

mental health AIDS

A Quarterly Update from the AIDS Education and Training Centers (AETC) National Resource Center Volume 4(3), Spring 2003

Biopsychosocial Update

HIV Prevention News

About Men Who Have Sex with Men

Canadian investigators (Calzavara et al., 2003) studied 183 men who have sex with men (MSM; 62 who seroconverted within 12 months of study enrollment, 121 HIV-negative matched controls) and found that recent seroconversion was associated with receptive unprotected anal intercourse (UAI) and delayed application of condoms during receptive anal intercourse with partners who were HIV-positive or of unknown status; the latter practice is thought to involve contact with preejaculatory fluid as a risk factor. Indeed, the authors suggest that *contact with preejaculatory fluid may pose as much risk as full receptive UAI. "Preventive counseling must continue to focus on ensuring that condoms are always used for anal sex, but it must also emphasize the potential risks of exposure to preejaculatory fluid and reinforce the importance of applying the condom before any penetration"* (p. 216).

Semple, Patterson, and Grant (2003) studied sexual risk behavior in 322 MSM living with HIV who reported UAI with a partner who was HIV-negative or of unknown status during the preceding four-month period. UAI was more likely when men had steady rather than casual partners, were *not* receiving highly active antiretroviral therapy (HAART), reported greater use of alcohol or drugs, and expected negative outcomes to the negotiation of safer sex and condom use. With regard to unprotected oral sex, this behavior was also more likely to occur with steady than with casual partners.

The authors offer the following recommendations to clinicians addressing sexual risk behavior in HIV-positive MSM: 1) engage in problem-solving exercises that empha-

size the benefits of safer anal sex and downgrade the reinforcing properties of UAI; 2) eroticize the (non-simultaneous) use of "male" and "female" condoms when engaging in anal intercourse; 3) motivate men to maximize the effectiveness of HAART by avoiding potential reinfection with drug-resistant strains of HIV or other sexually transmitted diseases (STDs); 4) explore and highlight the link between substance use and unsafe sexual behavior; 5) promote increased intimacy (i.e., more touching and hugging) in steady partnerships, "dismantle emotional issues from sexual needs and desires, increase relationship-specific communication skills and focus on the reinforcement value associated with protecting one's partner and feeling good about one's self" (p. 12); 6) enhance positive outcome expectancies regarding safer sex negotiation and condom use "through observations, role modeling, skill performance, positive feedback and reinforcement techniques" (p. 12); and 7) alert men to the small, but possible risk to self and others associated with unprotected oral sex.

Stueve et al. (2002) recruited a community-based, urban sample of 3,075 MSM between the ages of 15 and 25 and found that "being high [on drugs or alcohol] increases the likelihood that young MSM will engage in receptive UAI with nonmain partners, [a] result [that] holds across racial and ethnic groups. Thus, it is critical that HIV prevention programs include developmentally and culturally appropriate messages about the potential dangers of drinking and drug use in situations where sexual encounters with casual partners may occur" (p. 493).

By contrast, Gillmore et al. (2002) asked a community sample of 147 MSM between

the ages of 18 and 35 to complete a daily diary regarding their substance use and sexual behavior over an eight-week period. In their event-based, within-subjects analysis (i.e., examining variations in the behavior of each subject over time), they found *no* relationship between the use of condoms and having consumed drugs and/or alcohol in the four hours prior to engaging in anal intercourse. Unlike Stueve and colleagues, these investigators found that condoms were more likely to be used with casual than with steady partners and by men who were HIV-negative than by men who were HIV-positive. The authors attribute divergent findings from other studies to measurement differences or confounding situational or personality variables and advocate for more research in this area.

In a thoughtful discussion, Gillmore and colleagues observe that

Clinicians might argue that there is no harm done by encouraging men to reduce their drinking and drug use because both can be shown to have harmful health consequences when consumed in excess. [And yet,] conveying the idea that "high = high-risk" may provide men with a justification for engaging in risky sex (e.g., "I was drunk") or

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distract ... from ... the more important and complex problem of negotiating safer sex. Moreover, such advice may foster the illusion that one is safe if one avoids substance use in conjunction with sexual activities, and runs the risk of creating skepticism about public health messages if men discover that their substance use is not compromising their sexual safety. Thus, continuing the message that "high = high-risk" is not without possible adverse consequences if it is not true. (pp. 366-367)

Continuing with studies that add clarity to longstanding concerns, Vanable, Ostrow, and McKirnan (2003), based on measures taken from 60 gay men living with HIV, note that,

contrary to our hypothesis, ... men who reported having an undetectable viral load were *less* rather than more likely to report [UAI] with a nonprimary partner relative to those reporting a detectable or unknown viral load. Although a significant minority endorsed the belief that an HIV-positive partner with an undetectable viral load is less infectious, such beliefs were unrelated to sexual risk taking. Rather, in the multivariate analysis, only treatment-related reduced HIV concern emerged as a significant predictor of high-risk sexual behavior. Once demographic factors and treatment attitudes were controlled for, HIV viral load was no longer a significant predictor of [UAI]. These results suggest that treatment-related attitudes,

rather than perceived health status, are of central importance to understanding the impact of HIV treatment advances on sexual risk behavior among people living with HIV. (p. 267)

Similarly, Dilley et al. (2003) surveyed and interviewed a convenience sample of 248 gay and bisexual men seeking anonymous HIV counseling and found that only a small number at high risk for infection have increased their risk behavior as a consequence of recent advances in medical treatment for HIV. The authors wisely note, however, that the language used by providers to describe treatments may influence how these treatments are perceived by men at risk and, in turn, influence decisions regarding safer sex that are based on interpretations of these messages. "If it is true, as our data would suggest, that how some individuals think about risk of infection or the possibility of 'treatment' has an influence on their 'decision' to engage in risk, it is important for providers to exercise caution in how they discuss the issues involved" (p. 35). As an example, rather than suggesting a positive outcome through the use of such terms as "post-exposure prophylaxis" or "post-exposure prevention," Dilley and colleagues caution clinicians to use more neutral terms, including "post-exposure management" or "post-exposure care," as these wordings better convey the uncertainty inherent in these interventions. "Using such terms will not only be more accurate, but may also help those at risk be more realistic in their assessment of the potential risks and benefits of high-risk behaviour" (p. 35).

