mental health AIDS

A Quarterly Update from the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) Volume 7, Issue 4 – Summer 2006

Biopsychosocial Update

HIV Prevention News

About Women & Men

Every 6-12 months over a period of 8 years (1994 through 2002), Aidala, Lee, Garbers, and Chiasson (2006) interviewed a representative sample of 968 men and women living with HIV in New York City. This cohort

> reported **considerable variability in sexual behaviors over time**. Many persons were not sexually active at all for months at a time; some continued to have multiple partners. Over one third of the cohort had one or more periods when they had engaged in unprotected sex with a partner who was HIV-negative or status unknown ... and one in five reported exchanging sex [for money or drugs]. Periods of unsafe sex alternated with periods of safer sex. Predictors of sexual risk varied by gender, and among men who had sex with men [MSM], and men sexually active with women only. Contextual factors such as partner relations, housing status, and receipt of HIV services were as important as individual attributes as predictors of unsafe sex and sex exchange. (pp. 12-13)

The investigators submit that these findings

> underline the importance of conducting risk screening – a cornerstone of evidence-based HIV prevention recommendations – *on an ongoing basis,* not just at entry into care. ... [This] study indicates that HIV sexual and drug-related risk behaviors, sexual partnering, [self-described] sexual orientation, and contextual factors like housing status and service utilization change over time. For prevention messages to be effective, at a minimum, they must be relevant to the patient's behaviors and circumstances at the time they are delivered ... . Given the fluidity of the factors that have been shown to be significant predictors of unsafe sex and sex exchange, regular and repeated risk screening is essential. (pp. 28-29)

With regard to sexual risk behavior among persons living with HIV, another contribution to the **Tool Box** on meta-analysis and HIV prevention interventions presented in the Spring 2006 issue of *mental health* **AIDS** comes from Johnson, Carey, Chaudoir, and Reid (2006). These investigators conducted a meta-analytic review of **sexual risk reduction interventions** implemented in studies **involving men and women living with HIV**. Both published and unpublished studies were considered for inclusion in the meta-analysis "if they examined a deliberate sexual risk-reduction strategy in a sample that included HIV+ participants, used a randomized controlled trial design, measured condom use or number of sexual partners after the intervention, and provided sufficient information to calculate effect size (ES) estimates" (p. 642). Ultimately, 15 published studies describing 21 interventions, involving 3,234 participants, and available as of November 30, 2004, qualified for review. "Across the studies, intervention participants exhibited lowered sexual risk relative to control participants on condom use ... but not for number of sexual partners ... . Interventions were more successful at increasing condom use if the sample included fewer ... MSM ... or younger participants and when interventions included motivational and skills components" (p. 642). Johnson and colleagues conclude that "[b]ehavioral interventions reduced sexual risk especially if they included motivational and skills components. Such interventions have been less effective for older samples, suggesting the need for further refinement to enhance their efficacy. Motivation- and skill-based interventions have not yet been tested with HIV+ MSM who,

In This Issue:

Biopsychosocial Update
- HIV Prevention News.....1
- HIV Assessment News.....8
- HIV Treatment News.....9

From the Block
- River Valley Counseling Center..6
- Health Services Center of Alabama.....17

Tool Boxes
- Books & Articles.....5
- Emerging Methods for Motivating Effective Medication Practice.....10
- A Note on Content.....19

in general, seem to have benefited less from extant risk-reduction interventions" (p. 642).

On the topic of condom-related interventions, Durantini, Albarracín, Mitchell, Earl, and Gillette (2006) meta-analyzed 166 HIV prevention interventions "included in Albarracín et al.'s (2005) meta-analysis testing the effectiveness of different contents of interventions across different populations and contexts" (p. 217); these latter findings were the centerpiece of the Spring 2006 **Tool Box** referenced above. The focus for Durantini and colleagues was the relationship between **source characteristics** ("professional expertise[1] and recipient-source similarity in demographics and behaviors" [p. 232]) and the effectiveness of HIV prevention interventions.

Durantini and colleagues report that, "[i]n general, expert interventionists produced greater behavior change than lay community members, and the demographic and behavioral similarity between the interventionist and the recipients facilitated behavioral change. Equally importantly, there were differences across groups in the efficacy of various sources, especially among populations of low status and/or power" (p. 212). More specifically,

> experts are advisable in all cases, with the exception of groups of people under 21 years old. In addition, women and girls respond best to sources of the same gender, ethnicity, and behavior-risk group, whereas men and boys respond best to sources of either gender and of different ethnicity and behavior-risk group. Both Blacks and Whites change more when sources match their ethnicity and their risk group, although African Americans change more in response to experts than both European American and foreign samples of European and African ethnicities. People over 21 respond better to sources of their same gender, ethnicity, and behavior-risk group, and people under 21 respond better to sources of the same age in addition to the same gender, ethnicity, and behavior-risk group. Finally, all of the risk groups in all ... analyses changed more when sources included experts and individuals from the same risk groups. The only exception was [MSM], who showed greater change when the source included an expert but were unaffected by the inclusion of a behavior-risk-similar source. (pp. 235-236)

Drawing on these findings, Durantini and colleagues contend that

> the decision of who intervenes to change the behavior of an audience is highly consequential. ... [Findings confirm] that demographic similarity generally has a health-promoting effect. Behavioral-risk group similarity between intervention sources and recipients is also beneficial, and generally increases compliance with the intervention's recommendation. ... [P]ast doubt in the use of experts as a catalyst for behavior change may be misguided because experts appear to be uniquely qualified to facilitate change. In particular, women and African Americans are the ones who most benefit from the use of physicians, nurses, or professional health educators, while also benefiting from exposure to intervention sources who are similar to them. Given this finding, comprehensive efforts to combat HIV must necessarily address the shortage of professionals who will effectively promote change in their own communities. (p. 241)

Shifting focus away from condom-related interventions, Longshore, Stein, and Chin (2006)

> used the AIDS risk reduction model[2] ... as a conceptual frame-

[1] "Of the conditions summarized in ... [this] review, 70% had expert sources. Of these expert sources, 25% were public health educators; 25% were psychologists[,] ... counselors or masters level professionals; 13% were physicians; 11% were staff from clinics or from the research team; 9% were nurses; 16% were teachers, social workers, or outreach workers; and 1% were not specified but worked at health centers. Of the nonexpert sources, 88% were community leaders, peer opinion leaders, and community peers (including classmates and family members); 10% were artists (rap teams and actors); and 2% religious leaders" (p. 222).

[2] In the AIDS risk reduction model (ARRM), "risk behavior change is a three-stage process. First, people come to perceive their behavior as a possible source of HIV infection. Second, they develop a conscious commitment to behavior change; and, third, they act on this commitment. Progress through the three stages depends upon other psychosocial factors. For example, AIDS knowledge regarding virus transmission routes, symptoms, etc., is posited as a factor that influences perceived infection risk

mental health **AIDS** is produced four times a year under Contract No. 280-02-0202 with the Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). The content of this publication does not necessary reflect the views, opinions, or policies of the CMHS, SAMHSA, or HHS.

Summaries appearing in *mental health* **AIDS** are presented to promote awareness and understanding of current and continuing research in the area of HIV and mental health. They are not intended for use as the sole basis for clinical treatment nor as a substitute for reading the original research.

mental health **AIDS** is compiled and edited by Abraham Feingold, Psy.D. Questions and comments may be directed to the Editor at mentalhealthAIDS@aol.com.

work to guide a prospective analysis of sexual risk reduction in a sample of 600 heterosexually active, HIV-negative persons involved in illegal drug use (337 men and 263 women). The sexual risk reduction measure was a latent variable based on number of sex partners and risky sexual behavior such as engaging in sex while on drugs and having sex with high-risk partners. These indicators represent behavior by which women as well as men may be able to exert **indirect control over** their **sexual risk**. (p. 93)

The investigators found that, "[w]ith baseline sexual risk behavior controlled, stronger commitment to safer sex predicted less sexual risk behavior for both men and women. For men but not women, greater AIDS knowledge predicted safer sex commitment. For women but not men, higher self-efficacy predicted stronger commitment to safer sex, and peer norms favoring sexual risk reduction predicted higher self-efficacy" (p. 93).

Importantly, "[t]he model explained only 9% of the variance in men's sexual risk behavior and 18% of the variance in women's" (p. 101). Clearly, then, additional factors not accounted for in this model influence sexual risk behavior among women and men. Nevertheless, these findings offer some guidance for framing interventions. Longshore and colleagues observe that

> [g]ender differences in the pathways to sexual risk reduction imply that intervention to promote sexual risk reduction should be designed to address such differences. Commitment to safer sex was related to sexual risk reduction among drug-using men. Interventions with this population should therefore target safer sex commitment. Examples of commitment-building exercises include counterattitudinal advocacy, declarations or written statements of commitment, and behavior contracts ... . Interventions promoting cognitive accessibility of risk-reduction intentions are another potentially effective strategy .... . In addition, although drug users' knowledge regarding virus transmission routes is generally high ..., the path from AIDS knowledge to safer sex commitment – weaker for men than for women – suggests that men's intervention ought to target their AIDS knowledge. ... Interventions for men should ... provide definitive information regarding routes of transmission *and* seek to raise men's beliefs that this information is reliable. (pp. 101-102)

As with drug-using men,

> [f]or drug-using women, safer sex commitment was related to sexual risk reduction. Women's interventions should seek to raise commitment to safer sex by strategies such as those described above for men. But they should also explicitly address self-efficacy. Self-efficacy for exerting *direct control* over sexual risk, i.e., for persuading men to use condoms, appears to be a pathway to risk reduction for women ... . However, the present study indicates that self-efficacy as a motivator for women's *indirect control* over sexual risk behavior is another such pathway. It is important to emphasize indirect as well as direct control in women's intervention ... [;] an overemphasis on use of condoms is unwise if it means devoting inadequate time to risk reduction strategies that women can control more readily, e.g., having sex with fewer partners, avoiding sex with men known or thought to be engaging in high-risk behavior such as drug injection, abstaining from drug or alcohol use during sex, and slowing the pace of sexual intimacy.
>
> Self-efficacy was influenced by women's perceptions regarding peer norms for sexual risk reduction. This finding suggests that interventions with women should attempt to increase peer support for exerting control over sexual risk. Use of a small-group format ... is probably most appropriate in such interventions. The ... [facilitator] can raise various strategies for risk reduction, such as condom use and avoidance of sex. Participants as a group, on the basis of their experience, can identify the pros and cons of these strategies. The sharing of successful personal experience would serve to highlight the common concerns of participants and might provide a major boost to their sense of self-efficacy. (p. 102)

Longshore and colleague's analysis begs the following question: **Do condom-related interventions increase the frequency of sexual behavior**, inadvertently undermining sexual risk reduction efforts? To answer this question, Smoak, Scott-Sheldon, Johnson, Carey, and the SHARP Research Team (2006) conducted

