

mental health AIDS

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Biopsychosocial Update

HIV Prevention News

About Men

Kalichman, Cherry, Cain, Pope, and Kalichman (2005) surveyed a largely African American convenience sample of 141 men living with HIV who were **using the Internet to meet potential sex partners.**

Results showed that 37% of sexually active HIV-positive men who were using the Internet had gone online to seek potential sex partners in the previous 3 months. Seeking sex partners online was associated with greater likelihood of having HIV-negative sex partners and engaging in unprotected intercourse with HIV-negative or unknown HIV status partners. Multivariate analyses showed that seeking sex partners online was associated with greater education, higher CD4 cell counts, using the Internet for sexual entertainment, and higher Sexual Compulsivity scale scores over and above demographic, health, Internet use, sexual behavior, and other psychosocial characteristics[,] including optimism and depression. (p. 243)

Kalichman and colleagues conclude that,

[a]lthough it may also be the case for men who seek sex partners through other venues, results of this study show that men who seek sex partners on the

Internet are in need of HIV transmission risk reduction interventions. Men who used the Internet to seek sex partners reported greater symptoms of depression and less optimism than their counterparts who did not seek sex partners online. ... [Moreover, m]en who did not use the Internet to meet sex partners scored similarly on the Sexual Compulsivity scale as a general community sample of HIV-positive men In contrast, men who used the Internet to meet sex partners scored the same on the Sexual Compulsivity scale as men in a different study who frequently used the Internet for sexual recreation These findings suggest that interventions designed to reduce sexual risks among men who use the Internet to meet sex partners will benefit from taking into account the potential for sexual preoccupations, as indicated by scores on the Sexual Compulsivity scale. For example, interventions that use cognitive and behavior techniques such as thought stopping, distraction, aversive imagery, as well as pharmacological treatment have been used to treat the more severe symptoms of sexual compulsivity HIV-prevention efforts with this population may benefit from including current techniques for intervening with sexually compulsive men. (p. 249)

About Men Who Have Sex With Men

Updating earlier meta-analytic studies, Johnson et al. (2005)

conducted a systematic review and meta-analysis to locate, characterize, and summarize effects of **behavioral HIV prevention interventions** for men who have sex with men (MSM) ... [that were identified as of May 2005. The investigators] found 54 interventions with 16,224 participants that were evaluated in 40 randomized trials and controlled observational studies with independent comparison groups. Formats included 26 small group interventions, 18 individual-level interventions, and 10 community-level interventions. Fifteen interventions focused on HIV-positive individuals including MSM. (p. 568)

Johnson and colleagues report that “[i]n studies with strong research designs, behavioral interventions for MSM reduced unprotected sex by 27% compared with minimal or no intervention and reduced the propor-

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tion of men reporting any unprotected sex by 16%. These statistically significant effects were also evident in subgroup analyses of small-group and community-level interventions” (p. 582). The investigators also point out that “limited information on biological outcomes suggests that the highest risk clients may be better served by individual-level interventions than by small-group interventions that introduce them to potential new partners who are themselves at particularly high risk” (p. 584).

A study involving MSM comes from Heintz and Melendez (2006), who surveyed a convenience sample of 58 lesbian, gay, bisexual, and transgender individuals who had experienced **intimate partner violence** (IPV) and were receiving counseling from a community-based agency. “A large percentage of participants reported being forced by their partners to have sex (41%). Many stated that they felt unsafe to ask their abusive partners to use safer sex protection or that they feared their partners’ response to safer sex (28%). In addition, many participants experienced sexual (19%), physical (21%), and/or verbal abuse (32%) as a direct consequence of asking their partner to use safer sex protection” (p. 193).

Drawing needed attention to this interface of IPV and HIV/sexually transmitted disease (STD) risk within same-sex relationships, Heintz and Melendez stress that “all [domestic

violence] service providers [should] screen and provide assistance for issues relating to safer sex. Similarly, all HIV/STD service providers should screen for [domestic violence] and discuss safety within the context of abusive relationships when making safer sex plans with their clients” (p. 206).