O'Leary, Purcell, Remien, and Gomez (2003) studied 456 MSM living with HIV in either New York or San Francisco and found that a history of childhood sexual abuse was associated with UAI, both insertive and receptive, during the preceding 90-day period with partners who were either HIV-negative or of unknown status. Furthermore, several known sequelae of childhood sexual abuse (anxiety, hostility, and suicidality) were found to be associated with sexual risk behavior in adulthood; the first two were associated with insertive acts, while all three were associated with receptive acts. As for psychological factors playing a mediational role between childhood sexual abuse and UAI, those factors listed here were found to partially account for the association with receptive anal intercourse, while unmeasured factors (other than those listed here) likely account for the association with insertive anal intercourse. Nevertheless, the authors suggest that the provision of high-quality mental health services to survivors of childhood sexual abuse may serve a preventive role by addressing psychological distress and thus potentially limiting further transmission of the virus by MSM who are already HIV-infected.

About Women & Men

Drawing on a community-based convenience sample of 1,494 racially and ethnically diverse men and women, Ross, Essien, Williams, and Fernández-Esquer (2003) found a relatively *low* rate of concordance between self-classified sexual identity (i.e., heterosexual, bisexual, homosexual) and self-reported sexual behavior over the preceding three-month period. Moreover, there was considerable variation across racial/ethnic groups in this sample; concordance was highest for Asian respondents (both male and female) and lowest among white male respondents. Despite the biased sampling procedures, Ross and colleagues conclude that "[i]t is likely to be highly misleading to use self-reported sexual identity as a guide for the provision of preventive and clinical services across all racial/ethnic groups ... and it seems that the fluidity of sexual behavior is not always adequately represented by self-labeling of sexual identity" (p. 113).

(Biopsychosocial Update is continued on Page 4)

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Tool Box

Resources

Books & Articles:

Antoniou, T., & Tseng, A.L. (2002). Interactions between recreational drugs and antiretroviral agents. *Annals of Pharmacotherapy*, 36(10), 1598-1613.

The authors "summarize existing data regarding potential interactions between recreational drugs and drugs commonly used in the management of HIV-positive patients" (p. 1598).

Brooks, R., Rotheram-Borus, M.J., Bing, E.G., Ayala, G., & Henry, C.L. (Eds.). (2003). HIV prevention for men of color who have sex with men (MSM) and men of color who have sex with men and women (MSM/W). *AIDS Education & Prevention*, 15(Suppl. A), 1-138.

This February 2003 supplement "covers three key areas in HIV prevention research: (a) social, contextual, and cultural factors and their relationship to increased risk behaviors among MSM and MSM/W of color; (b) characteristics of MSM and MSM/W of color that place them at risk ..., and (c) HIV prevention strategies targeting MSM and MSM/W of color" (p. 4).

Carney, J.S. (2003). Understanding the implications of HIV disease in women. *The Family Journal: Counseling & Therapy for Couples & Families*, 11(1), 84-88.

Carney offers a concise overview of physical, psychological, social, and relational concerns specific to women living with HIV.

Cruess, D.G., & Evans, D.L. (Eds.). (2003). Psychiatric symptoms during HIV disease: Physiologic mechanisms and potential treatments. *CNS Spectrums*, 8(1), 20, 25-30, 40-63.

The January 2003 issue of *CNS Spectrums* reviews research literature on the prevalence and impact of psychiatric symptoms among people living with HIV as well as the effectiveness of pharmacologic and stress management interventions in treating these symptoms.

Daar, E.S., Cohen, C., Remien, R., Sherer, R., & Smith, K. (2003). Improving adherence to antiretroviral therapy. *The AIDS Reader*, 13(2), 82, 85-86, 88-90.

The authors highlight the challenges posed by antiretroviral regimens and how providers can work to maximize adherence.

Fry, C.L., & Lintzeris, N. (2003). Psychometric properties of the Blood-borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ). *Addiction*, 98(2), 171-178.

Fry and Lintzeris have developed a standard measure of blood-borne virus transmission risk

behaviors (i.e., specific injecting, sexual, and skin penetration/hygiene risk practices) for use in research and clinical settings.

Heckman, T.G. (2003). The chronic illness quality of life (CIQOL) model: Explaining life satisfaction in people living with HIV disease. *Health Psychology*, 22(2), 140-147.

The CIQOL model theorizes that "life satisfaction in persons living with a chronic illness such as HIV disease is a function of illness-related discrimination, barriers to health care and social services, physical well-being, social support, and coping" (p. 140). Heckman concludes that the model "can facilitate endeavors to understand and improve life satisfaction in persons living with HIV disease" (p. 146). Importantly, "the CIQOL model identifies psychosocial constructs amenable to change via intervention but leaves open to the practitioner both intervention content and delivery modality" (p. 146).

Hunt, B., Jaques, J., Niles, S.G., & Wierzalis, E. (2003). Career concerns for people living with HIV/AIDS. *Journal of Counseling & Development*, 81(1), 55-60.

A small qualitative study assessing the perceived impact of HIV on career development and goals, with implications for career counseling.

Miller, D., & Green, J. (Eds.). (2002). *The psychology of sexual health*. Oxford, England: Blackwell Science Ltd.

A compilation of advances in theory and practice pertaining to a host of psychological issues underlying sexual health, with several chapters devoted to HIV/AIDS.

Reynolds, N.R. (2003). The problem of antiretroviral adherence: A self-regulatory model for intervention. *AIDS Care*, 15(1), 117-124.

"It has become increasingly clear that HIV medication adherence is exceedingly complex and effective interventions to improve adherence can be developed only to the extent that we understand mechanisms underlying behaviour. The proposed model attempts to make explicit the processes underlying ... adherence behaviour and may be used to guide the development of a multicomponent intervention" (p. 121).

Ringel, S. (2002). Dreaming and listening: A final journey. *Clinical Social Work Journal*, 30(4), 359-367.

Ringel contextualizes dream material presented by a male client living with AIDS at the close of his life within both the client's struggle with the process of dying as well as the therapeutic relationship between them.

Valdiserri, R.O. (Ed.). (2003). *Dawning an-*

swers: How the HIV/AIDS epidemic has helped to strengthen public health. London: Oxford University Press.

This volume "charts the legacy of the global HIV/AIDS epidemic to the theory and practice of public health. ... [T]he many public health lessons learned as a result of the epidemic have positively influenced other domains of public health and will continue to exert an influence on new approaches to health assessment, policy development, and assurance."

Yarhouse, M.A., & Anderson, G. (2002). Persons with HIV/AIDS. *Journal of Psychology & Christianity*, 21(4), 333-340.

The authors discuss "the proper posture Christians might take in relationship to the AIDS epidemic. Christian mental health professionals are called upon to provide services to persons with HIV/AIDS in a spirit of humility and integrity, reflecting to the marginalized and stigmatized their worth as image bearers of God" (p. 333).