> [a] meta-analytic review of the influence of HIV risk reduction

---

(stage 1). Self-efficacy, or confidence in one's ability to perform risk-reducing behaviors, is a predictor of both commitment to behavior change (stage 2) and actual behavior change (stage 3). Behavior change can be analyzed as an end-point (such as condom use) or a series of incremental steps (such as raising the idea of condom use with a sexual partner) leading to the end-point. Finally, some factors in the ARRM are not stage-specific but instead are hypothetically relevant as motivators of movement across stages. These include social factors such as peer norms regarding risk behavior and cues to action such as information received from an HIV education program" (pp. 93-94).

interventions on sexual occasions, number of partners, and abstinence ... . Included studies examined sexual risk reduction strategies and used a controlled design. Data from 174 studies (206 interventions, ...116,735 participants) were included. In general, HIV risk reduction interventions neither increased nor decreased sexual occasions or number of partners reported. Participants in intervention conditions were less likely to be sexually active than those in control conditions. When samples included more black participants, interventions reduced the number of sexual occasions; interventions were more successful at reducing the number of partners in samples that included more ... MSM ... or individuals engaged in sex trading. Samples that included more MSM were more likely to adopt abstinence as a risk reduction strategy. Interventions that included more information, motivational enhancement, and skills training also led to greater risk reduction. (p. 374)

Smoak and colleagues conclude that "HIV risk reduction interventions do not increase the overall frequency of sexual activity. To the contrary, for some subgroups, interventions that include components recommended by behavioral science theory reduce the frequency of sexual events and partners" (p. 374).

About Persons With Severe Mental Illnesses

"Sex, Games and Videotapes" (SexG), a "15-session social skills intervention for reducing high-risk sexual behaviors among men with severe mental illness" (p. 407), is described in the Fall 2005 issue of *mental health* **AIDS**. More recently, Berkman, Cerwonka, Sohler, and Susser (2006) evaluated a six-session version of SexG (**SexG-Brief**). Ninety-two men were randomized to this intervention or to a 2-hour HIV educational session; sexual risk behaviors were assessed at 6-week intervals for a period of 6 months. "Among the sexually active men (33 in the intervention group and 23 in the control group), a twofold reduction in sexual risk behaviors was found for the intervention group. This reduction was less than the threefold reduction seen for the original 15-session intervention and was not ... [statistically] significant" (p. 407). Berkman and colleagues suggest that "[f]urther study is required to determine the optimal balance between efficacy and feasibility of this intervention" (p. 407).

About Persons Who Use Substances

Schroeder, Epstein, Umbricht, and Preston (2006) randomly assigned 81 outpatients **dually diagnosed with heroin *and* cocaine dependence** and engaging in HIV risk behaviors to one of four conditions. While all study participants received methadone maintenance, this treatment was augmented with cognitive-behavioral therapy (CBT), contingency management (CM), both (CBT + CM), or neither. The CBT administered in this study "included relapse-prevention techniques along with methods for coping, behavioral reinforcement, and generalizing skills to the environment, and this intervention was given in a group format in twelve weekly 90-min sessions. Furthermore, the CBT intervention ... included an HIV prevention component with hands-on demonstration and group practice of HIV risk reduction skills (e.g., putting a condom on a banana, cleaning a syringe)" (pp. 876-877).

> The most noteworthy findings from this study are the frequencies of cessation of self-reported drug-related and sexual risk behaviors, even among participants receiving the control treatment. Over half of participants reporting injection drug use [IDU] at intake reported no [IDU] at study exit, and over 90% of participants who reported sharing needles at intake reported no needle sharing at study exit. ... [In addition,] 88% of those reporting unprotected sexual intercourse at intake reported no unprotected sex at study exit, and 91% of those trading sex for money or drugs at intake reported no longer doing so at study exit. These reported cessations in risk behavior were independent of gender and psychiatric comorbidity and were largely independent of behavioral treatment modality. ... The apparent cessation rates of sexual as well as drug-related risk behavior observed in this study suggest that additional benefit may be derived from augmentation [of methadone maintenance] with behavioral treatment, regardless of the behavioral treatment modality. The reported behavior change may be attributable to some feature common to all treatment in this study – perhaps the increased contact with clinic staff, or the social benefits of engaging in group therapy. (p. 876)

Schroeder and colleagues stress caution in interpreting these data, which are based entirely on self-report and the exclusion of 112 of 193 participants who were randomized but for whom HIV risk behavior data were missing. Despite these limitations, the investigators indicate that

> this study offers preliminary evidence that dually dependent substance abusers maintained on methadone can achieve reductions in sexual as well as drug-related risk behaviors when treatment is augmented with group behavioral therapy aimed at reducing cocaine use. That these reductions were observed in the control group implies that intensive behavioral treatment may not

Tool Box
Books & Articles

Bucciardini, R., Murri, R., Guarinieri, M., Starace, F., Martini, M., Vatrella, A., Cafaro, L., Fantoni, M., Grisetti, R., d'Arminio Monforte, A., Fragola, V., Arcieri, R., Del Borgo, C., Tramarin, A., Massella, M., Lorenzetti, D., & Vella, S. (2006). ISSQoL: A new questionnaire for evaluating the quality of life of people living with HIV in the HAART era. *Quality of Life Research, 15*(3), 377-390.
Italian investigators designed the self-administered Istituto Superiore di Sanità-Quality of Life (ISSQoL) Survey to measure health-related quality of life (HRQoL) in a way "consistent with the new needs and changes introduced by the use of HAART" (p. 378). "The final version of ISSQoL includes two sections: HRQoL Core Evaluation Form (9 domains) and Additional Important Areas for HRQoL (6 domains). ... The Additional Important Areas for HRQoL include social support, interaction with medical staff, treatment impact, body changes, life planning, and motherhood/fatherhood" (p. 377). Importantly, people living with HIV were involved in all phases of survey development.

Ferrando, S.J., & Nims, C. (2006). HIV-associated mania treated with electroconvulsive therapy and highly-active antiretroviral therapy. *Psychosomatics, 47*(2), 170-174.
"This extraordinary case of AIDS mania that went initially undetected but was ultimately successfully treated with ECT and HAART, underscores the endemic persistence of HIV and the potential for this virus to present with neuropsychiatric symptoms" (p. 173).

Martin, J.I. (2006). Transcendence among gay men: Implications for HIV prevention. *Sexualities, 9*(2), 214-235.
"This article presents a critique of HIV prevention research and practice with gay men in light of reports that HIV seroprevalence appears to be increasing in this population. Central to this critique is the possibility that people may have a need for transcendence, which some gay men might seek to satisfy through sexual experience. Theories underpinning HIV prevention generally do not account for such nonrational aspects of sexuality, and they fail to acknowledge the impact of differential values on people's health behaviours" (p. 214).

Porche, D.J., & Willis, D.G. (2006). Depression in HIV-infected men. *Issues in Mental Health Nursing, 27*(4), 391-401.
"HIV-infected men experience the three most common depressive disorders – major depression, dysthymia, and bipolar disorder. Comorbidity associated with the dual diagnosis of HIV infection and common depressive disorders in men is a critical men's health issue. This article's purpose is to increase health care professionals' awareness and knowledge regarding the significant impact of a dual diagnosis of HIV infection and depression on men's health" (p. 391).

Solomon, J., Card, J.J., & Malow, R.M. (2006). Adapting efficacious interventions: Advancing translational research in HIV prevention. *Evaluation & the Health Professions, 29*(2), 162-194.
"This article ... offer[s] tips for researchers on how to adapt an HIV prevention program proven efficacious ... to meet the needs of groups that differ culturally from those with whom the program was initially validated. We also offer suggestions for how researchers can help build the capacity of service providers to conduct adaptations that are based on research-based principles. The article places particular emphasis on the importance of modifying an efficacious program to meet the needs of its new target population and community context while retaining fidelity ... to its core components, which were, in all likelihood, responsible for its efficaciousness in the original ... controlled trials" (p. 163).

Strathdee, S.A., & Patterson, T.L. (2006). Behavioral interventions for HIV-positive and HCV-positive drug users. *AIDS & Behavior, 10*(2), 115-130.
"In this review, we ... discuss behavioral interventions that can reduce ongoing high risk behaviors among HIV-seropositive IDUs and MSM-DUs, and review the literature which has evaluated their effectiveness. ... In addition, we briefly discuss interventions which have the potential to simultaneously reduce ongoing transmission of both HIV and HCV. Finally, given the dearth of information on the effectiveness of behavioral interventions in reducing the burden of the HIV and HCV epidemics among persons already infected with either or both viruses, we describe some newer, promising interventions and offer suggestions for future studies" (p. 115).

Thompson, A., Silverman, B., Dzeng, L., & Treisman, G. (2006). Psychotropic medications and HIV. *Clinical Infectious Diseases, 42*(9), 1305-1310.
"In a brief review of the use of psychotropic medications in patients with HIV infection, we discuss indications, adverse effects, and drug interactions for commonly used antidepressants, mood stabilizers, anxiolytics, antipsychotics, psychostimulants, and drugs of abuse" (p. 1305).

– Compiled by Abraham Feingold, Psy.D.

be necessary; perhaps the effectiveness of methadone maintenance for reduction of HIV risk could be improved by the addition of a weekly support group with incentives for regular attendance. Due to the tentative nature of these findings, further research is necessary to replicate them in larger samples, preferably using outcome assessments that include collateral reports of participants' HIV risk behaviors. (p. 877)

To identify psychological motivations and psychosocial states associated with different levels of **methamphetamine** (meth) use, Halkitis and Shrem (2006) analyzed survey data from a convenience sample of 49 gay and bisexual men in New York City who used meth. Men were categorized as "Binge" users if they used meth between 1 and 12 days over the previous 3-month period. Men were categorized as "Chronic" users if they used meth for any amount of time greater than 12 days over the previous 3-month period.

Findings suggest that "Chronic" users report higher levels of avoidant coping and are more likely to use [meth] to avoid unpleasant emotions, to avoid physical pain, and to engage in pleasant times with others than those who are "Binge" users. While previous research demonstrates the value of treatment approaches that consider the synergy of mental health, drug use, and sexual-risk taking, ... [these] findings suggest the importance of identifying the frequency and current progression of [meth] use when addressing the psychological meanings it has for the individual user. (p. 549)

Theall, Elifson, and Sterk (2006) interviewed 268 young adult men and women with diverse self-identified sexual orientations to examine HIV risk behavior associated with the use of MDMA (3,4-methylenedioxymethamphetamine), better known as **ecstasy**. For readers unfamiliar with this substance, "[t]ouch, both sensual and sexual, ... [i]s a significant part of the ecstasy experience" (p. 169).