By asking clients if they engage in safer sex with their partners and if they are forced to engage in sex with their partners or with others, service providers ... [can begin to] address the crucial and common nexus between IPV and STD risk in a way that gives voice to the victims ... [and] allow[s] for a more accurate, effective and safe plan for reducing the risk of violence and STD transmission Counselors need to discuss with their clients the importance of safer sex and to discuss the possible risks that come from requesting safer sex. ... [Those who have experienced domestic violence] should learn techniques for ... staying physically safe and sexually safe. They should be given concrete guidelines for having a safer sex discussion with their partner including deciding beforehand where and when to request safer sex (making sure it happens before engaging in foreplay). Such negotiations will necessarily differ from individual to individual, much as general ... safety plans do. (pp. 205-206)

About Women

Through assessments conducted with a randomly recruited community sample of 732 women who had experienced **childhood sexual abuse** (CSA), Testa, VanZile-Tamsen, and Livingston (2005) observed that

the elevated sexual risk status of adult survivors, including higher numbers of sexual partners and higher rates of ST[D], can be at least partially explained by the quality of women’s intimate relationships. Across three relationships, CSA was associated with affiliation with more aggressive and more sexually risky partners. One consequence of the tendency to affiliate with riskier partners was higher rates of ST[D] resulting from the current relationship. Another consequence was lower relationship satisfaction, which prospectively predicted entering new sexual relationships. (p. 1122)

Notably, the investigators

did not observe a direct relationship between CSA and relationship satisfaction. Rather, in three replications of the model, with three different relationships, ... [Testa and colleagues] consistently found that the relationship between CSA and satisfaction was mediated via the characteristics of the men with whom CSA survivors affiliate. It is not surprising that satisfaction is lower among women who affiliate with more aggressive and more sexually risky men. Given the quality of these relationships, dissatisfaction and dissolution should not be viewed as necessarily bad outcomes. However, the pattern of unhappy relationships contributes to the accumulation of more sexual partners over time, a risk factor for both ST[D] ... and sexual victimization (p. 1122)

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Testa and colleagues conclude that

[t]hese findings are important and novel in suggesting that the link between CSA and women's sexual risk may reflect women's difficulties in intimate relationships. However, additional research is necessary to fully understand this process. ... [Nevertheless, t]he study suggests that the higher levels of sexual risk behaviors and negative sexual outcomes observed among CSA survivors may be ameliorated by addressing women's difficulties in establishing and maintaining safe and stable relationships. This is likely to involve addressing the issues of trust and communication that may hamper relationship functioning and dispelling the notion that one needs a partner. On the other hand, addressing HIV risk reduction in CSA survivors, for example, through increasing sexual assertiveness ..., may improve relationship quality and help women to be more discriminating in deciding to enter a new relationship. The ... suggested [model] is complex and findings are preliminary, necessitating replication before warranting changes in clinical practice. However, ... [the investigators] believe that the model ... may prove heuristic both in conceptualizing the long-term implications of CSA for women's intimate relationships and in suggesting an alternative way of viewing women's sexual risk behaviors. (p. 1123)

Sterk, Theall, and Elifson (2006) randomly assigned 333 HIV-negative African American female drug users from inner-city Atlanta to one of three HIV risk-reduction interventions. These included a four-session enhanced gender- and culture-specific HIV intervention focused on motivation; a four-session enhanced gender- and culture-specific HIV inter-

vention focused on negotiation; and a two-session National Institute on Drug Abuse (NIDA) standard condition. Study participants were interviewed at baseline, at the conclusion of the assigned intervention, and again 6 months later. The investigators report that,