Internet Resources:

Swanson, J., & Cooper, A. (2002, December). *Dangerous liaison: Club drug use and HIV/AIDS* [Article]. Chicago, IL: International Association of Physicians in AIDS Care Monthly. Retrieved January 24, 2003, from the World Wide Web: <http://www.iapac.org/Text/pdf/Dec2002Web.pdf>

Swanson and Cooper examine the effects and risks of club or recreational drugs, the settings for their use, HIV sexual transmission risk linked to drug use, their possible interaction with HAART, prevention and risk reduction strategies, and assessment and treatment approaches for drug abuse or dependency.

O'Neill, J.F., Selwyn, P.A., & Schietinger, H. (Eds.). (2003, February 25). *Clinical guide on supportive and palliative care for HIV/AIDS (2003 edition)* [Document]. Rockville, MD: HIV/AIDS Bureau, Health Resources & Services Administration. Retrieved February 28, 2003, from the World Wide Web: <http://hab.hrsa.gov/tools/palliative/>

HRSA has released a five-part guide to optimizing quality of life for people living with HIV throughout the disease course by actively working to prevent or reduce pain and suffering.

Nonoccupational Human Immunodeficiency Virus Postexposure Prophylaxis Guidelines for Rhode Island Healthcare Practitioners, designed to help evaluate and intervene in cases of potential exposure to HIV when prevention strategies have failed or could not be implemented (e.g., during a sexual assault), are available at: <http://www.brown.edu/Departments/BRUNAP/backnpep.htm>

--Compiled by Abraham Feingold, Psy.D.

(*Biopsychosocial Update--continued from Page 2*) Gore-Felton and Koopman (2002) drew data from a diverse sample of 64 men and women living with HIV and found that: 1) moderate to severe symptoms of trauma were associated with unprotected intercourse during the three months preceding the study; 2) reliving the trauma (i.e., flashbacks, nightmares) was associated with having more sexual partners during the same period; 3) more intense symptoms of intrusion and avoidance were associated with unprotected intercourse; and 4) controlling for demographics, the greater the severity of the sexual coercion (i.e., the number of times coercion occurred), the greater the symptoms of intrusion, and the lesser the symptoms of avoidance, the greater the amount of sexual risk behavior. These authors, like O'Leary and colleagues (above), conclude that "reducing trauma symptoms among adults with moderate to severe symptoms may be a particularly effective HIV-prevention intervention for adults living with HIV/AIDS" (p. 122).

Neighbors and O'Leary (2003) presented 10 scenarios depicting a steady female partner's request to use condoms to 84 randomly selected, domestically violent and nonviolent male inmates and found that scenarios suggesting that the women had been unfaithful had the lowest likelihood of condom use and/or the highest possibility of violence, particularly among men with a history of domestic violence. By contrast, the greatest likelihood of condom use and a non-violent response was elicited by the woman's concerns regarding yeast infections, with responses to this scenario more favorable than to standard HIV prevention messages. "The results suggest that creative strategies that do not call into question the fidelity or commitment of either partner may be more effective in getting men to use condoms and/or to not react violently" (p. 93) although, "if ... alternative negotiation strategies [are] used, [a woman] would have to make assessments of the level of knowledge of [her partner] and the credibility of the message in the context of her relationship" (p. 106).

About Women

From questionnaires completed by a con-

venience sample of 95 sexually-active white female college students, Wayment and Aronson (2002) discerned that women with greater self-perceived ability to introduce and use condoms in sexual situations experienced fewer barriers to their use and were more likely to have used them. While women with higher levels of guilt associated with sex had fewer partners and were more likely to use condoms, they also experienced more barriers to condom use and lower condom use self-efficacy. Similarly, women reporting histories of sexual abuse also trended toward a reduced likelihood of using condoms. From these findings, Wayment and Aronson conclude that

effective interventions should be two-fold; the first aspect ... would ... help women to feel more control over sexual matters by teaching them that they are responsible for their own sexual health and have the right to make sexual decisions. This component would address any guilt over sexual matters that women may have, as well as help them to understand that the right to make healthy decisions is independent of the type of relationship (casual versus steady). The second part of the intervention could target condom use self-efficacy ... Teaching women to use condoms, role-playing conversations with sexual partners and reducing perceived barriers to condom use would be an effective means of preparing women to have healthy sexual encounters. Women who experience guilt over sexual matters ... would learn that they have the power to make sexual decisions, as well as the tools necessary to keep themselves protected from unwanted sexual outcomes. Women who had a history of sexual abuse would [also] benefit [from this approach] ... (p. 731)

Baker et al. (2003) randomly assigned 229 heterosexual women at risk for HIV and other STDs to one of two 16-session group interventions – health education or skills training based on the relapse prevention model – and followed these women for 12 months post-intervention. When comparing the two groups, they found that women

receiving either intervention reported significant reductions in sexual risk behavior at one year; however, women who received the skills training demonstrated stronger risk-reduction *skills* and were less likely to be diagnosed with an STD than women receiving health education only. Based on this sample, the authors conclude that the skills training intervention was superior to health education for reducing the acquisition of STDs among at-risk women.

Sterk, Theall, and Elifson (2003) assigned 265 African-American, out-of-treatment crack cocaine users to one of three interventions: a four-session, enhanced HIV intervention focused on motivation, a four-session, enhanced HIV intervention focused on negotiation, or a two-session, National Institute on Drug Abuse (NIDA) standard condition. Interestingly, exposure to *any* of these conditions led to reductions in drug-use and sexual risk behavior at six-month follow-up. "Although women in our negotiation condition may have improved their negotiating skills in general, continued drug use in a setting where such skills are more difficult to enforce would render them less effective. In comparison, women in the motivation condition were less likely to place themselves in risky drug-using settings but also lacked negotiation skills that may come into play in other settings (e.g., condom use with a steady partner). Components of both interventions may prove useful for reducing the risk of HIV infection among similar populations of women" (p. 30).

HIV Assessment News

HIV Counseling & Testing

To assess the persuasiveness of messages designed to promote HIV testing, Apanovitch, McCarthy, and Salovey (2003) randomly assigned 480 low-income, ethnic minority women at "relatively high risk" for HIV to watch either one of two videotaped educational programs that were "gain-framed" (i.e., emphasizing the benefits of HIV testing) or one of two that were "loss-framed" (i.e., emphasizing the costs of avoiding HIV testing). As predicted, the authors found that, among women who felt certain that they had a low risk of testing positive, "gain-framed" messages were associated with more self-reported HIV test-

ing at six months post-intervention than "loss-framed" messages. Among women who were uncertain about the outcome of testing (i.e., believing there was some risk of testing positive), testing rates did not vary based on the message viewed (i.e., while "a bit of an advantage" for the "loss-framed" message was noted, the expected strong advantage of this frame among women who believed HIV testing to be a relatively risky behavior with an uncertain outcome was not observed). Nevertheless, Apanovitch and colleagues conclude that it is critical to tailor motivational messages about HIV testing to an individual's perception of certainty regarding the outcome of testing, rather than their objective risk of testing positive. "[G]ain-framed messages provide a way to persuade individuals who may underestimate their risk for HIV and those who view HIV testing as a behavior that serves to confirm their healthy status. Conversely, loss-framed messages may be useful in motivating individuals already concerned about their HIV risk" (p. 66).