In general, the findings suggest that HIV sexual risk behaviors occur among young adult ecstasy users, with higher levels of HIV risk-taking among heavy ecstasy users [i.e., those using ecstasy on more than 10 days during the 90 days preceding the interview]. After controlling for various enabling factors and poly-drug use, having a drug-using partner, believing that ecstasy makes one want to touch people in a sexual way and more frequent alcohol consumption were some of the strongest predictors of overall HIV sexual risk among the respondents in this sample. It is important to incorporate these predictors in HIV risk reduction messages. For instance, information on touch, and the associated sexual desire, will enable ecstasy users to recognize the link between use, touch, and the potential for unsafe sex. (p. 177)

About Adolescents & Young Adults

Employing audio-assisted technology with a sample of 207 **low-income urban minority adolescents receiving outpatient psychiatric care**, Donenberg, Emerson, Bryant, and King (2006)

examined the effects of substance use on the relation between risky sex and peer, parent, and dispositional characteristics among teens in psychiatric care. As expected, negative peer influence and parental permissiveness were related to greater risky sex, but mainly among adolescents who reported substance use in the past 3 months. Substance use may operate as a risk factor for HIV by potentiating the influence of negative peer influence and permissive parenting on adolescent risky sex. Contrary to research on school-based populations, adolescent attitudes toward health, achievement, and school were not related to any of the outcome variables. These data suggest that negative peer influence and parental permissiveness may be more important influences on sexual risk than adolescent disposition, particularly for teens who endorse recent substance use. (pp. 197-198)

Donenberg and colleagues suggest that these "[f]indings highlight important targets for HIV prevention. Mental health practitioners have unique access to troubled teens and their families and can influence risk reduction efforts through education about exposure risks, teaching parents effective monitoring skills, and providing substance use treatment. By broadening the scope of mental health services to incorporate successful strategies for HIV prevention ..., clinicians can address adolescent sexual health and risk behaviour thereby changing the course of the epidemic" (p. 199).

Dutch investigators (van Empelen & Kok, 2006) examined **condom use with casual and steady partners** among 140 sexually active 14-16 year old Dutch secondary school students.

From the Block

River Valley Counseling Center

Through offices in Holyoke, Chicopee, and Springfield, River Valley Counseling Center (RVCC), Inc., offers a range of medical, psychiatric, and social services to residents of western Massachusetts. Historically, the agency had placed a special emphasis on serving those who are disadvantaged or have been traditionally underserved.

With funding from CMHS/SAMHSA, RVCC has been able to expand its delivery of outpatient mental health services to African American and Hispanic/Latino(a) consumers living with HIV/AIDS. Assistance includes psychiatric assessment, psychotherapy, case management, and other social services. These are provided in RVCC's Springfield clinic, the Holyoke Health Center, and various non-traditional settings, including drop-in centers and clients' homes. Former service consumers are employed as peer outreach workers who assist with client recruitment and retention.

The Principal Investigator is Marianne Polmatier, LICSW; the Project Director is Nancy O'Hare, MPH; and the Clinical Director is Margie Maldonado, LICSW. For more information, please call 413/737-2437 or go to http://www.holyokehealth.com/pages.asp?id=47.

– Compiled by the MHHSC Program Coordinating Center

> It was hypothesised that among adolescents[,] sex and subsequent ... condom use with casual sex partners ... [are] less likely to be considered in advance, more context-dependent and less habitual; whereas the opposite is true for steady relationships. Therefore, preparatory behaviours (buying and carrying condoms and communicating about condom use) were expected to mediate the intention-behaviour relation in the context of steady relationships, but not in the context of casual sex. Results confirmed that condom use with steady sex partners was explained by preparatory behaviours, habits, and to some extent, behavioural willingness, and that preparatory behaviours mediated the intention-behaviour relationship. Condom use with casual sex partners was predicted by risk willingness and intentions, without any mediation by preparatory behaviours. (p. 165)

Drawing on these findings, van Empelen and Kok submit that

> [i]t is essential to increase awareness among young people of the likelihood that unexpected situations may occur, and to train and support them in taking preparatory actions. It is clear that when young people do not anticipate the possibility of a sexual encounter, their reactions may depend entirely on the opportunities existing in a given situation. As such, it is likely that young people who are willing to take the risk of unprotected sexual intercourse will do so. Anticipated regret may be a valuable means of highlighting the potential adverse effects of having engaged in a risky sexual situation, while simultaneously providing information on the outcome of a desired response – having condoms readily available and using them. (p. 178)

The investigators further suggest that

> specific implementation plans ... could be used as a means of reinforcing the initiation and frequency of engaging in preparatory behaviours among young people. Implementation intentions (that is, specifying when, where and how the behaviour is performed) may increase the frequency of preparatory behaviours, because the contextual cues will elicit performance of the intended behaviour. ... [T]his method requires that people possess a positive intention to perform a ... behaviour. Thus, interventions should ensure that young people are motivated not only to use condoms, but also to buy condoms, carry them and communicate about condom use. (p. 178)

About Men

Norton, Bogart, Cecil, and Pinkerton (2005)

> reviewed both quantitative and qualitative research and imposed a theoretical framework on the findings of 57 studies that examined **men's attitudes toward condom use**. Attitudinal beliefs were classified as cognitive or affective, and their relationships to behavior were examined. ... [C]ognitive beliefs about condoms were weaker predictors of condom-use intentions and behavior than were affective beliefs about condoms across both qualitative and quantitative analyses. Although the majority of participants across studies believed that condoms protected against HIV and pregnancy, effectiveness beliefs were inconsistently and weakly associated with condom-use behavior. In contrast, beliefs about the reduced pleasure associated with condom use were common and robust predictors of condom use. Men who believed that condoms reduce pleasure were less likely to intend to use condoms and to practice actual condom use. Other affective beliefs, although less frequently studied, also had strong relationships with condom-use behavior. For example, the beliefs that condoms interfere with spontaneity and intimacy during sex, or that condoms create distrust or embarrassment between partners, were related to lack of condom use. (p. 2523)

Norton and colleagues conclude that this

> comprehensive review of the literature suggests that condom attitudes can be conceptualized best in terms of the tension between cognition and affect. Affective beliefs about condoms tend to be based on direct experience with condoms and, therefore, are likely to be more robust predictors of behavior. Interventions designed to stem the spread of HIV and other STDs [sexually transmitted diseases] need to take into account the primacy of affect in driving condom-use behavior by addressing perceived loss in pleasure and spontaneity as a result of condoms, as well as anticipated negative partner reactions to condom use. (p. 2525)

About Women

Addressing the other side of the condom-use equation, Lam and Barnhart (2006) conducted a Web-based survey of 181 heterosexually active Chinese and Filipina American women attending California universities to assess **condom negotiation strategies**, categorized dichotomously as verbal/nonverbal and direct/indirect.

> Verbal-direct ... messages ... are verbal in nature and explicit in their request for condom use (e.g., telling partner to use condom). Verbal-indirect ... mes-

> sages ... are verbal in nature but are more subtle in their request for condom use (e.g., dropping hint to partner that so-and-so just got pregnant). Nonverbal-direct strategies are those that are not verbal yet are direct in their message to use a condom (e.g., placing condom in view of partner). Nonverbal-indirect ... strategies ... are not verbal and are subtle in their message to use a condom (e.g., placing safer sex pamphlet in view of partner). (p. 73)

Lam and Barnhart found that "Asian women with non-Asian partners were more likely to use nonverbal-direct strategies than those with Asian partners. Asian women with older partners were less likely to use verbal strategies ... than those with same-age partners" (p. 68). As these investigators see it, this study "fills a critical gap in the condom negotiation literature, suggesting that Asian women do not use the same condom negotiation ... [strategy] irrespective of a sexual partner's characteristics. Obtaining information such as partner ethnicity and age can help ... [in] teach[ing] more culturally sensitive sexual communication strategies to clients across different types of relationships" (p. 79).

HIV Assessment News

HIV Counseling & Testing

Lauby, Bond, Eroglu, and Batson (2006) assessed how **decisional balance** or "the relative weight of perceived advantages (pros) compared to perceived disadvantages (cons)" (p. 84) and self-perceived HIV risk were associated with HIV testing by surveying a community sample of 1,523 men and women at elevated risk for HIV. Lauby and colleagues "developed scales to measure ... pros ... and ... cons ... of taking an HIV test and assessed their content using factor analysis. Perceived risk was highly related to the pros and cons scales. Multivariate analyses revealed that the pros scale had positive associations with having ever tested and the number of tests taken, while the cons scale had negative associations with these testing measures. ... [As in earlier studies, p]erceived risk was not related to testing practices" (p. 83).

The investigators suggest that

> [p]erceived advantages can be leveraged as motivators for HIV test-taking, while perceived disadvantages can be targets of communication efforts. ... [R]esults suggest that perceived advantages may have a stronger effect than perceived disadvantages on both the decision to take a first HIV test and to take repeated tests. Analysis of the pros subscales indicates that promoting testing as part of a person's responsibility to one's self and family may be more influential for persons who are not infected with HIV than stressing testing as a way to protect partners from transmission.
>
> Among the cons subscales, *preferring not to know* one's HIV status decreases the likelihood of ever testing, as does *fear of needles* used in testing. (p. 90)

Even though the relatively high refusal rate (50%) among persons selected to be in the study sample may limit the generalizability of these findings, the investigators observe that "[e]levated perceived risk leads to testing only when the perceived advantages of testing outweigh the disadvantages. Thus interventions to increase testing must focus on addressing positive and negative perceptions about the test in addition to helping individuals assess their risk of infection" (p. 90). Additionally, "[i]nterventions to increase HIV testing need to reinforce feelings of security and responsibility linked to testing and to decrease fear of testing and of knowing one's HIV status. In addition, providing a range of testing options, including oral tests and anonymous tests, may help to mitigate some of the negative perceptions of testing" (p. 91).

Women in ongoing heterosexual relationships face a variety of challenges when they decide to undergo testing for HIV, express interest in their partner being tested, and attempt to institute safer sexual practices. Morrill and Noland (2006) conducted a study in which 81 "women who sought HIV counseling and testing and had a regular male sexual partner were interviewed on five occasions, and 18 of these women and 15 men later took part in ... focus groups (women only, men only, or couples)" (p. 183). Among the challenges identified were "difficulty understanding the unpredictability of HIV transmission, gender differences in how partners interpret their susceptibility to HIV, and male resistance to safer sex and testing" (p. 183).

