intervention for parents and their adolescents with psychiatric disorders. Contrary to reports of youth in outpatient care (Donenberg et al., 2001), sexual risk behavior was associated with a wide range of psychiatric disorders including internalizing problems (Brown et al., 2010).

**Summary of Family-Based Interventions**

In summary, these studies demonstrate that parents can be taught to be effective HIV/AIDS educators: they can effectively impart information as well as teach their children skills to protect themselves in risky situations. The studies also provide corroborative evidence that the quality of parent–child relations and communication are important predictors of sexual risk behaviors. Across the studies, adolescents who reported low levels of parental support or more emotional dis-
tance and separation from their families were more likely to engage in sexual behaviors at a younger age. Conversely, adolescents’ who felt that they have close relationships with their parents was protective against early initiation of sexual intercourse.

**Introduction to Special Issue**

When researchers and health care providers tackle problems associated with preventing HIV infection, it is important that they work with couples and families to increase the impact of their intervention. Couple and family research provides a framework for investigating the processes through which psychological, social, and cultural factors influence the health and well-being of all family members. The evidence-based interventions reviewed in this article are effective in reducing the spread of HIV and helping couples and families adapt.

This special issue focuses on some of the latest findings from the HIV/STD literature on couples and families and demonstrates that interventions for couples and families have the potential to be more effective than for interventions directed only at individuals. The article by El-Bassel and Wechsberg (this issue, pp. 94–105) makes the case for the importance of couple-based HIV interventions because they address the context of sexual behavior and the dynamics of relationships that are missing from individual approaches. The Huebner and Hoff article (this issue, pp. 106–119) provides the first qualitative data on how gay men evaluate and implement their dual roles as a partner and parent. Lightfoot and Milburn (this issue, pp. 120–133) review family based prevention efforts and identify the common elements that are associated with efficacious outcomes with families and children. Szapocznik and his colleagues (this issue, pp. 134–145) developed a model for early adoption of an evidence-based family therapy program by health agencies that builds on a long history of groundbreaking work by his research team. This brief family therapy is designed to prevent behaviors that result in early initiation of sex and the acquisition of HIV/STDs, delinquency and jail, and substance abuse. Based on data from a couples study, Wyatt and her colleagues (this issue, pp. 146–159) provide a case study of individuals who have experienced childhood sexual abuse and how that history impacts their current relationship and their need for other services.

The programs reviewed and illustrated in this special series be disseminated in a variety of settings with different populations. Several of the programs have been adapted for different cultures. Further, the programs address the health disparities in HIV prevention and treatment. Based on the findings reported in this special issue, it is imperative that policymakers, community-based programs and service providers offer these evidence-based prevention programs for couples and families to reduce the risk of HIV infection and negative impact on the lives of couples and families.

**References**


Couple and Family Psychology: Research and Practice, 1, 134–145.


Received March 26, 2012
Revision received April 24, 2012
Accepted April 25, 2012

Call for Nominations

Nominations for the editorship of Training and Education in Professional Psychology for the years 2014–2019 are open. Emil R. Rodolfa, PhD, is the incumbent editor.

Candidates should be available to start receiving manuscripts in early 2013 to prepare for issues published in 2014. Please note that the P&C Board encourages participation by members of underrepresented groups in the publication process and would particularly welcome such nominees. Self-nominations are also encouraged.

Eugene J. D’Angelo, PhD, ABPP, and Gary R. VandenBos, PhD, will chair the search.

Candidates should be nominated by accessing APA’s EditorQuest site on the Web. Using your Web browser, go to http://editorquest.apa.org. On the Home menu on the left, find “Guests.” Next, click on the link “Submit a Nomination,” enter your nominee’s information, and click “Submit.”

Prepared statements of one page or less in support of a nominee can also be submitted by e-mail to Sarah Wiederkehr, Editor Search Liaison, at swiederkehr@apa.org.

Deadline for accepting nominations is July 15, 2012, when reviews will begin.