Conversely, focusing on disincentives to taking up testing (or periodic retesting in the case of ongoing risk), Spielberg et al. (2003) surveyed a diverse sample of 460 people at high risk for HIV (based on needle use and/or sexual behavior) in Seattle, 87% of whom had tested previously, and found several perceived barriers to HIV testing, including: fear of test results, concerns about discrimination, concerns about names reporting, insufficient financial resources to afford treatment (if needed), dislike of counseling procedures, the anxiety of waiting for test results, and the use of standard testing procedures (i.e., venipuncture). Many participants indicated a preference for rapid testing via clinics (27%) or home self-testing (20%), the latter preferred, in particular, among those who had never been tested; the preferred method of testing was evenly divided among oral fluid (18%), urine (17%), and blood (17%), with blacks sampled favoring urine testing. To improve acceptance of HIV counseling and testing, Spielberg and colleagues encourage clinicians to educate clients about : 1) the benefits and availability of current antiretroviral regimens should test results prove positive; 2) laws that protect people living with HIV from discrimina-

tion; 3) the meaning and availability of anonymous testing as well as confidentiality protections built into names reporting; 4) the availability of the AIDS Drug Assistance Program (ADAP) to facilitate treatment access for people who qualify based on income guidelines; and 5) the accuracy and safety of urine testing and oral fluid testing. They further observe that "[e]xpanding options for rapid testing, urine testing, and home self-testing; providing alternatives to venipuncture; making pretest counseling optional; and allowing telephone results disclosure may encourage more persons to learn their HIV status" (p. 318).

Psychiatric Assessment

Hingson, Heeren, Winter, and Wechsler (2003) surveyed 11,739 students from 128 randomly selected U.S. colleges and universities and found that "the younger respondents were when they first got drunk, the greater the likelihood that, in the past year, they had unplanned sex and unprotected sex that they reported to be attributable to drinking. Compared with drinkers who never got drunk before age 19, the younger respondents were when they first were drunk, the greater the likelihood they would report having unplanned and unprotected sex because of drinking, even after controlling for history of alcohol dependence, frequency of drinking, and numerous other characteristics associated with the age of first becoming drunk" (p. 39). They encourage clinicians to inquire about the age at which clients began drinking alcohol and first got drunk and alert them to the association between early onset of drinking and drunkenness and unplanned or unprotected sex.

Bova and Durante (2003) examined sexual functioning in 101 women living with HIV and found that 90% of these women remained sexually active after learning their HIV status, that more than one-third continued to engage in unprotected sexual behavior on a regular basis, that sexual functioning did not vary as HIV disease progressed, and that very few women attributed declines in sexual functioning specifically to HIV. Those women with better mental health, those who attributed more positive meaning to living with HIV, those with

fewer HIV-related symptoms and a higher quality of life, and those who never injected drugs enjoyed higher levels of sexual functioning. Bova and Durante urge clinicians to focus on sexual functioning in the context of a clinical assessment and address impediments to functioning.

In an exploratory study involving 40 adults with HIV-related fatigue, Barroso, Carlson, and Meynell (2003) found fatigue to be strongly associated with depression, state anxiety, and trait anxiety as well as three physiological factors (thyroid stimulating hormone [TSH; correlated negatively], platelets, and alkaline phosphatase [ALP]). Even among those with strong viral suppression, fatigue was common. According to the authors, "the strong relationships between fatigue and depression, and fatigue and anxiety, point to the need for clinicians to identify and treat these conditions aggressively in fatigued, seropositive patients. ... If treatment for depression or anxiety does not relieve the fatigue, this may point to the need to more aggressively pursue physiological causes" (p. 63).

Following up on a 1994 review of studies on reaction time performance among HIV-positive adults, Hardy and Hinkin (2002) tentatively conclude that: 1) reaction time, when measured by a variety of tasks, is generally slower in HIV-positive adults than HIV-negative controls and tends to worsen with disease severity (so that people living with AIDS are, on average, 22% slower than their uninfected counterparts); 2) slowing involves cognitive as well as motor processes; 3) not all cognitive processes are slowed (e.g., basic decision time, memory scanning, and repetition priming do not appear to be affected by HIV); 4) attentional processes (e.g., selective, divided, and possibly sustained attention) are affected by HIV, particularly when task demands are high; and 5) cognitive slowing has been shown to improve with the use of methylphenidate (Ritalin®), a psychostimulant. "Given the demonstrated sensitivity of [reaction time] tasks to the neuropsychological effects of HIV infection, it is recommended that [reaction time] tasks be included when possible in routine clinical evaluations of HIV-infected patients" (p. 912).

Parent-Child Assessment

Hough, Brumitt, Templin, Saltz, and Mood (2003) studied child psychosocial adjustment through surveys and interviews with 147 low-income, urban, primarily African-American mother-child dyads in which the mother was infected with HIV and her school-aged child was not. In order of importance, the factors found to affect the child's adjustment were: mother's HIV-associated symptom distress, mother's emotional distress, social support available to the child, the child's coping strategies, and the quality of the mother-child relationship.

Results ... suggest a need for including a child assessment component in the care protocol of HIV-positive women. Also, in addition to ... assessing both the mother's and child's need for ongoing social support, HIV-positive mothers and their children are in need of interventions that specifically address the development of effective coping skills. The mother's use of passive tension-reducing coping was found to have a deleterious effect on her level of emotional distress, which was a direct predictor of the child's psychosocial adjustment problems. Finally, the strong significant relation between maternal emotional distress and child psychosocial adjustment problems points to the need for comprehensive psychological assessment and treatment components in the care protocol of HIV-positive mothers. (p. 652)

HIV Treatment News

Medical Care

The National Institutes of Health (U.S. National Library of Medicine, 2003) discontinued a trial of Trizivir®, a three-drug combination of abacavir (ABC or Ziagen®), lamivudine (3TC or Epivir®), and zidovudine (ZDV, AZT or Retrovir®), when it was found to be less effective when used alone than in combination with other antiretrovirals.