"The most dramatic, and disturbing, discovery of this study is a pervasive belief that if one partner tests negative for HIV after having unprotected intercourse, the untested partner's serostatus is deemed to be negative. In essence, whether consciously or not, one partner is testing on behalf of the other. ... [Morrill and Noland] have labeled this phenomenon '**testing by proxy**'" (p. 194). Additionally, "[r]espondents confirmed that a woman's decision to test elicits strong emotions and doubts about fidelity. It is difficult to discuss testing and safer sex, especially for couples who have been together for as long as 10 years or more. Women who broach the subject may be cast as threatening the stability of the relationship" (p. 195).

Through these respondents, Morrill and Noland

> also discovered ... ways to overcome or avert couples coming to

> loggerheads over such issues. For instance, it may be more acceptable to attribute the need for mutual testing and safer sex to the unknown status of the man's past partners. Emphasis also might be placed on positive feelings generated by taking ongoing, proactive responsibility for one's own health. To promote couple communication about HIV prevention in spite of such obstacles, it is important to (a) be nonjudgmental and (b) normalize HIV testing and condom use even ... in ... established, loving relationship[s] ... . (p. 195)

Morrill and Noland conclude that "programs aiming to reduce heterosexual HIV risk for women must include their male partners, and must incorporate effective interpersonal communication skills. ... [Clinicians] must [also] refute the misconception that a person's serostatus can be revealed through their partner's test result. Such endeavors would constitute important contributions to the national goal of prevention through HIV counseling and testing" (p. 196).

Psychiatric Assessment

Mellins, Brackis-Cott, Dolezal, and Abrams (2006) conducted a pilot study to explore rates and types of *DSM*-diagnosable psychiatric and substance use disorders, as well as emotional and behavioral functioning, in a sample of 47 **perinatally HIV-infected children and adolescents** between the ages of 9 and 16 years receiving services in an HIV clinic in New York City. The youths and their primary caregivers "were interviewed using standardized assessments of youth psychiatric disorders and emotional and behavioral functioning, as well as measures of health and caregiver mental health" (p. 432). According to the caregivers and/or the youths in their care,

> 55% (26 of 47) of the youth met criteria for a psychiatric disorder and 26% (n = 12) of the children met criteria for multiple disorders. The most prevalent diagnoses were anxiety disorders (40%; n = 19), which included social phobia [4%], separation anxiety [8%], agoraphobia [8%], panic disorder [2%], obsessive-compulsive disorder [8%] and specific phobias (eg, insects, snakes, dogs, dark, shots, elevators[; 21%]). Behavioral disorders were also prevalent (23%; n = 11), including attention deficit hyperactivity disorders [21%], conduct disorders [13%] and oppositional defiant disorders [11%]. Four children [8%] met criteria for a mood disorder and one child [2%] met criteria for a substance abuse (marijuana) disorder. (p. 434)

Importantly, "the majority of caregivers and children scored in the normative range on the symptom questionnaires on emotional and behavioral functioning. None of the demographic or child health variables or measures of caregiver mental health was significantly associated with presence of a child psychiatric disorder. There was[, however,] an association between caregiver mental health and child emotional and behavioral functioning" (p. 432). Mellins and colleagues conclude that "[h]igh rates of disorders that typically warrant ... intervention were reported by caregivers and children in this pilot study ... [and] efficacy-based psychopharmacologic and psychologic treatment programs (particularly cognitive behavioral interventions) exist to treat the majority of disorders found in this population. ... [I]ncorporating mental health interventions into the ... care of HIV-infected adolescents is critical for the health and well-being of this population" (p. 436).

HIV Treatment News

Medical Care

French investigators (Allavena, Le Moal, Michau, Chiffoleau, & Raffi, 2006) present nine cases of **neuropsychiatric disturbances associated with a combination of tenofovir** (TDF or Viread®) **and efavirenz** (EFV or Sustiva®). While the latter is associated with such side effects, these individuals had been

> treated with an EFV-containing regimen for a median duration of 31 months without any EFV-related central nervous system (CNS) effects. They were switched to an EFV-TDF-containing regimen because of lipodystrophy (n = 2) and/or the wish to simplify to a once-daily regimen (n = 9). Moderate to severe neuropsychiatric events occurred immediately (< 48 hours) after TDF initiation in five patients and 2 weeks to 24 months after the switch in the remaining four patients. Treatment modifications occurred in six patients (switch to EFV-nevirapine [n = 3], TDF-zidovudine [n = 2] or treatment discontinuation [n = 1]), leading to a marked improvement of CNS intolerance. Treatment remained unchanged in three patients; two patients experienced chronic persistent sleeping disorders and one patient underwent a spontaneous improvement of symptoms within 2 weeks. EFV plasma concentrations, which were available in two patients before the switch and in four patients after the switch, remained in the therapeutic range. Although the exact mechanism of these symptoms remains hypothetical, neuropsychiatric disorders could be either a consequence of an unexplained interaction between EFV and TDF or an infrequent TDF-related side effect. The incidence of these side effects needs to be evaluated in large databases or pharmacokinetic studies. (p. 263)

Psychiatric/Psychological/ Psychosocial/Spiritual Care

Neuropsychological Impairment

Marcotte et al. (2006) administered

neuropsychological (NP) testing as well as the Useful Field of View (UFOV), a computerized measure of visual attention, to 42 HIV-positive and 21 HIV-negative study participants. The investigators found that "HIV+ participants performed significantly worse than the HIV- participants on the UFOV, particularly on the Divided Attention subtest. Poor UFOV performance was associated with higher accident rates in the past year, with a trend for NP impairment to also predict more accidents. The highest number of accidents occurred in the group with a 'high risk' UFOV designation and NP impairment; this category correctly classified 93% of HIV+ participants as to who did, and did not, have an accident" (p. 13).

> The findings ... suggest that a subset of HIV+ individuals may have visual attentional impairments that put them at **high risk for driving accidents**. HIV+ par-

Tool Box

Emerging Methods for Motivating Effective Medication Practice

"[A] consistent theme to emerge in ... [the HIV-related adherence intervention] literature ... was the critical role of the patient-provider relationship in maximizing patient adherence. ... The HIV patient may have an especially critical need for the physician as a source of technical and informational expertise, as well as social and emotional support."
— Fogarty et al., 2002, pp. 102-103

As clinicians who serve people living with HIV are well aware, optimal antiretroviral adherence "means taking all of every prescribed dose, within a designated timeframe, while at times also following dietary restrictions. ... [R]esearch seeking to determine the level of adherence needed for optimal virologic outcome ... [has] resulted in wide acceptance of a 95% standard ..." (Tugenberg, Ware, & Wyatt, 2006, p. 269). Consequently, providers may experience a sense of urgency concerning the manner in which patients take these medications and may convey this urgency by exhorting patients to maintain perfect adherence.

To assess the impact of clinician urgency on the medication-taking practices of highly active antiretroviral therapy (HAART) recipients, Tugenberg, Ware, and Wyatt (2006) conducted 214 qualitative interviews concerning adherence over a 2-year period with 52 adults living with HIV who also used illegal substances. The investigators found that, "[i]nstead of feeling encouraged to share particular difficulties or beliefs about medication and their effects[, study participants] ... felt 'lectured' on the importance of adherence" (Tugenberg, Ware, & Wyatt, 2006, p. 271). Fearing disapproval or damage to a relationship upon which they had come to rely for their very survival, participants "chose instead to conceal adherence information. Apprehensions about failing at perfect adherence [even] led some to cease taking antiretrovirals over the course of the study. [In this way, w]ell-intentioned efforts by clinicians to emphasize the importance of adherence can paradoxically undermine the very behavior they are intended to promote" (Tugenberg, Ware, & Wyatt, 2006, p. 269).

Tugenberg and colleagues propose an alternative to "insistence" as a response to nonadherence: "active problem-solving, in which patients and clinicians collaborate to address barriers. In a collaborative approach, clinicians contribute expertise on HIV/AIDS illness and antiretroviral medications, while patients contribute comprehensive and accurate information on how they are taking medications, and why they are taking them the way [that] they are" (p. 273).

"Adherence relies on the construction of the patient-provider relationship as one with a dominant, directive professional, and a dependent, passive patient where the function of the physician is to diagnose and treat, and the role of the patient is to follow expert advice or directives. The patient's 'sick role' is assumed to [be] the most important role in the individual's life, and the most significant determinant for his or her health-related choices and actions ... ."
— Broyles, Colbert, & Erlen, 2005, p. 369

The Problem With Adherence

A collaborative approach to addressing adherence barriers represents a significant improvement over lecturing on the importance of adherence, but for an approach to be *truly* collaborative, perhaps thinking needs to encompass greater consideration of the inherent power inequities underlying the patient-provider partnership. Broyles, Colbert, and Erlen (2005) observe that "[c]onceptualizations of adherence still rely on traditional paternalistic models of patient-provider relationships. Despite the calls for improved patient-provider communication and partnership, patients are still ultimately afforded limited autonomy over their regimen management" (p. 365). In the view of these investigators, "limit[ing] patient involvement in self-regulation and disease management ... [represents] a failure to understand what medication taking *is* and *means* for individuals managing chronic infectious diseases like HIV/AIDS" (p. 365).

"[P]roviders may measure a behavior and label it as 'nonadherence,' whereas from the ... patient's perspective they are behaving in accordance with decisions they have made for themselves, with their own best intention in mind."
— Remien et al., 2003, p. 70

Using HIV/AIDS as an example, Broyles and colleagues propose "the sociological-anthropological concept of 'medication practice' as a preferred alternative to adherence ..." (p. 371). The concept of medication practice was originally proposed by Conrad[1] "as an individual-centered perspective on self medication management" (p. 372) developed from interview data on the medication-taking experiences of persons with epilepsy.

Realizing the Medication Day

Bresalier and colleagues[2] ex-

[1] Conrad, P. (1985). The meaning of medications: Another look at compliance. *Social Science & Medicine, 20*(1), 29-37.
[2] Bresalier, M., Gillis, L., McClure, L., McCoy,

ticipants performed significantly worse than control participants on the UFOV, a measure with demonstrated sensitivity to impaired driving performance. There was a trend for worse performance across all subsets, with the greatest differences seen on the measure of divided attention. Declines in visual attention were not solely the result of advancing disease nor high levels of general cognitive impairment – individuals impaired on the UFOV covered the spectrum of disease stages and severity of cognitive impairment, suggesting a process occurring at least partially independent of disease progression, as well as a cognitive deficit not entirely captured by common NP tests. (p. 23)

Marcotte and colleagues urge clinicians to "attend to visual attention as well as general cognitive status

(Biopsychosocial Update is continued on Page 14)

panded and elucidated medication practice in their ethnographic investigation of the work and experiences of taking antiretroviral therapy for HIV/AIDS. ... 'Realizing the medication day', becomes the process of creating and establishing the necessary conditions for medication-taking, and then translating regimen instructions into executed behaviour, where the themes are self-knowledge, self-regulation, and initiative, not acquiescence to clinical authority. ... The work of the individual is that of 'active self-manager'. The person first matches the ideal regimen plan prescribed by the provider with the real-time activity at hand, i.e., remembering to take the medication through the use of cues, reminders, routines, and other signals. The patient then 'completes the medication sequence' through actual ingestion after following (often idiosyncratic) steps for preparing doses or actually swallowing the pills. Complicating these tasks is the mental and emotional work of 'overcoming resistance' ... associated with actual medication ingestion, i.e., 'coaching the reluctant self', for example, through the laboriousness of medication preparation, medication as a symbolic reminder of illness, or the anticipation of side effects. ...