[d]espite a significant decline in symptoms of **emotional distress** during the study period, the women in this sample reported high levels of depressive and anxiety symptoms at baseline and 6-month follow-up. Higher levels of emotional distress were positively associated with post-intervention sexual and drug-taking risk. Women in both enhanced intervention conditions reduced their sexual and drug-taking risks more than women in the standard intervention. Those in the motivation intervention arm experienced a greater reduction in depressive symptoms, accompanied by a greater reduction in sexual risk behavior. (p. 157)

Sterk and colleagues observe that there is a

continuing need to develop and target effective interventions to particular subgroups of high-risk individuals, particularly those with greater depressive symptoms and anxiety. Including components such as those included in the motivation intervention (e.g., recognizing daily life stressors and ... dealing with those stressors) may prove most beneficial in similar populations of women. Findings also reaffirm the direct or indirect role that psychosocial factors play in HIV risk behavior. Interventions should not only be geared toward subgroups manifesting varying drug use or sexual behavior-related risks but also should be integrated with mental health treatment, social service, and additional community re-

sources to potentially target those women most resistant to change. (p. 170)

About Persons Who Use Substances

Lundgren, Amodeo, and Chassler (2005) assessed 507 street-recruited injecting drug users (IDUs) and found that "anxiety was significantly and positively associated with **needle sharing**," while using psychotropic medication was significantly and negatively associated with sharing needles" (p. 525). "This finding suggests that appropriately treated psychiatric problems may provide IDUs with sufficient mood and cognitive stabilization that they are able to refrain from needle sharing behavior or exercise sufficient control to reduce the behavior" (p. 535). Lundgren and colleagues also found that "[t]hose who had higher levels of drug injecting were more likely to share needles and those with an HIV-positive status were less likely to share needles. Finally, IDUs who reported high levels of drug treatment use (in the 75th percentile in terms of number of treatment admissions) were also more likely to share needles" (p. 525). This last finding suggests "the need to develop new intervention methods for high-level drug treatment users who may be 'cycling' through treatment with low levels of treatment completion" (p. 525).

About Persons With Severe Mental Illnesses

Kloos et al. (2005) interviewed 41 men and women with severe mental illness (SMI) living in five supportive housing programs regarding their **HIV-related knowledge and experiences**. Importantly, these investigators found that "a substantial number of persons in these settings already engage in their own HIV prevention informed by public health messages. ... [Kloos and colleagues] suggest, however, that specialized HIV prevention integrated into mental health care is needed which goes

beyond education about risks and prevention methods and allows for processing of emotional material and addressing motivational challenges to implementing HIV prevention within the context of supportive settings” (p. 371).

More specifically, Kloos and colleagues recognize that

[a] range of approaches to intervention may be needed based upon persons’ prior experiences with HIV. ... Persons who “witnessed” suffering from AIDS acquired vibrant images about the effects of the disease. Interventions with these individuals may need to allow for processing of these experiences to allow for

effective learning of health promotion skills. In contrast, few persons who experienced the less intimate “confronting their own HIV risk” as the result of personal interaction connected their stories to health promotion practices, as did those who “witnessed” AIDS suffering. Interventions for persons with these ex-

Tool Box

The Latest Last Word on HIV Prevention Interventions

As readers of the [Summer 2005](#) issue of *mental health AIDS* may recall, Carballo-Diéguez et al. (2005) conducted a randomized controlled trial involving 180 Latino men who have sex with men (MSM) in New York City. The men were assigned to either an eight-session empowerment intervention tailored to the target population and designed to reduce unprotected anal intercourse (UAI), or a wait-list control group. Participants were assessed at baseline and again at 2, 8, and 14 months after completing the intervention.

“In the course of this longitudinal study,” according to Carballo-Diéguez and colleagues, “about a third of a group of Latino MSM who had twice acknowledged having had recent UAI reported no longer engaging in this risky practice at two different assessment occasions. Furthermore, a larger group – about half of the participants – reported going through at least two-month periods in which they had no UAI. However, *the changes cannot be attributed to the intervention, since both intervention and control groups modified their behavior to a similar extent*” (italics added; p. 325).