On March 15, 2003, the Food and Drug Administration (FDA, 2003) approved enfuvirtide (Fuzeon™, also known as T-20) for use in combination with other antiretrovirals for the treatment of advanced HIV disease in adults and children. Enfuvirtide is

Building Block

Highlights from the 10th CROI

The 10th Conference on Retroviruses and Opportunistic Infections (CROI) was held in Boston from February 10-14, 2003. The points listed below highlight key studies presented at the conference:

- o Among the 25 U.S. states that report new HIV diagnoses to the Centers for Disease Control and Prevention (CDC), the number of new HIV cases increased by 8% between 1999 and 2001 while the number of new AIDS cases across all U.S. states and territories increased by 1% between 2000 and 2001, according to Valdiserri et al. (2003). This latter finding is the first recorded increase since 1993.

- o Based on an online survey involving approximately 3,000 visitors from all 50 states to the Web site gay.com, Chiasson et al. (2003) reported that gay men meeting partners online were more likely to engage in unprotected anal intercourse (UAI) than gay men meeting partners under other circumstances during the six months preceding the survey and that HIV-positive men meeting sex partners online were more likely to engage in UAI than men of HIV-negative or unknown status who use the Internet for similar purposes.

- o European investigators (Mocroft et al., 2003) followed 9,803 people living with HIV between 1994 and 2002 and found that the risk of progressing to AIDS or dying from it fell by 80% between 1994 and 1998 and continued to fall by 8% during each six-month period between September 1998 and 2002, reflecting the continuing benefit of antiretroviral treatment despite its problematic side effects.

- o With regard to side effects, a study of 23,468 European men and women living with HIV has revealed that the risk of myocardial infarction increased by 26% for each year that a person receives antiretrovirals (Friis-Møller et al., 2003). Other studies (Iloeje et al., 2003; Moore, Keruly, & Lucas, 2003) also reported dramatic increases in cardiovascular disease associated with the use of antiretrovirals.

the first fusion inhibitor approved by the FDA. "Fusion inhibitors interfere with the entry of HIV-1 into cells by inhibiting the merging of the virus with the cellular membrane, the first step in viral infiltration. This inhibition blocks HIV before it enters the human immune cell. ... Because of its unique mode of action, [enfuvirtide] may be

o In efforts to reduce drug toxicity, scientists continue to debate the overall benefit of structured treatment interruptions (STIs). Studies from Thailand (Ananworanich et al., 2003), Spain (Ruiz et al., 2003), and the United States (Dybul et al., 2003) now suggest that longer, more open-ended breaks, with treatment resumption tied to particular CD4 cell count or viral load thresholds, may have greater utility than shorter, more frequent interruptions; the latter appear to promote the development of drug-resistant strains of HIV.

- o American (Williams et al., 2003) and Swedish (Björkman, Flamholz, Naucler, Wallmark, & Widell, 2003) studies suggest that infection with a common and seemingly harmless virus, GBV-C (previously referred to as hepatitis G), is associated with a slowing of HIV disease progression and consequent increases in survival.

- o Several promising, experimental HIV drugs in development or in clinical trials were described, including Tanox's TNX-355, administered intravenously and effective for two to three weeks (Kuritzkes et al., 2003) and Roche and Trimeris' T-1249, an alternative that may be used once individuals develop resistance to enfuvirtide (Fuzeon™, the fusion inhibitor formerly known as T-20 that recently received FDA approval; Miralles et al., 2003).

References

Note: All references are to the Program and Abstracts of the 10th Conference on Retroviruses and Opportunistic Infections, held from February 10-14, 2003 in Boston, MA.

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active against HIV that is resistant to currently available classes of anti-HIV drugs" (FDA, 2003). The drug is administered twice daily by subcutaneous injection. Clinicians should be on the lookout for bacterial pneumonia as a possible complication of this medication; symptoms may include a cough with fever, rapid breathing, and shortness

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--Compiled by Abraham Feingold, Psy.D.

of breath and require immediate medical attention. Allergic reactions (e.g., chills, fever, vomiting, skin rashes) and signs of infection at the injection site should also prompt medical evaluation.

Contrasting with findings presented at the most recent CROI (see **Building Block**, p.

6), Bozzette, Ake, Tam, Chang, and Louis (2003) conducted a retrospective analysis involving 36,766 individuals receiving HIV care through VA facilities between 1993 and 2001 and concluded that metabolic side effects linked to the use of antiretrovirals do not appear to cause a larger number of heart attacks and strokes than would otherwise be expected in this largely male population; in fact, small decreases in the rates of heart attacks and strokes were noted, and death rates from all causes declined overall. "This finding indicates that, even if cardiovascular and cerebrovascular complications were considered to be as bad as death, HIV-infected patients have been enormously better off since the advent of [HAART]" (p. 709). The authors note, however, that longer-term studies are needed.

Psychiatric/Psychological/ Psychosocial/Spiritual Care Psychopharmacology

In a preliminary, prospective study, Currier, Molina, and Kato (2003) administered sustained-release bupropion (Wellbutrin®; 100-300 mg/day) to 20 HIV-positive or AIDS-diagnosed adults receiving outpatient treatment for major depressive disorder and report that the medication was well-tolerated and effective in the context of this six-week, open-label trial. The mean effective dose was 265 mg/day.

Neuropsychiatric Impairment

Cherner et al. (2002) conducted a full neuropsychological testing battery on 39 adults living with HIV within 18 months of their deaths and found that the identification of even *mild* neurocognitive problems was almost always associated with HIV-related encephalitis uncovered at autopsy.

[O]ur findings ... indicate that a relatively inexpensive and low-risk procedure – comprehensive neuropsychological testing – can be helpful in identifying patients that are likely to have HIV-related brain disease. ... Such patients would be ideal candidates for treatment studies with agents that may target [central nervous system] (CNS) pathology. These might include neuroprotective substances (e.g., memantine, CPI-1189) as well as agents designed to

improve the delivery of antiretroviral drugs to CNS tissues (e.g., p-glycoprotein inhibitors, brain-targeting chemical delivery systems). (p. 1566)

How do reaction time tests compare with full neuropsychological batteries? Gonzalez et al. (2003) compared the performance of 82 men living with HIV and suspected of experiencing neuropsychological impairments on a traditional neuropsychological test battery and the California Computerized Assessment Package-Mini (CaCAP-Mini; a small set of computerized reaction time tests). While summary scores from each set of instruments were associated with CD4 cell counts and cerebrospinal viral load, overall agreement on the classification of impairments between the batteries was low. "Data from this study suggest that traditional [neuropsychological] batteries and computerized reaction time tests do not measure the same thing, and are not interchangeable in examining HIV-related [neuropsychological] impairments" (p. 64).