In these conceptions of medication practice, individuals perceive various degrees of inherent flexibility in their regimens, see clinicians as 'the animator(s) of statements about ideal dosages', ... and often consider these parameters as guidelines that are provisional and evolutionary (particularly with respect to HIV/AIDS). Additionally, patients balance the biomedical and experiential sources of information about these parameters through their use of collaborative information-sharing networks comprised of other persons with HIV/AIDS. ... (Broyles, Colbert, & Erlen, 2005, pp. 372-373)

Broyles and colleagues take this line of thinking one step further by "integrat[ing] medication practice with feminist thought, further validating individuals' situated knowledge, choices, and multiple roles; more fully recognizing the individual as a multidimensional, autonomous human being; and reducing notions of obedience and deference to authority. Blame is thus extricated from the healthcare relationship, reshaping the traditionally adversarial components of the interaction, and eliminating the view of adherence as a patient problem in need of patient-centred interventions" (pp. 362-363). Broyles and colleagues suggest that "[a]voiding attributions of blame facilitates the patient-provider discussion imperative for increasing the degree of engagement with each another. In turn, professionals are more inclined and prepared to identify and rectify impediments preventing individuals from '[doing better] what they already want to do' ... i.e., improve their health and well-being" (p. 375).

With regard to interventions emerging from this critique, Broyles and colleagues have this to say:

> Provider involvement in enhancing medication practice can ... avoid re-embracing traditional power assumptions by: 1) giving credence to the individual's voice in shaping one's own view of the health enhancement goal by incorporating personal needs, priorities, and beliefs; 2) challenging nuances of the traditional patient-provider relationship and offering alternatives rooted in reciprocity; and 3) refusing to dismiss discussion of structural influences [on health behavior, i.e., factors that are often outside the immediate control of patients and providers]. Providers ought to understand the self-regulatory, daily or even dose-by-dose nature of the choices made by individuals. ... Then providers can assist patients to develop plans that integrate desired medication practices into the complexities of their lives. More often than not, patients know *what* to do in self-care regimens, but not necessarily *how* to do it. Patients do not always require additional information about their medication, but rather, individualised guidance in order to assimilate medications into their routines based on their needs and values. ... People must be asked what they wish to conserve, as opposed to being told what they must change. ... Active participation in constructing enhancement interventions allows care to be informed, determined, and directed by individuals, in turn affording them greater ownership and choice. ... Finally, while the full extent of providers' social responsibility remains unsettled, clinicians *are* obligated to fully assess the many individual, social, and structural barriers which may negatively impact people's medication-taking, and then to help link individuals to supportive services which can reduce or eliminate these hurdles ... . (Broyles, Colbert, & Erlen, 2005, pp. 376-377)

(Tool Box is continued on Page 12)

E., Mykhaloviskiy, E., Taylor, D., & Webber, M. (2002). *Making care visible: Antiretroviral therapy and the health work of people living with HIV/AIDS* [Research report]. Toronto, Ontario, Canada: Making Care Visible Working Group. Retrieved April 23, 2006, from http://cbr.cbrc.net/files/1052421030/makingcarevisible.pdf

(Tool Box -- continued from Page 11)

Power to the People

What techniques are available to clinicians who desire to engage clients in a collaborative process of identifying and addressing barriers to enhancing their medication practice?

> *"Health care providers who recognize and reinforce autonomy rather than viewing it as a threat can foster a supportive and collaborative environment, improving the odds of effective disease management."*
>
> — Kennedy, Goggin, & Nollen, 2004, p. 624

One option is motivational interviewing (MI), a nonconfrontational approach developed by Miller and Rollnick (see sidebar on "No Arguments Here"), who set out four general principles that "underpin its specific techniques and strategies: the expression of empathy, the development of discrepancy, rolling with resistance, and support for self-efficacy" (Markland, Ryan, Tobin, & Rollnick, 2005, pp. 813-814). As Cooperman and Arnsten (2005) describe it,

> [t]he spirit and philosophy of MI ... [encompass] collaboration, evocation, and autonomy, where the patient's goals and readiness to change dictate the direction of the intervention. Techniques – such as open-ended questions, reflective listening, and affirmation – help to establish and maintain therapeutic rapport, create a judgment-free environment and allow the patient to freely express his or her thoughts and feelings about a behavior change so goals and ambivalence can be explored. The goals and focus of the treatment are developed collaboratively with the patient, allowing for a variety of options. (p. 160)

Cooperman and Arnsten further observe that,

> [a]lthough MI is patient-centered, it also incorporates the use of directive techniques to help move a patient forward through the stages of change[3] and strategies to negotiate resistance. A goal of MI is to amplify the patient's ambivalence about a target behavior and elicit an argument for change from the patient. This is accomplished by providing information and advice that ... [are] appropriate for the patient's stage of change, after obtaining the patient's permission. Through a guided exploration of the current versus desired condition and a supported evaluation of the pros and cons of behavior change as opposed to the status quo, the patient can begin to voice and solidify an argument for behavior change that is personally meaningful. Reflection is used selectively to reinforce "change

[3] "Prochaska and DiClemente ... developed the Transtheoretical Model of Change to explain the process by which individuals make behavior changes. This model proposes that a change in behavior is dependent on an individual's stage of readiness to make the change. The stages are precontemplation, contemplation, preparation, action, and maintenance ... . Individuals in the precontemplation stage are unaware of or unwilling to acknowledge the need for a behavior change. Those in the contemplation stage can acknowledge that there is a problem and something needs to be changed, but they have not taken action to make any modifications. In the preparation stage, individuals have begun to make preliminary preparations and plan to make changes in the near future. Those in the action stage are actively working on the new behavior. Finally, the maintenance stage is reached once a new behavior has been sustained for a period of time. According to this model, individuals may relapse and often cycle through these stages several times before making a long lasting or permanent behavior change" (Cooperman & Arnsten, 2005, p. 160).

No Arguments Here

First described by William R. Miller in 1983, and later elaborated upon by Miller and Stephen Rollnick in 1991, "motivational interviewing is a directive, client-centred counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence. It is most centrally defined not by technique but by its spirit as a facilitative style for interpersonal relationship" (Rollnick & Miller, 1995, p. 325).

Rollnick and Miller characterize that spirit in seven key points:

1. *Motivation to change is elicited from the client, and not imposed from without. ...*
2. *It is the client's task, not the counsellor's, to articulate and resolve his or her ambivalence. ...*
3. *Direct persuasion is not an effective method for resolving ambivalence. ...*
4. *The counselling style is generally a quiet and eliciting one. ...*
5. *The counsellor is directive in helping the client to examine and resolve ambivalence. ...*
6. *Readiness to change is not a client trait, but a fluctuating product of interpersonal interaction. ...*
7. *The therapeutic relationship is more like a partnership or companionship than expert/recipient roles. ... (pp. 326-327)*

Regarding the "specific and trainable therapist behaviours that are characteristic of a motivational interviewing style" (p. 327), Rollnick and Miller point to the following:

- o Seeking to understand the person's frame of reference, particularly via reflective listening
- o Expressing acceptance and affirmation
- o Eliciting and selectively reinforcing the client's own self motivational statements [or "change talk"] – expressions of problem recognition, concern, desire and intention to change, and ability to change
- o Monitoring the client's degree of readiness to change, and ensuring that resistance is not generated by jumping ahead of the client.
- o Affirming the client's freedom of choice and self-direction (pp. 327-328)

A more developed explication of this clinical approach is presented in Miller and Rollnick's classic text (1991) and its more recent second edition (2002).

References

Miller, W.R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.

Miller, W.R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York: Guilford Press.

Rollnick, S., & Miller, W.R. (1995). What is motivational interviewing? *Behavioural & Cognitive Psychotherapy, 23*(4), 325-334.

talk" and to help weigh the patient's ambivalence towards moving to the next stage of change. In MI, resistance is not seen as a patient problem but is normalized and considered the result of the interaction between the therapist and the patient. Through reflection, reframing, siding with the negative, shifting focus, emphasizing personal choice, and reassessing goals and the patient's stage of change, MI provides the opportunity to deal with resistance and still accomplish positive treatment outcomes. (p. 160)

"Clearly, the patient as a whole *(all ... beliefs, attitudes, feelings, and social influences) must be considered when trying to understand and address adherence in HIV care."*
— Remien et al., 2003, p. 70

MI, Oh My!

Cooperman and Arnsten summarize emerging research on the use of MI as an intervention to enhance antiretroviral medication practice. They report that, to date, "few published studies have investigated its impact, and the studies that have been published are pilot or feasibility studies ... . However, two randomized, controlled pilot studies [Dilorio et al., 2003; Safren et al., 2001] have shown that MI-inclusive interventions have a positive influence on antiretroviral .... [medication-taking] behavior and attitudes ..." (p. 161). Two *uncontrolled* studies that used MI in combination with cognitive-behavioral therapy with active substance users produced divergent results; one set of authors (Parsons, Rosof, Punzalan, & Di Maria, 2005) did not find significant improvement in HAART medication practice, whereas the other set of authors (Cooperman, Parsons, Kaswan, & Arnsten, 2005) demonstrated significant positive outcomes.

Adamian, Golin, Shain, and DeVellis (2004) demonstrated the feasibility, acceptability, and usefulness of a brief MI session focused on medication practice. Subsequently, Golin et al. (2006) conducted a randomized, controlled trial involving 140 adults who were having medication-taking difficulties or were just beginning HAART "to compare ... [the medication practice] (at 12-week follow-up) of patients receiving an MI intervention with those receiving a dose-matched HIV information control program" (p. 42). Although Golin and colleagues found, on average, that the antiretroviral medication practice of the intervention group improved, while that of the control group declined, the investigators "did not definitively demonstrate the efficacy of the MI-based intervention at 12 weeks" (p. 49), as *both* groups demonstrated poor medication-taking practices overall.

The more recent findings of Golin and colleagues notwithstanding, Cooperman and Arnsten conclude that "[e]xisting research, although limited, suggests that MI combined with other interventions is feasible and efficacious for improving ... antiretroviral medication ... [practice], even among drug users" (p. 164). They are quick to caution, however, that "further investigation is necessary to understand how MI can best be adapted for this purpose. It is currently difficult to compare studies or determine the true impact of MI because the content of each intervention has been different. Furthermore, training of counselors and evaluation of fidelity to MI philosophy and techniques vary among the interventions reported. This is important because research has shown that the quality of the MI provided is significantly related to outcomes ..." (pp. 161, 163).