Results like these beg the following question: What changes in the use of male condoms *can* be attributed to an HIV prevention intervention?

The Most Comprehensive Analysis to Date

Albarracín et al. (2005) conducted a meta-analysis of outcomes and mediating mechanisms reported in 17 years’ worth of studies involving strategies designed to increase the use

of male condoms. This review synthesized findings from 194 research reports published between 1985 and September 2003, encompassing 354 independent HIV prevention intervention groups and 99 independent control groups. The purpose of this meta-analysis was “to test general ... premises [incorporated into theoretical models of health behavior change], identify the mediators of effective interventions, and consider the applicability of interventions to populations that vary in demographic and behavioral variables that correlate with marginalization and risk for HIV” (p. 856).

Two Main Conclusions

Albarracín and colleagues identify and later expand upon the two main conclusions that might be drawn from this extensive review. “First, the most effective interventions were those that contained attitudinal arguments, educational information, behavioral skills arguments, and behavioral skills training, whereas the least effective ones were those that attempted to induce fear of HIV.¹ Second, the impact of the interventions and the different strategies behind them was contingent on the gender, age, ethnicity, risk group,

¹ Intervention strategies may include: “(a) attitudinal arguments, such as discussions of the positive implications of using condoms for the health of the partners and for the romantic relationship; (b) normative arguments about support of condom use provided by friends, family members, or partners; (c) factual information (i.e., mechanisms of HIV, HIV transmission, and HIV prevention); (d) arguments designed to model behavioral skills (what to do when partners do not want to use a condom, when recipients or their partners are sexually excited, and when alcohol or drugs are involved); and (e) threat-inducing arguments, such as discussions about the recipients’ personal risk of contracting HIV or other ... [STDs]” (p. 860).

and past condom use of the target audience ...” (p. 856).

Elements of Effective Interventions

The investigators suggest that the first set of findings have

implications for the way in which intervention content is selected and interventions are framed. To begin with, ... [these] results suggest that HIV practitioners aiming to motivate audiences to increase condom use are more likely to succeed if they avoid aversion- or fear-inducing approaches. ... Further, ... [these] findings permit conclusions about what interventionists should do. Because active interventions are generally more effective, they should be preferred to passive ones.² If one can implement only a passive intervention, it makes sense to select attitudinal and behavioral skills arguments and also to distribute condoms to the audience. If, however, one is in a position to deliver an active intervention, the presentation of information and behavioral skills arguments in combination with self-management training or HIV counseling and

² “Passive interventions are characterized by the presentation of material to an audience that has minimal participation; they comprise (a) messages to induce procondom attitudes, (b) messages to induce procondom norms, (c) messages to increase relevant knowledge, (d) messages to verbally model skills that promote condom use, and (e) messages to increase perceived threat. Active interventions generally include passive strategies as well, but their main distinguishing feature is the inclusion of client-tailored counseling, HIV testing, and/or activities to increase behavioral skills, such as role-playing of solutions for prototypical conflicts surrounding condom use” (pp. 858-859).

periences may need to accommodate both fear-based motivations for learning about HIV prevention skills and health promotion interests. Finally, a last category of participants was less emotionally engaged about HIV in their accounts. ... [and] interventions for them will likely need to take into account that some

intervention practices, particularly ones designed for those bearing witness to AIDS, may overwhelm persons with SMI who are less emotionally engaged with the subject of HIV and HIV risk. ...