In Canada, Murji et al. (2003) administered the California Verbal Learning Test (CVLT) to 154 white, well-educated, medically stable, and non-substance-abusing men living with HIV and identified four memory subtypes – Normal, Atypical, Subsyndromal, and Frontal-striatal – that were meaningfully related to neuropsychological functioning (i.e., the ability use effective learning strategies, to retain and retrieve information). According to Murji and colleagues, subtypal differences may help clinicians determine rehabilitative needs.

[I]ndividuals exhibiting the Atypical and Subsyndromal patterns may benefit from pragmatic compensatory strategies (e.g., day planner, palm pilot). Given the neurocognitive difficulties with learning, memory, speed, and problem solving, individuals in the Frontal-striatal group may need to be monitored with respect to their daily activities, particularly with more demanding tasks such as medication management skills, as well as tasks requiring multiple components and effortful processing. Depending on the severity of neurocognitive disturbances, there may be a

need for increased structure in daily routines and in the individual's environment. ... [E]arly delineation of learning and memory profiles may [also] have important advantages for the individual with HIV-1 infection, including appropriate referrals (i.e., assessment, counseling, medication), compensatory lifestyle

changes, and identification of at-risk individuals who may have difficulties carrying out daily tasks. (p. 13)

Adherence to Treatment

Hinkin et al. (2002) utilized a comprehensive neuropsychological test battery and Medication Event Monitoring System, as perhaps occurred in the Côté and Pepler study cited above, may also be hurtful. Italian investigators (Solano et al., 2001) studied 42 asymptomatic, HIV-positive individuals to observe the relationship between CD4 cell counts and emotion and found that those with the highest CD4 levels showed *intermediate* levels of expressed emotion, coupled with a high capacity for emotional processing. The authors conclude: "On the whole, our data appear to support the usefulness for health of a process of working through emotions, as a means of reorganizing experience internally, rather than as a process of release. [The findings go] against an idea of progressive improvement in health the more emotion is released, but, rather, [support] the idea of an optimal level of processing. On the other hand, [the capacity for working through emotions] shows a linear correlation with immune status" (p. 696).

Working Through Emotions Is Key

Both sets of investigators introduce an important concept to this discussion: processing. While emotional expression, in and of itself, may be beneficial within certain parameters, it the *processing* of emotions (referred to variously as "cognitive," "emotional," or "depth" processing) that holds even greater promise of health benefits.

Cognitive processing involves reflection and assimilation of past experiences. With individuals who engage in psychological inhibition, this process may be truncated, which may prevent these individuals from fully understanding or learning from their experiences ... Thus, psychological inhibition may be important in relation to immune status because it prevents cognitive processing, thus impeding the discovery of meaning and its psychological, and possibly, health benefits. (Eisenberger, Kemeny, & Wyatt, 2003, p. 221)

The benefits of processing are highlighted by O'Cleirigh et al. (2003), who compared essays describing reactions to trauma associated with becoming or being HIV-infected written by 46 long-term survivors of AIDS (i.e., people living four or more years past diagnosis before initiating protease inhibitors) and an equivalent comparison group of 89 HIV-positive individuals with

(MEMS) caps with a convenience sample of 137 adults taking HAART to study the impact of neuropsychological compromise and regimen complexity on medication adherence. They found that the latter two were associated with reduced adherence, with deficits in executive function, attention, and memory key to adherence difficulties. A out AIDS symptoms. Essays were scored for emotional expression (both positive and negative) and depth processing (i.e., positive cognitive appraisal change, a high level of experiential involvement, self-esteem enhancement, and adaptive coping strategies). The long-term survivors group scored higher on both emotional expression and depth processing than the group earlier on in the disease course. Importantly, depth processing was identified as the mediator between emotional expression and long-term survival with AIDS and was positively correlated with CD4 cell counts among female study participants. While emotional expression was also positively correlated with CD4 cell counts and negatively correlated with viral loads in female study participants, depth processing (and not emotional expression) was associated with adherence to antiretrovirals, perceived stress, and social support. The authors conclude that: 1) clients should be encouraged to disclose and process traumatic events, since the cognitive appraisal of trauma, client involvement in processing trauma, the restoration of self-esteem, and the employment of adaptive coping strategies appear to contribute to long-term survival with AIDS; and 2) HIV-positive women may derive particular benefit immunologically from emotional disclosure and depth processing of traumatic events, as reflected in improvements in viral load and CD4 cell counts.

Post-Processing: The Making of Meaning

One outcome of processing emotions is making meaning of life events, an activity that is central to several psychotherapeutic approaches. According to some researchers, it is through this psychological outcome that particular benefits may be seen.

Bower, Kemeny, Taylor, and Fahey (1998), for example, conducted interviews with 40 HIV-positive men – largely white and well-educated – who had recently lost a close friend or partner to AIDS, evaluated blood samples two- to three-years thereafter, and noted mortality over a four- to nine-year follow-up period. They found that those men who had "thought about the death and its implications for their own lives in some deliberate, effortful, or long-lasting way," (p. 983), which they refer to as "cognitive processing," were more likely to discover meaning from the death which, in turn, was reflected

Tool Box

Health Correlates of Cognitive Processing & Meaning-Making for People Living with HIV/AIDS

As readers of *mental health AIDS* may recall, Canadian investigators (Côté & Pepler, 2002) randomized 59 male inpatients with advanced HIV disease to one of three conditions: a brief cognitive coping skills intervention, a brief intervention focused on emotional expression, or a waiting list control group. Among other things, they found that while the cognitive intervention was associated with reductions in both anxiety and intrusive ideation regarding HIV in pre-post session comparisons, the emotional expression intervention was associated with *increases* in anxiety.

These findings beg the question: Is emotional release beneficial to people living with HIV and AIDS? Many HIV-focused clinicians do, in fact, try to facilitate emotional expression in the context of supportive interventions, believing that "unburdening" or "venting" is helpful in managing stressors associated with HIV disease and that "more is better." And yet, a growing body of research evidence conveys a more complex set of considerations related to clinical and immunological parameters that will be of interest to clinicians.

Not Too Little, Not Too Much

We have learned, for example, that psychological *inhibition* may be associated with *harmful* health outcomes, as demonstrated by Eisenberger, Kemeny, and Wyatt (2003), who interviewed 61 women living with HIV. They found that use of a higher percentage of inhibition words (e.g., "inhibit," "restrain," "avoid") during interviews was associated with a lower CD4 cell count when controlling for demographics, health behaviors, and treatment regimen. "Psychological inhibition," according to these authors, "refers to the active holding back of emotional expression or emotional experience ... [B]y inhibiting thoughts and feelings, individuals do not allow themselves to fully process stressful events" (p. 221).