Cooperman and Arnsten are nonetheless hopeful that, "[w]ith continued development and refinement of antiretroviral ... [medication practice] interventions that incorporate MI, more persons with HIV infection can be expected to choose to make the difficult changes necessary for them to benefit from antiretroviral therapy" (p. 159).

References

Adamian, M.S., Golin, C.E., Shain, L.S., & DeVellis, B. (2004). Brief motivational interviewing to improve adherence to antiretroviral therapy: Development and qualitative pilot assessment of an intervention. *AIDS Patient Care & STDs, 18*(4), 229-238.

Broyles, L.M., Colbert, A.M., & Erlen, J.A. (2005). Medication practice and feminist thought: A theoretical and ethical response to adherence in HIV/AIDS. *Bioethics, 19*(4), 362-378.

Cooperman, N.A., & Arnsten, J.H. (2005). Motivational interviewing for improving adherence to antiretroviral medications. *Current HIV/AIDS Reports, 2*(4), 159-164.

Cooperman, N.A., Parsons, J.T., Kaswan, D., & Arnsten, J.H. (2005, April 13-15). *Intervening to improve utilization of and adherence to antiretroviral therapy among HIV-infected drug users receiving primary care in methadone maintenance treatment programs.* Rapid communications poster presented at the Society of Behavioral Medicine's 26th Annual Meeting, Boston, MA.

Dilorio, C., Resnicow, K., McDonnell, M., Soet, J., McCarty, F., & Yeager, K. (2003). Using motivational interviewing to promote adherence to antiretroviral medications: A pilot study. *Journal of the Association of Nurses in AIDS Care, 14*(2), 52-62.

Fogarty, L., Roter, D., Larson, S., Burke, J., Gillespie, J., & Levy, R. (2002). Patient adherence to HIV medication regimens: A review of published and abstract reports. *Patient Education & Counseling, 46*(2), 93-108.

Golin, C.E., Earp, J., Tien, H.-C., Stewart, P., Porter, C., & Howie, L. (2006). A 2-arm, randomized, controlled trial of a motivational interviewing-based intervention to improve adherence to antiretroviral therapy (ART) among patients failing or initiating ART. *Journal of Acquired Immune Deficiency Syndromes, 42*(1), 42-51.

Kennedy, S., Goggin, K., & Nollen, N. (2004). Adherence to HIV medications: Utility of the theory of self-determination. *Cognitive Therapy & Research, 28*(5), 611-628.

Markland, D., Ryan, R.M., Tobin, V.J., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of Social & Clinical Psychology, 24*(6), 811-831.

Parsons, J.T., Rosof, E., Punzalan, J.C., & Di Maria, L. (2005). Integration of motivational interviewing and cognitive behavioral therapy to improve HIV medication adherence and reduce substance use among HIV-positive men and women: Results of a pilot project. *AIDS Patient Care & STDs, 19*(1), 31-39.

Remien, R.H., Hirky, A.E., Johnson, M.O., Weinhardt, L.S., Whittier, D., & Minh Le, G. (2003). Adherence to medication treatment: A qualitative study of facilitators and barriers among a diverse sample of HIV+ men and women in four U.S. cities. *AIDS & Behavior, 7*(1), 61-72.

Safren, S.A., Otto, M.W., Worth, J.L., Salomon, E., Johnson, W., Mayer, K., & Boswell, S. (2001). Two strategies to increase adherence to HIV antiretroviral medication: Life-Steps and medication monitoring. *Behaviour Research & Therapy, 39*(10), 1151-1162.

Tugenberg, T., Ware, N.C., & Wyatt, M.A. (2006). Paradoxical effects of clinician emphasis on adherence to combination antiretroviral therapy for HIV/AIDS. *AIDS Patient Care & STDs, 20*(4), 269-274.

– Compiled by Abraham Feingold, Psy.D.

(Biopsychsocial Update -- continued from Page 11)

in estimating which patients are at risk for impaired driving" (p. 13). They further speculate that "many individuals could potentially benefit from behavioral treatment for deficient driving skills. Recent evidence indicates that ... speed of processing training may improve performance on the UFOV, and this may transfer to on-road driving performance ... . While it remains to be seen whether the attentional impairments seen in an HIV-infected cohort could be remediated with training, it does offer the hope that perhaps some HIV+ patients could reacquire safe driving skills" (p. 25).

Carey et al. (2006) examined **prospective memory** (ProM)[3] among 42 individuals living with HIV, as well as 29 demographically similar comparison individuals who were not HIV-infected. "The HIV-1 sample demonstrated deficits in time- and event-based ProM, as well as more frequent 24-hour delay ProM failures and task substitution errors[4] relative to the ... [comparison] group. In contrast, there were no significant differences in recognition performance, indicating that the HIV-1 group was able to accurately retain and recognize the ProM intention when retrieval demands were minimized" (pp. 536-537).

> In light of the prevalence of Task Substitution errors in HIV-1, it might be prudent to incorporate highly explicit and specific task reminders (e.g., a text messaging system that gives explicit instructions, including the name of the particular medication, recommended dosage, and any conditions under which the medication should be taken) when designing remedial medication adherence strategies. Medication adherence efforts might also be enhanced by minimizing the ProM 'load' (e.g., keeping to a minimum the number and complexity of tasks to be completed) for persons with HIV-1. (p. 546)

Adherence to Treatment

As suggested in this issue's **Tool Box** (p. 10), "[w]hereas prior research has emphasized individual-level factors associated with HAART [highly active antiretroviral therapy] adherence, recent studies suggest the need to examine **interpersonal, social, and structural environmental factors** that may affect vulnerable populations' effective HAART use" (Knowlton et al., 2006, p. 486).

To this end, Knowlton and colleagues drew data from a community sample of 466 heterosexually active IDUs living with HIV in four U.S. cities and taking recommended HAART at the time of the study. Within this sample (66% male, 69% African American, 26% recently homeless; median age 43 years), 28% had an undetectable viral load. Furthermore, "[r]esults indicated that among participants on recommended HAART, adjusted odds of viral suppression were at least 3 times higher among those with high emotional support, stable housing, and CD4 > 200; viral suppression was approximately 60% higher among those with better patient-provider communication" (p. 489). On this latter point, "[i]n item-by-item analyses of a scale on engagement with one's healthcare provider, questions most highly associated with undetectable viral load were those pertaining to patient-provider communication and joint decision making, eg, 'My doctor listens to me, answers my questions, involves me in decisions'" (p. 490). Finally, "[o]utpatient drug treatment and ... [African American] race and an interaction between current drug use and social support were marginally negatively significant. Among those with high perceived support, noncurrent drug users compared with current drug users had a greater likelihood of [undetectable viral load]; current drug use was not associated with [undetectable viral load] among those with low support" (p. 486). In short, these results "suggest the major role of social support in facilitating effective HAART use in this population and suggest that active drug use may interfere with HAART use by adversely affecting social support" (p. 486). To promote the effective use of HAART, these findings move Knowlton and colleagues to conclude that

> interpersonal support and communication skill building interventions are needed, targeting patients with a recent history of IDU (especially African Americans), their main supportive ties, and their healthcare providers. The results also suggest the need for policies and programs that improve their access to stable housing and to outpatient drug abuse treatment. Such multisectoral interventions may help address the structural and social environmental influences impacting the population's ability to effectively incorporate medication taking into their everyday lives, relationships, and routines. ... (p. 491)

How do **positive interactions with health care providers** and **adherence self-efficacy** (i.e., an individual's confidence in his or her ability to adhere) relate to one another and, ultimately, to antiretroviral adherence? Johnson, Chesney, et al. (2006) "hypothesize[d] that positive provider interactions are linked to greater self-efficacy for adherence, which in turn is associated with bet-

[3] "A form of episodic memory, ProM involves the complex processes of forming, monitoring, and executing future intentions vis-à-vis ongoing distractions" (p. 536). "Practical, everyday examples of ProM include remembering to take medications at a particular time or remembering to turn off the stove after preparing a meal" (p. 537).

[4] One example of a task substitution error is repeating a task from an earlier trial, perhaps reflecting some interference with the retrieval of intentions for the task at hand.

ter [antiretroviral] adherence; specifically, that higher adherence self-efficacy explains the association between provider interaction and adherence" (p. 259). To explore this hypothesis, the investigators utilized a mixture of "[c]omputerized self-administered and interviewer-administered self reported measures of medication adherence, demographic and treatment variables, provider interactions, and adherence self-efficacy" (p. 258) with a convenience sample of 2,765 adults receiving antiretroviral therapy.

Analyzing these data, Johnson and colleagues did, indeed, find that

> adherence self-efficacy mediated the relationship between positive provider interactions and medication adherence. This indicates that, statistically, the relationship of provider interactions and adherence can be explained by adherence self-efficacy, suggesting that self-efficacy may be the mechanism of the relationship between the other two variables. The pattern of this relationship was the same regardless of gender, race/ethnicity, [IDU], and site of usual HIV care, suggesting substantial support for this model of adherence. Furthermore, this relationship is maintained when controlling for important demographic variables (age, gender, education), treatment variables (CD4 count, usual source of care), and other factors often linked to adherence (depression, social support, IDU).
>
> These findings have implications for improving adherence self-efficacy such that fostering positive interactions between providers and patients may lead to better medication adherence. ... For example, helping providers create an environment in which the patient feels respected and understood may lead to greater confidence in the patient's ability to stick to a treatment regimen. ... Physician training to increase collaborative negotiation in setting treatment goals and strategies is also likely to bolster adherence self-efficacy. ... Because patient perceptions of stress may undermine self-efficacy for antiretroviral adherence, ... it may also be beneficial to improve patient-physician communication about managing stressful life circumstances that influence medication adherence. Likewise, patient-focused interventions that enhance skills may improve provider/patient visits ... and lead to greater self-efficacy for medication adherence. For example, assertive communication skills, in which the patient is able to respectfully make specific requests of the provider, may facilitate positive interactions. Other strategies by which the patient can influence the interaction with the provider (e.g., making lists of questions for the provider) may have a beneficial impact on the patient-provider interaction and thereby improve adherence self-efficacy. (pp. 263, 265)

Canadian investigators (Veinot et al., 2006) conducted interviews with 34 **young people** (ages 12-24 years) living with HIV in Ontario to assess their views on, and experience with, antiretroviral treatment.