One promising ... prevention strategy may be to embed integrated

interventions into “host” settings that can help facilitate learning of skills, assist emotional processing, and provide interpersonal support for implementation of prevention knowledge. Supportive housing for people with SMI may offer such an opportunity to structure a prolonged intervention with supportive resources to work

testing seems advisable.³ (p. 882)

Additional Guidance for Framing Interventions

With regard to the second set of findings, Albarracín and colleagues offer additional guidance for the framing of HIV prevention efforts (see [Table 1](#)). On the impact of **gender** on the effectiveness of intervention strategies,

[w]ith the exception of condom provision, which was effective for both males and females, all strategies had different impact for males than for females For example, even when self-management skills training and HIV counseling and testing were effective across genders, these effects were all stronger for females than for males. Further, whereas attitudinal arguments and information were linked to increased condom use among females alone, behavioral skills arguments and training in condom use skills were linked to increased condom use among males alone. Thus, although these findings point to numerous strategies that can be effective for women (e.g., self-management skills training), they suggest that men are the ones who most benefit from condom use skills training approaches. (p. 884)

³ “Strategies to induce behavioral skills ... [include:] (f) condom use skills (e.g., practice with unwrapping and applying condoms), (g) interpersonal skills (e.g., role playing of interpersonal conflict over condom use and initiation of discussions about protection), and (h) self-management skills (e.g., practice in decision making while intoxicated, avoidance of risky situations), ... whereas (i) HIV counseling and testing ... [involve] the administration of a seropositivity test as well as the type of counseling in place” (p. 860).

As for the **age** of study participants,

[b]ehavioral skills arguments and HIV counseling and testing were associated with increased condom use only among populations with an average age over 21 years. Further, even when self-management

skills training was effective regardless of age, the effect was stronger when the audience averaged over 21 years. However, people under 21 were positively influenced by normative arguments that oth-

(Tool Box is continued on Page 8)

Table 1: Intervention Strategies To Increase Condom Use, Organized by Demographic and Behavioral Risk Factors of Target Audience (Adapted from Albarracín et al., 2005, p. 887)	
Gender	
Females:	Select attitudinal arguments, information, condom provision, self-management skills training, and HIV counseling and testing
Males:	Select behavioral skills arguments, condom provision, condom use skills training, self-management skills training, and HIV counseling and testing
Age	
Under 21:	Select normative arguments, attitudinal arguments, (information), condom provision, and self management skills training
Over 21:	Select attitudinal arguments, information, behavioral skills arguments, self-management skills training, and HIV counseling and testing
Race/Ethnicity	
Minority:	Select attitudinal arguments, information, behavioral skills arguments, self-management skills training, and HIV counseling and testing
Majority:	Select attitudinal arguments, information, condom provision, and self-management skills training
Behavioral Risk Factors	
MSM:	Select information, behavioral skills arguments, condom provision, self-management skills training, and HIV counseling and testing
IDUs:	Select attitudinal arguments, behavioral skills arguments, condom provision, and condom use skills training
PIDUs:	Select attitudinal arguments, behavioral skills arguments, condom provision, and interpersonal skills training
MPHs:	Select attitudinal arguments, (information), (behavioral skills arguments), condom provision, condom use skills training, and (interpersonal skills training)
LCUs:	Select attitudinal arguments, information, behavioral skills arguments, self-management skills training, and HIV counseling and testing
Key:	MSM = men who have sex with men; IDUs = injecting drug users; PIDUs = partners of injecting drug users; MPHs = multiple-partner heterosexuals; LCUs = low condom users; passive strategy ; active strategy ; () = effectiveness of strategy not ruled out on the basis of this demographic/behavioral risk factor.

through prevention barriers. These settings appear to be in a position to capitalize on individuals' desire to make changes in their lives (e.g., sobriety, recovery from SMI, work, independent living) ... [and t]he support of fellow residents and staff is a promising resource to help residents consistently use prevention methods. (p. 370)

HIV Assessment News

HIV Counseling & Testing

Meade and Sikkema (2005) interviewed a convenience sample of 150 urban **psychiatric outpatients with SMI** and found that 41% had been tested for HIV during the preceding year. HIV testing was associated with "lower educational attainment, HIV risk behavior, greater social support, homelessness, non-psychotic disorder, borderline personality disorder, and greater treatment utilization. Psychiatric factors remained significant correlates of HIV testing after accounting for psychosocial and behavioral factors" (p. 465).