On the other hand, *too much* emotional expres-

complex dosing regimen (i.e., medications three-times daily) prescribed to cognitively compromised individuals was associated with lower rates of adherence than once- or twice-daily dosing. Overall, neuropsychological compromise was associated with a more than two-fold greater risk of poor adherence among study participants. in changes in their values, priorities, and perspectives (e.g., tending to their close relationships, living each day to the fullest). Moreover, men who found such meaning demonstrated slower declines in CD4 cell counts and lower rates of mortality related to AIDS, independent of their baseline health status and health behaviors, among other potential confounds. Importantly, those men who did not engage in cognitive processing, as well as those who did but did not make meaning out of their loss, experienced a moderate to rapid decline in their CD4 cell counts.

Bower and colleagues conclude that "cognitive processing may be one route through which individuals find meaning from a stressful experience. Actively thinking about a past trauma can be a difficult and painful process, provoking short-term increases in negative mood and in certain measures of autonomic activity. However, this process may be required to reach a positive cognitive outcome following the event, inspiring changes in attitudes and values that would not otherwise be considered" (p. 984).

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Hinkin and colleagues posit a bidirectional relationship between adherence to HAART and neurocognitive functioning "such that those who fail to take their medications are more likely to develop cognitive deficits that in turn further compromise adherence" (p. 1948). The authors suggest that adherence might be improved through the provision of simpler dosing regimens for individuals who are more cognitively impaired.

Miller et al. (2003) discovered that "suboptimal" knowledge of antiretroviral dosing at regimen initiation was common among 128 people living with HIV – though it improved for many by Week 8 of the study – and knowledge deficits at Week 8 were associated with reduced adherence. Lower levels of education and literacy were among factors associated with these deficits. Miller and colleagues note that "[t]he association of poor dosing knowledge with adherence demands that patient understanding of medication dosing be confirmed [at regimen initiation and] soon after a change in the regimen. Because a lower level of literacy is an independent predictor of deficits in medication knowledge, asking a patient to verbally describe his or her medications and dosing may [be] the most effective way to assess medication knowledge" (p. 517).

Murphy et al. (2003) interviewed 114 adolescents living with HIV in 13 U.S. cities regarding their adherence to HAART and barriers to same. They found that only 28.3% of teens reported full adherence over the preceding month; barriers included the adverse effects of medication – both physical (side effects) and psychological (a reminder of HIV status) – and complications related to daily routines. The authors encourage clinicians to work with teen living with HIV to improve their organizational skills to promote greater antiretroviral adherence.

Oggins (2003) interviewed a racially and ethnically diverse sample of 62 people living with HIV to assess beliefs that influence medication-taking and found a variety of misconceptions regarding HIV and its treatment, including the notions that: HIV is like a cold that will get better or a form of cancer that can go into remission; medications are like street drugs and should therefore

not be ingested; medication regimens are as constraining as an addiction to drugs; antiretrovirals are toxic, particularly when taken in combination; and prophylaxis against opportunistic infections should be delayed until one feels ill. Oggins encourages clinicians to inquire about a client's views on HIV and the medications used in its treatment to promote ongoing dialogue, to address misconceptions, and to reveal other barriers to adherence that might be addressed through clinical intervention.

Kalichman and Rompa (2003) surveyed and interviewed 255 men and women receiving antiretrovirals and found that those who had missed one or more doses in the preceding week scored higher on a scale measuring hopelessness and also reported greater use of marijuana, a greater number of sex partners, more unprotected vaginal intercourse, and less protected sexual behavior with partners who were HIV-negative or of unknown status. Observing this link between medication adherence difficulties and risky sexual behavior, Kalichman and Rompa suggest that a comprehensive and integrated approach to improving adherence and reducing sexual risk in people living with HIV could incorporate principles and intervention components common to both – including information, motivational enhancement, and behavioral skills building – and may, in turn, positively influence both sets of behaviors.

Similarly, Halkitis, Parsons, Wolitski, and Remien (2003) studied a racially and ethnically diverse sample of 456 men living with HIV in New York and San Francisco, 94% of whom identified as gay or bisexual, and report that antiretroviral nonadherence was associated, in this sample, with discomfort in talking to sex partners about HIV, drinking alcohol, and the more general use of avoidant coping strategies (i.e., social isolation, sleeping, overeating, overworking). They surmise that "the desire to escape the reality of being HIV-positive may be the overriding factor that drives non-adherence" (p. 99) and suggest that clinicians work to reduce alcohol use, improve communication skills, and promote more active coping strategies in efforts to improve antiretroviral adherence among gay and bisexual men.

Access to Care

Reilly and Woo (2003) recruited a diverse convenience sample of 360 adults living with HIV from outpatient medical facilities and found that over one-third reported one or more occasions of unprotected intercourse (anal or vaginal) during the preceding six-month period. Engaging in unsafe sexual practices was associated with both the number of needed services as well as the number of unmet service needs. Notably, a greater proportion of those engaging in unsafe sex reported unmet psychological counseling and support group service needs when compared with those practicing safer sex, highlighting service gaps that may impede the long-term maintenance of safer sexual behavior.

Serostatus Disclosure

Serovich and Mosack (2003) inquired of 78 gay men living with HIV their reasons for disclosing or not disclosing their HIV status to casual sexual partners. They found that a sense of "responsibility" was key in decisions regarding disclosure, while no single factor clearly emerged to explain nondisclosure. Serovich and Mosack encourage clinicians to "promote a sense of individual responsibility and duty to others and community as an important consideration for disclosure, ... [putting] the focus on others' needs or rights rather than on the benefits that disclosure might have for one's own well-being. ... Responsibility is not about 'spreading the word' to others but about an individual believing that it is not right to jeopardize the health of others" (p. 78).

Pain Management

In a sample of 142 men and women living with HIV/AIDS, Vosvick et al. (2003) found that both the experience of pain and the use of maladaptive coping strategies were associated with reductions in energy, physical functioning, social functioning, and role functioning. The authors suggest that attending to and addressing reports of pain, as well as assisting individuals with the development of more adaptive coping strategies, may contribute to an improved quality of life in people living with HIV/AIDS.

Evans, Fishman, Spielman, and Haley (2003) randomized 61 people experiencing

HIV-related peripheral neuropathic pain to either six weeks of cognitive behavior therapy or six weeks of supportive psychotherapy. Of the 33 individuals who completed the protocol, participants in both conditions experienced reductions in pain, although those receiving cognitive behavior therapy experienced greater reductions in pain-related interference with functioning and distress than those receiving supportive psychotherapy. Evans and colleagues warn that the high attrition rate suggests some limitations in the feasibility or acceptability of psychotherapeutic intervention for HIV-related pain.