> Four major themes emerged: *Treatment knowledge: confusion and skepticism.* Many participants did not understand, or believe in, antiretroviral treatment. Some youth on treatment did not understand why they were taking medications. *Treatment decision-making: lack of choice and feeling emotionally unprepared.* Some youth did not feel that they had choices about treatment, and others did not feel ready to make treatment decisions. *Difficulties taking medications.* Youth had problems with social routine disruption, feeling "different" and side effects. Many viewed costs of medications as a barrier to treatment. *Inconsistent treatment adherence and treatment interruptions,* which were common amongst participants. (p. 261)

Drawing on these themes and exercising caution in generalizing these findings to a wider population of youth living with HIV, Veinot and colleagues nonetheless observe that "[d]evelopmentally appropriate education about HIV treatment and youth-specific outreach for social programs may be helpful in facilitating HIV-positive youths' treatment access. Providers may also wish to consider delivering resiliency-based interventions and using empowerment-based approaches to assist youth in becoming involved in treatment decisions. Finally, youth may need specific support for managing adherence and difficulties with treatment" (p. 266).

Serostatus Disclosure

Peretti-Watel et al. (2006) conducted a cross-sectional survey with a nationally representative sample of 2,932 adults receiving outpatient HIV care at French hospitals. The purpose of the survey was to investigate **serodisclosure patterns** and their **relationship to** experiences of **HIV-related stigma and to HAART adherence**. Peretti-Watel and colleagues found that

> HIV disclosure patterns were both selective and cumulative: disclosure was more frequent for friends and siblings, while concealment prevailed concerning children, other relatives, and colleagues; but patients who disclosed their seropositivity to one significant other were also more likely to disclose it to other significant others. Patients reporting experi-

ences of discrimination from sexual partners were less likely to be highly adherent [to HAART], and ... [the investigators] also found a significant relationship between uncontrolled disclosure and non-adherence. (p. 254)

Peretti-Watel and colleagues observe that "[p]atients who have opted for concealment probably consider non-adherence and uncontrolled disclosure as competing risks, but among them a significant minority loses on both counts. Counselling provided to HIV-infected people should not separate the adherence and disclosure issues, and adherence interventions should seek to help patients to manage concurrently disclosure/concealment of their seropositivity and its consequences" (p. 254).

In an exploratory study, Wiener and Battles (2006) examined the relationship between serostatus disclosure and interpersonal relationships, psychological functioning, and HIV prevention behavior among 40 **perinatally infected youth** (ages 13 to 24) living with HIV.

No link was found between the age the participant learned the diagnosis and later psychological distress or degree of romantic disclosure ... [but] greater disclosure ... [was] associated with better psychosocial outcomes, fewer posttraumatic stress symptoms, ... and higher peer self-competence. Although preliminary, this study is the first that explored the psychosocial effects of an adolescent's HIV diagnosis disclosure. The web of disclosure is complex and delicate, each disclosure encumbered with consequences. As clinicians, we need to help adolescents build the communication, health care, and general life skills that correspond with their increased survival rates. (p. 309)

Stress Management

Continuing research on a trial introduced in the Spring 2006 issue of *mental health* **AIDS**[5], Carrico et al. (2006) randomized 130 MSM living with HIV and receiving HAART to one of two conditions: either a 10-week, **cognitive behavioral stress management** (CBSM) **group offered in conjunction with individualized antiretroviral medication adherence training** (MAT) from a clinical pharmacist (CBSM + MAT; *n* = 76) or a MAT-only condition (*n* = 54). "Measures of self-reported adherence, active cognitive coping (i.e., acceptance and positive reinterpretation), avoidant coping (i.e., denial and behavioral disengagement), and depressed mood were examined over the 10-week intervention period" (p. 155). "The results ... provide support for the efficacy of CBSM + MAT for decreasing depressed mood and avoidant ... coping ... in HIV-positive gay and bisexual men treated with HAART. However, this intervention did not influence the use of active cognitive coping strategies or adherence over the 10-week intervention period" (p. 161). As Carrico and colleagues see it, "[a]lthough denial may be an effective means of distress reduction in the short term, reliance on this coping strategy may result in a decreased capacity to effectively manage a variety of disease-related stressors in the long term. CBSM+MAT addresses this potentially detrimental pattern by teaching stress reduction skills that may decrease depressed mood via reduced reliance on denial coping" (p. 155).

Coping, Social Support, & Quality of Life

Belanoff et al. (2005) conducted a pilot study in which they matched and randomly assigned an ethnically diverse and predominantly low-income sample of 59 men and women living with HIV to one of two conditions. In the experimental condition, participants received weekly sessions of **supportive-expressive group therapy** plus educational materials on HIV/AIDS, while those in the control condition received the educational materials alone. CD4 cell counts and viral load were assessed at baseline and again 12 weeks later. The investigators found that "individuals who were randomized to group therapy showed a statistically significant increase in CD4 count and decrease in HIV viral load. Among individuals randomized to the education only condition, no significant change occurred in CD4 count or viral load" (p. 349).

The overall results of this study provide preliminary data which suggest that supportive-expressive group therapy may be effective in modulating important biological markers of HIV disease progression, particularly that of CD4 count. For viral load, the within-group analysis showed statistically significant improvement in the group therapy condition over time. However, in the between groups comparison of the two treatment arms, the difference in viral load was not statistically significant. Therefore, further research with larger samples is warranted by these preliminary results. (p. 357)

To evaluate the benefits of **expressive writing** among people living with HIV, Rivkin, Gustafson, Weingarten, and Chin (2006) interviewed and then randomized an ethnically diverse sample of 79 men and women living with HIV to one of two conditions. In the expressive writing condition, participants were asked to write for 20 minutes about "their deepest thoughts and feelings about liv-

[5] Antoni, M.H., Carrico, A.W., Durán, R.E., Spitzer, S., Penedo, F., Ironson, G., Fletcher, M.A., Klimas, N., & Schneiderman, N. (2006). Randomized clinical trial of cognitive behavioral stress management on human immunodeficiency virus viral load in gay men treated with highly active antiretroviral therapy. *Psychosomatic Medicine, 68*(1), 143-151.

ing with HIV" (p. 13), while in the control condition, participants were asked to describe their activities during the preceding 24 hours. Participants in each condition were asked to repeat the exercise once weekly over the subsequent 3-week period. Immunological functioning was assessed at baseline and again at 2-month (n = 62) and 6-month (n = 50) follow-up interviews.

> This study provides mixed support for the benefits of expressive writing for people living with HIV. Although there were no effects of expressive writing on depression immune function, or the number of positive or negative changes described at the 2-month or 6-month follow-ups, the ways that participants wrote about their experiences influenced benefits from expressive writing. Expressive writing participants who showed increased cognitive processing and discussion of social themes in their writing had better immune function and described more positive changes at follow-up than those who did not.. ... The results in the current study suggest that cognitive processing is critical to the benefits of expressive writing. The cognitive processing that takes place during writing may improve adjustment by facilitating changes in how individuals think about the events and helps individuals find meaning in the stressful experiences ... . The current study also suggests that increases in expression of social themes may be important in the benefits of writing. However, the nature of the social themes expressed in the writing, and the extent to which they reflect social support, conflict, or burdens could not be captured by ... [computerized text analysis]. It is possible that those, for whom writing prompted changes in social interactions, may have experienced greater health benefits and positive changes from the writing. (pp. 20-21)

Rivkin and colleagues conclude that these findings, together with those from earlier studies, "suggest that cognitive processing of emotions and concerns about HIV can facilitate better emotional and physical adjustment. An intervention such as expressive writing that can help people confront and process their disease has the potential to improve the lives of people living with HIV. ... For people living with HIV, this writing intervention may be more effective when it is incorporated into a more intensive counseling approach that facilitates greater cognitive processing and emotion-regulation" (p. 24).

Tarakeshwar, Khan, and Sikkema (2006) conducted comprehensive, in-depth interviews about spirituality with 10 men and 10 women living with HIV.

> Interview themes suggest that the HIV diagnosis facilitated a **relationship-based framework of spirituality**. Relationships that formed this framework were: relationship with God/Higher Power, renewed engagement with life, and relationship with family. Within "relationship with God/ Higher Power," subthemes included gratitude for God's benevolent influence, spiritual struggles, and building connections with their Higher Power. Self care, transformation of life goals, and accepting mortality were subthemes for "renewed engagement with life." Subthemes within "relationship with family" included finding a sense of purpose, finding support through families, and families as a source of strain. (p. 59)

To integrate spirituality into coping interventions, Tarakeshwar and colleagues offer several suggestions:

> First, it would be important to allow men and women with HIV to define what spirituality means to them, how spirituality has "evolved" in their lives, and examine their experience of spiritual struggles (shame, guilt, and anger at God-Higher Power). ...

From the Block

Health Services Center of Alabama

Health Services Center, Inc. (HSC), is a coordinated network of HIV primary care clinics serving 14 rural counties in northeast Alabama, a geographic area of over 9,000 square miles. HIV-related medical services were first provided in 1990 on a voluntary basis; today, the network employs more than 30 professionals and offers a full spectrum of health care and social services to over 300 people living with HIV/AIDS.

With funding from CMHS/SAMHSA, HSC has expanded its program of outpatient individual, group, and family counseling to include psychiatric/psychopharmacological evaluation and psychotropic medication management and follow-up care. HSC's main clinic is located in Hobson City (near Anniston, Alabama), and remote clinics are located in Gadsden, Lanett, Alexander City, Sylacauga, and Fort Payne, all served on a rotating schedule. Under a separate SAMHSA funding stream, intensive outpatient substance abuse treatment and aftercare services are also provided at the Gadsden location. Other federal agencies fund HIV-related case management services, as well as adherence, outreach/education, and palliative care initiatives.

The Principal Investigator is Barbara Hanna, MD; the Project Director/Clinical Director is Gayle Wood, MS, LPC. For more information, please call 256/832-0100 or go to http://www.hscal.org/.