Meade and Sikkema point out that, "[a]mong this sample of psychiatric outpatients, HIV testing was common and comparable to other 'at-risk' groups. However, *nearly half* of participants who engaged in recent HIV risk behavior were not tested within the past year" (p. 470), underscoring "the importance of targeting adults with SMI for HIV prevention, including routine HIV testing and behavioral risk reduction. Given the multiple psychiatric, medical, and psychosocial needs of persons with SMI, HIV prevention interventions should be integrated into existing services. Mental health professionals are in an ideal position to assess HIV risk, encourage HIV testing, promote risk reduction, and ultimately improve the health of ... [persons] living with SMI!" (p. 471).

What is the impact of repeatedly testing HIV-negative? Canadian in-

vestigators (Ryder et al., 2005) interviewed 64 adults who had received more than two HIV-negative test results or had received an HIV-positive test result following the receipt of more than two HIV-negative test results. The sample was urban and composed predominantly of educated white gay men. Analysis revealed that "[r]epeat HIV-negative testing frequently results in confusion as to what constitutes risk and occasionally to thoughts of HIV immunity. Narrative accounts include[d] beliefs that monogamy constitutes safety from HIV, that psychosocial factors other than repeatedly testing negative [e.g., depression, substance use] lead ... to risk, and that sexual risk reduction is unsustainable" (p. 459). Ryder and colleagues contend that "the repeat negative test experience for some neither clarifies risk behavior nor reinforces sustained risk reduction" and that "repeat negative testers require assistance beyond the post-test experience in order to address continued risk behavior" (p. 463). In the view of these investigators, "[t]he HIV test counseling session could be more effective at curbing sexual risk behavior if the tester's perceptions of safety in [assumed] monogamy and HIV immunity were elicited and dealt with in the HIV test counseling session" (p. 463).

Psychiatric Assessment

Pence et al. (2005) present a validation study conducted on the 16-item **Substance Abuse and Mental Illness Symptoms Screener** (SAMISS), a brief screening instrument designed specifically for use in settings that serve persons living with HIV/AIDS. In comparisons between scores achieved by consecutive consenting clinic attendees on the substance abuse module ($n = 148$) and the mental illness module ($n = 143$) of the SAMISS and on a reference standard diagnostic tool (the Structured Clinical Interview for DSM-IV or SCID), "the SAMISS dem-

onstrated high sensitivity and moderate specificity for both [substance abuse] and [mental illness]. Due to its brevity, the SAMISS can be feasibly integrated into routine care in busy clinical settings. The instrument's high sensitivity makes it an effective universal, first-line screening instrument. Because of its moderate specificity, patients who screen positive will require a more rigorous psychiatric evaluation to confirm the presence of a diagnosis" (p. 439). Importantly, screening questions focus on substance use, mood, and anxiety disorders; for this reason, "[t]he SAMISS is unlikely to be effective in identifying psychotic or personality disorders" (p. 441).

Neuropsychological Assessment

Ryan et al. (2005) studied 200 individuals with advanced HIV disease, 50% of whom had \leq 8th grade reading level but only 5% of whom had \leq 8 years of education, to investigate "the comparability of educational attainment with **reading level** and ... [examine] whether discrepancies in education and reading level accounted for differences in neuropsychological [NP] test performance between HIV+ racial/ethnic minority and nonminority participants" (p. 889). Importantly,

[s]ignificantly lower reading ability and education ... [were] found among African Americans and Hispanics, and these participants were more likely to have discrepant reading and education levels compared to non-Hispanic Whites. Discrepancy in reading and education level was associated with worse [NP] performance while racial/ethnic minority status was not. As years of schooling [have led to] overestimated racial/ethnic minority participants' educational quality, standard norms based on education may inflate impairment rates among racial/ethnic minorities. (p. 889)

For this reason, Ryan and colleagues caution clinicians, as their “presumptions about the expected level of [NP] performance for a given education level among urban educated African Americans and Hispanics may be erroneous. ... [These] data suggest that when working with racial/ethnic minority individuals who have less than a high school education, it would be prudent to assess their reading level, as educational quality may affect their [NP] test performance” (p. 896).