Coping, Social Support, & Quality of Life

Lechner et al. (2003) randomly assigned low-income women – primarily women of color – living with AIDS with moderate to poor quality of life to one of two conditions: an individual psychoeducational intervention (n = 180) or a manualized, 10-week group-based cognitive-behavioral stress management/expressive-supportive therapy intervention (n = 150). The group intervention covered the same information as the individual intervention, but also offered the women emotional support from peers, individualized coping skills training, and feedback regarding thoughts, attitudes, and behaviors. Four weeks following these time-matched interventions, women in both groups reported improvements in overall quality of life as well as the specific areas of cognitive functioning, health distress, and overall health perceptions. In addition, women receiving the group intervention reported improvement in mental health-related quality of life. Lechner and colleagues conclude that individual psychoeducational interventions as well as group-based cognitive-behavioral stress management/expressive-supportive therapy interventions may improve quality of life for women with AIDS, and that the latter intervention may be particularly effective at improving mental health-related quality of life.

Robbins et al. (2003) conducted a pilot study involving 38 low-income, inner-city, postpartum African-American women living with HIV (a sample of convenience) and found that women who experienced greater average monthly reductions in CD4 cell counts ex-

perienced more psychological distress, while women with greater increases in their counts experienced less psychological distress. Importantly, satisfaction with social support moderated this relationship, such that the *quality* of support (as distinguished from its *quantity*) reduced distress.

The influence of family functioning was more complex; women whose families functioned well experienced less psychological distress associated with CD4 cell count changes, while women whose families functioned poorly were more emotionally responsive to such changes. And yet, women from families in which disagreements are discussed were *also* more emotionally responsive to changes in their CD4 cell counts, suggesting that denial and avoidance by family members may be an adaptive coping strategy when CD4 cell counts are falling. While these results are preliminary, Robbins and colleagues contend that the emotional and psychological well-being of African-American women living with HIV may be enhanced through interventions that serve to increase a woman's social support satisfaction, promote adaptive connectedness among family members, and foster flexibility among family members when resolving conflict.

With reference to the latter, these results suggest that therapists should recognize that denial and avoidance may be as adaptive in some circumstances (CD4 cell drop) as conflict emergence and resolution are in others (CD4 cell increases). Therapists who routinely assess denial and avoidance as problematic aspects of family functioning may strip the woman and her family of an important defense against the psychological and emotional consequences of HIV. Therapists should attempt to increase the family's repertoire of conflict resolution styles rather than always placing greater value on conflict emergence and resolution. (p. 34)

On this same theme, McCain et al. (2003) randomized 148 men and women living with HIV to one of three conditions: an eight-week cognitive-behavioral stress management group, an eight-week social support

group, or a wait list control and assessed study participants prior to and immediately after the intervention as well as six-months later. Among the 112 assessed postintervention, those in the cognitive-behavioral intervention reported greater emotional well-being and higher total quality of life scores when compared with those in the other two groups. Importantly, those in the social support group intervention reported *lower* social/family well-being scores at the conclusion of the intervention and less social support six months later. The authors posit that “among those with more advanced illness[,] group interventions that involve discussing or confronting one’s illness are not helpful in managing chronic psychological stress in the ... era of HAART” (p. 313). Finally, “with both interventions positive effects were not sustained over the follow-up period. These findings indicate the need for longer, perhaps more ‘potent’ interventions and/or routine booster sessions following the short-term weekly interventions” (p. 113).

Also addressing the quality of social support, Schrimshaw (2002) studied an ethnically and racially diverse sample of 146 women living with HIV in New York City and found that depressive symptomatology was positively correlated with social conflict, negatively correlated with feeling socially integrated (i.e., accepted by and belonging to a social network), and, interestingly, unrelated to the perceived availability of social support. Notably, Puerto Rican women reported higher rates of depressive symptomatology than African-American or white women and may require targeted efforts to increase social integration and decrease social conflict in their lives. Regardless of background, however, and moving beyond the mere availability of AIDS services or support groups, “[g]reater emphasis and intervention must be placed on creating a social environment and social relationships where HIV-infected women might feel they belong, are wanted, and are accepted, thus increasing their feeling of social integration. ... [Moreover,] interventions with family and caregivers on how to better foster a sense of acceptance and belonging might allow women to establish feelings of social integration, rather than alienation, within their home environments” (p. 2037).

On the subject of Puerto Rican women, Simoni and Ortiz (2003) surveyed 142 Puerto Rican women living with HIV in New York City and found that high levels of spirituality were negatively associated with scores on an instrument measuring depressive symptomatology. Additionally, both mastery and self-esteem were found to mediate the relationship between spirituality and depressive symptoms. For these reasons, Simoni and Ortiz encourage clinicians, when providing services to Puerto Rican women living with HIV, to assume an informed and accepting stance when assessing spiritual beliefs and inquiring about spiritual practices as coping strategies. With regard to the mediating factors, they suggest that emphasizing areas over which women have some measure of influence (e.g., family responsibilities, social activities, personal self-care) may serve to boost feelings of mastery, while connection with HIV-positive peers may reduce feelings of stigma and guilt related to HIV status and may, in turn, increase feelings of self-worth.

Lastly, Mitrani, Prado, Feaster, Robinson-Batista, and Szapocznik (2003) studied 49 low-income, African-American mothers living with HIV and found that the engagement of adult members of these mothers’ families in family treatment could be predicted by family support for the mother, the mother’s desire for family to be involved in treatment, and the mother’s “hassles” with other family members. Further analysis revealed that, in “high-support” families, mother’s desire for family involvement was predictive of family treatment engagement, while in “low-support” families, family engagement was low, regardless of the mother’s desires, although family “hassles” increased engagement with these families. “Thus, in low-support families, which are the most challenging for ... engagement, a particularly effective engagement strategy for both the mother and her family may be to highlight the value of family therapy for addressing family problems” (p. 43).

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Tool Box

A Note About Content

This publication has been developed to help the frontline provider of HIV-related mental health services, allied professionals, and consumers stay up-to-date on research-based developments in HIV care. The contents for the "Biopsychosocial Update" are drawn from a variety of sources including, but not limited to: the *CDC HIV/STD/TB Prevention News Update* (<http://www.cdcnpi.org/news/prevnews.htm>); the *Kaiser Daily HIV/AIDS Report* (<http://report.kff.org/hiv/aids/>); and literature reviews e-mailed by Florida International University researcher Robert Malow, Ph.D. Other sources

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of information are identified when appropriate.

It is presumed that readers have at least a fundamental understanding of medical, psychosocial, and neuropsychiatric considerations for assessing and intervening with people who are living with HIV/AIDS and their families. For additional background information, the following resources may be of assistance:

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