– Compiled by the MHHSC Program Coordinating Center

> [E]xpressions of these struggles can be critical during the months/years following the HIV diagnosis. Second, the themes highlight the notion that spirituality can be practiced in a variety of ways, not all of which include organized religion. ... [T]here are other ways (prayer, meditation, Bible reading) through which ... [people] can observe their spirituality. Thus, individuals with HIV can be encouraged to seek appropriate resources (e.g., meditation groups) to help them connect with their Higher Power. Third, "spirituality" is not all about the "higher" realm. For ... [study] participants, strengthening family ties was an inextricable component of spirituality. Hence, interventions can include discussions on re-building family connections, finding support from family members, and balancing personal and familial needs. The latter is particularly salient for women. (pp. 68-69)

End-of-Life Issues

Continuing this focus on spirituality, Williams et al. (2005) randomly assigned 58 residents of an AIDS-dedicated skilled nursing facility to one of four month-long conditions: Metta meditation[6] (instruction, followed by daily self-administration via audiocassette), massage (30 minutes per day, 5 days per week), a combination of **meditation and massage**, or standard care. "This study showed significant improvement in overall and spiritual quality of life in patients with AIDS near the end-of-life who received the combined meditation and massage intervention. ... The groups receiving single interventions (meditation-only or massage-only) showed less of a decline than standard care in overall and transcendent quality of life scores, although these differences were not significant" (p. 947). Notably, "[i]nfluence on quality of life appears to be sustainable, as the improvement in scores appreciated by the combined intervention group ... [was] evident at 8 weeks (1-month postintervention phase) and remained at 68 weeks, the last assessment time point" (p. 948). With regard to the impact of the combined intervention, Williams and colleagues conjecture that "physical touch is a valuable component of end-of-life care for patients with AIDS. Possibly, among this population, where the stigma of disease engenders a sense of physical isolation and alienation, ... massage may be essential for the spiritual effects of meditation to be appreciated" (p. 950). They conclude that "[t]his pilot study is unique in addressing the spiritual needs of late-stage patients with AIDS from two modalities, meditation and massage. While the interventions are spiritual, they are nondenominational, and are therefore readily generalizable" (p. 950).

[6] "Metta meditation ... [p]ractitioners cultivate a personal state of 'metta' [i.e., 'loving-kindness' in Pali] by gently repeating phrases that are meaningful in terms of what they wish, first for themselves and then for others. Classically there are four phrases used:

> May I be free from danger.
> May I have mental happiness.
> May I have physical happiness.
> May I have ease of well-being. ...

Metta meditation, designed to cultivate loving-kindness and forgiveness toward oneself and all living beings, encouraging connection and relation, may be uniquely appropriate for people with AIDS" (p. 940).

References

Aidala, A.A., Lee, G., Garbers, S., & Chiasson, M.A. (2006). Sexual behaviors and sexual risk in a prospective cohort of HIV-positive men and women in New York City, 1994-2002: Implications for prevention. *AIDS Education & Prevention, 18*(1), 12-32.

Albarracín, D., Gillette, J.C., Earl, A.N., Glasman, L.R., Durantini, M.R., & Ho, M.-H. (2005). A test of major assumptions about behavior change: A comprehensive look at the effects of passive and active HIV-prevention interventions since the beginning of the epidemic. *Psychological Bulletin, 131*(6), 856-897.

Allavena, C., Le Moal, G., Michau, C., Chiffoleau, A., & Raffi, F. (2006). Neuropsychiatric adverse events after switching from an antiretroviral regimen containing efavirenz without tenofovir to an efavirenz regimen containing tenofovir: A report of nine cases. *Antiviral Therapy, 11*(2), 263-265.

Belanoff, J.K., Sund, B., Koopman, C., Blasey, C., Flamm, J., Schatzberg, A.F., & Spiegel, D. (2005). A randomized trial of the efficacy of group therapy in changing viral load and CD4 counts in individuals living with HIV infection. *International Journal of Psychiatry in Medicine, 35*(4), 349-362.

Berkman, A., Cerwonka, E., Sohler, N., & Susser, E. (2006). A randomized trial of a brief HIV risk reduction intervention for men with severe mental illness. *Psychiatric Services, 57*(2), 407-409.

Carey, C.L., Woods, S.P., Rippeth, J.D., Heaton, R.K., Grant, I., & the HIV Neurobehavioral Research Center (HNRC) Group. (2006). Prospective memory in HIV-1 infection. *Journal of Clinical & Experimental Neuropsychology, 28*(4), 536-548.

Carrico, A.W., Antoni, M.H., Durán, R.E., Ironson, G., Penedo, F., Fletcher, M.A., Klimas, N., & Schneiderman, N. (2006). Reductions in depressed mood and denial coping during cognitive behavioral stress management with HIV-positive gay men treated with HAART. *Annals of Behavioral Medicine, 31*(2), 155-164.

Donenberg, G.R., Emerson, E., Bryant, F.B., & King, S. (2006). Does substance use moderate the effects of parents and peers on risky sexual behaviour? *AIDS Care, 18*(3), 194-200.

Durantini, M.R., Albarracín, D., Mitchell, A.L., Earl, A.N., & Gillette, J.C. (2006). Conceptualizing the influence of social agents of behavior change: A meta-analysis of the effectiveness of HIV-prevention interventionists for different groups. *Psychological Bulletin, 132*(2), 212-248.

Halkitis, P.N., & Shrem, M.T. (2006). Psychological differences between binge and chronic methamphetamine using gay and bisexual men. *Addictive Behaviors, 31*(3), 549-552.

Johnson, B.T., Carey, M.P., Chaudoir, S.R., & Reid, A.E. (2006). Sexual risk reduction for persons living with HIV: Research synthesis of randomized controlled trials, 1993 to 2004. *Journal of Acquired Immune Deficiency Syndromes, 41*(5), 642-650.

Johnson, M.O., Chesney, M.A., Goldstein, R.B., Remien, R.H., Catz, S., Gore-Felton, C., Charlebois, E., Morin, S.F., & the NIMH Healthy Living Project Team. (2006). Positive provider interactions, adherence self-efficacy, and adherence to antiretroviral medications among HIV-infected adults: A mediation model. *AIDS Patient Care & STDs, 20*(4), 258-268.

Knowlton, A., Arnsten, J., Eldred, L., Wilkinson, J., Gourevitch, M., Shade, S., Dowling, K., Purcell, D., & the INSPIRE Team. (2006). Individual, interpersonal, and structural correlates of effective HAART use among urban active injection drug users. *Journal of Acquired Immune Deficiency Syndromes, 41*(4), 486-492.

Lam, A.G., & Barnhart, J.E. (2006). It takes two: The role of partner ethnicity and age characteristics on condom negotiations of heterosexual Chinese and Filipina American college women. *AIDS Education & Prevention, 18*(1), 68-80.

Lauby, J.L., Bond, L., Eroglu, D., & Batson, H. (2006). Decisional balance, perceived risk and HIV testing practices. *AIDS & Behavior, 10*(1), 83-92.

Longshore, D., Stein, J.A., & Chin, D. (2006). Pathways to sexual risk reduction: Gender differences and strategies for intervention. *AIDS & Behavior, 10*(1), 93-104.

Marcotte, T.D., Lazzaretto, D., Scott, J.C., Roberts, E., Woods, S.P., Letendre, S., & the HNRC Group. (2006). Visual attention deficits are associated with driving accidents in cognitively-impaired HIV-infected individuals. *Journal of Clinical & Experimental Neuropsychology, 28*(1), 13-28.

Mellins, C.A., Brackis-Cott, E., Dolezal, C., & Abrams, E.J. (2006). Psychiatric disorders in youth with perinatally acquired human immunodeficiency virus infection. *Pediatric Infectious Disease Journal, 25*(5), 432-437.

Morrill, A.C., & Noland, C. (2006). Interpersonal issues surrounding HIV counseling and testing, and the phenomenon of "testing by proxy." *Journal of Health Communication, 11*(2), 183-198.

Norton, T.R., Bogart, L.M., Cecil, H., & Pinkerton, S.D. (2005). Primacy of affect over cognition in determining adult men's condom-use behavior: A review. *Journal of Applied Social Psychology, 35*(12), 2493-2534.

Peretti-Watel, P., Spire, B., Pierret, J., Lert, F., Obadia, Y., & the VESPA Group. (2006). Management of HIV-related stigma and adherence to HAART: Evidence from a large representative sample of outpatients attending French hospitals (ANRS-EN12-VESPA 2003). *AIDS Care, 18*(3), 254-261.

Rivkin, I.D., Gustafson, J., Weingarten, I., & Chin, D. (2006). The effects of expressive writing on adjustment to HIV. *AIDS & Behavior, 10*(1), 13-26.

Schroeder, J.R., Epstein, D.H., Umbricht, A., & Preston, K.L. (2006). Changes in HIV risk behaviors among patients receiving combined pharmacological and behavioral interventions for heroin and cocaine dependence. *Addictive Behaviors, 31*(5), 868-879.

Smoak, N.D., Scott-Sheldon, L.A.J., Johnson, B.T., Carey, M.P., & the SHARP Research Team. (2006). Sexual risk reduction interventions do not inadvertently increase the overall frequency of sexual behavior: A meta-analysis of 174 studies with 116,735 participants. *Journal of Acquired Immune Deficiency Syndromes, 41*(3), 374-384.

Tarakeshwar, N., Khan, N., & Sikkema, K.J. (2006). A relationship-based framework of spirituality for individuals with HIV. *AIDS & Behavior, 10*(1), 59-70.

Theall, K.P., Elifson, K.W., & Sterk, C.E. (2006). Sex, touch, and HIV risk among ecstasy users. *AIDS & Behavior, 10*(2), 169-178.

van Empelen, P., & Kok, G. (2006). Condom use in steady and casual sexual relationships: Planning, preparation and willingness to take risks among adolescents. *Psychology & Health, 21*(2), 165-181.

Veinot, T.C., Flicker, S.E., Skinner, H.A., McClelland, A., Saulnier, P., Read, S.E., & Goldberg, E. (2006). "Supposed to make you better but it doesn't really": HIV-positive youths' perceptions of HIV treatment. *Journal of Adolescent Health, 38*(3), 261-267.

Wiener, L.S., & Battles, H.B. (2006). Untangling the web: A close look at diagnosis disclosure among HIV-infected adolescents. *Journal of Adolescent Health, 38*(3), 307-309.

Williams, A.-L., Selwyn, P.A., Liberti, L., Molde, S., Njike, V.Y., McCorkle, R., Zelterman, D., & Katz, D.L. (2005). A randomized controlled trial of meditation and massage effects on quality of life in people with late-stage disease: A pilot study. *Journal of Palliative Medicine, 8*(5), 939-952.

Tool Box

A Note on 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.cdcnpin.org/news/prevnews.htm); the *Kaiser Daily HIV/AIDS Report* (http://report.kff.org/hivaids/); and information e-mailed by Florida International University researcher Robert M. Malow, Ph.D., ABPP. Other sources are identified when appropriate.

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

Bartlett, J.G. (2005). *The Johns Hopkins Hospital 2005-6 guide to medical care of patients with HIV infection, 12th edition.* Philadelphia: Lippincott Williams & Wilkins.

Shernoff, M. (Ed.). (2000). *AIDS and mental health practice: Clinical and policy issues.* Binghamton, NY: Haworth Press.

– Compiled by Abraham Feingold, Psy.D.

HIV/AIDS Education, Prevention, and Services Programs
Division of Prevention, Traumatic Stress, and Special Programs
Center for Mental Health Services
Substance Abuse and Mental Health Services Administration
One Choke Cherry Road, Suite 2-1009
Rockville, MD 20857
Web site: http://www.samhsa.gov/

U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration (SAMHSA)
www.samhsa.gov