HIV Treatment News

Medical Care

The National Institute of Allergy and Infectious Diseases (NIAID) halted enrollment in a major international HIV/AIDS trial **comparing continuous antiretroviral therapy with episodic drug treatment** guided by levels of CD4+ cells.¹ This trial, termed Strategies for Management of Anti-Retroviral Therapy (SMART), involved 318 clinical sites located in 33 countries. At the time enrollment was stopped, 5,472 participants had entered the study.

The analysis revealed that participants on CD4+ cell-guided episodic treatment faced more than twice the risk of disease progression [i.e., the development of clinical AIDS or death] relative to participants on continuous [antiretroviral therapy]. Furthermore, there was an increase in major complications such as cardiovascular, kidney and liver diseases in ... participants on the drug conservation arm. These complications have been associated with [antiretroviral therapy], and it was hoped that they would be seen less frequently in those patients receiving less drug. (NIAID, 2006)

¹ A detailed discussion of structured treatment interruptions (STIs) may be found in a **Tool Box** in the [Winter 2003](#) issue of *mental health AIDS* entitled “The Promises and Pitfalls of STIs: A Primer for Mental Health Professionals.”

Although the risk-to-benefit ratio of an episodic drug treatment strategy *over the longer term* remains unclear, local study investigators were advised to reinstate continuous antiretroviral therapy with participants in the drug conservation arm of the study.

As described in the [Winter 2006](#) issue of *mental health AIDS*, Clifford et al. (2005) conducted a 24-week randomized, controlled study to better characterize the severity and longevity of side effects associated with the use of **efavirenz** (EFV or Sustiva®). The investigators found that recipients of EFV were more likely to discontinue their prescribed regimen because of neurological or psychological complications than were those who did not receive EFV. Additionally, recipients of EFV reported more sleep disturbances and “bad dreams” during their first week on an EFV-based regimen than did those not receiving EFV. Importantly, no significant differences in depression, anxiety, sleep disturbance, cognitive performance, or neurological symptoms were found between these two groups at weeks 4, 12, and 24.

Others (e.g., Dawson & Woods, 2005) have, however, identified **late-onset neuropsychiatric complications** in individuals taking EFV. In an effort to predict long-term central nervous system (CNS) toxicity and related neuropsychiatric adverse events associated with the use of EFV, Spanish investigators (Gutiérrez et al., 2005) monitored 17 individuals taking an EFV-containing regimen for a minimum of 6 months at baseline over a subsequent 18-month study period. In this longer timeframe,

[p]atients experiencing neuropsychiatric symptoms during [EFV] therapy usually had drug plasma concentrations > 2.74 µg/mL. This cutoff point was found to

have the best discriminatory power to evaluate the risk of CNS toxicity Indeed, patients who had [EFV] plasma concentrations above this value at any time point during the study were much more likely than others to report neuropsychiatric symptoms. Conversely, patients with [EFV] concentrations below this value seem to have a low risk for developing CNS-related adverse events during long-term [EFV] therapy. (p. 1652)

Gutiérrez and colleagues conclude that their findings “confirm that CNS toxicity associated with long-term therapy with [EFV] is related to [EFV] plasma levels, and ... suggest that patients who achieve higher plasma levels may be at increased risk of developing long-term delayed neuropsychiatric adverse events” (p. 1652).

Finally, Purkayastha, Wasi, and Shuter (2005) conducted a study to identify factors associated with sustained virologic suppression among persons receiving care in an urban HIV clinic. The investigators compared characteristics of 64 “case” patients, who demonstrated sustained virologic suppression through at least three viral load measurements taken during 2002, with the characteristics of 64 “control” patients, who did not demonstrate sustained suppression. The investigators found that those “receiving regular follow-up and ... [highly active antiretroviral therapy (HAART)] throughout 2002, on average, demonstrated reasonably good immunologic and virologic parameters regardless of case or control status. Patients with sustained virologic suppression had significantly higher CD4+ lymphocytes at the end of 2002 than patients without sustained ... suppression. Being a nonsmoker, having a risk behavior for HIV acquisition other than heterosexual contact or IDU, and being seropositive

(Tool Box -- continued from Page 5)

ers support condom use. This finding is ... the only instance in which ... [the investigators] found a favorable effect of the use of this type of argument. (p. 884)

With regard to **race and ethnicity**, “findings suggest that samples with a greater number of people with African backgrounds show more behavior change in general and that this change is attributable to behavioral skills arguments, self-management strategies, and HIV counseling and testing. However, condom provision appears more effective for populations from European backgrounds ...” (p. 885).

When studies involved groups of **individuals at high risk for HIV infection**, “distributing condoms was more effective when the sample included groups possessing a variety of behavioral risk factors. Providing condoms to participants was effective only when samples included [MSM], ... [injecting] drug users [IDUs], partners of ... [IDUs], and multiple-partner heterosexuals” (p. 885).

The analysis of study findings specific to these subpopulations offered the following insights:

o “Leaving condom provision aside, samples including [MSM] changed more in response to interventions than other samples However, this group was generally insensitive to the type of intervention strategy that was used, with the exception of greater behavior change in response to condom provision and lesser change in response to attitudinal arguments ...” (p. 885).

o “[A]ttitudinal and behavioral skills arguments work as well when the groups contain ... [IDUs] as when they do not, and ... condom use skills training, in addition to condom provision, should be [a] strateg[y] ... of choice for this population” (p. 885).

o “[I]nterpersonal skills training was associated with successful increases in condom use only when the sample included **partners of ... [IDUs]**. Because of the predominantly female composition of this sample, this result may not be surprising. After all, inter-

personal skills training has been advocated for situations in which using a condom depends on obtaining the agreement of the sexual partner In this regard, female partners of ... [IDUs] probably constitute the single population in which sexual assertive-

Prevention Interventions Targeting People Living With HIV

Crepaz et al. (2006) recently conducted “a meta-analytic review of HIV interventions for people living with HIV (PLWH) to determine their overall efficacy in reducing HIV risk behaviours and identify intervention characteristics associated with efficacy” (p. 143). “This systematic review synthesizes the available literature on prevention interventions for reducing risky sex and needle-sharing behaviours in PLWH” (p. 144).

Among studies published between 1988 and 2004, Crepaz and colleagues identified 12 controlled trials that “met the stringent selection criteria: randomization or assignment with minimal bias, use of statistical analysis, and assessment of HIV-related behavioural or biologic outcomes at least 3 months after the intervention” (p. 143). “All 12 trials were conducted in the United States and most trials were carried out after 1996 when [highly active antiretroviral therapy (HAART)] became available” (p. 145).

Crepaz and colleagues found that risk reduction interventions targeting PLWH, as a whole, significantly reduced self-reported unprotected sex among PLWH and also decreased the acquisition of sexually transmitted infections (STIs). “This significant intervention effect is robust as it was not affected by the rules used to guide ... [the] meta-analyses. The reduced rates of unprotected sex were observed not only at 3-4 months but also at 6-12 months post-intervention” (p. 152). At the same time, “a relatively large but non-significant intervention effect was observed for needle sharing” (p. 153). The investigators note that “[t]he findings on STI and needle sharing were based on a small set of trials and, therefore, the robustness of these findings needs to be reassessed when additional controlled trials are completed” (p. 153).

Interventions with the following characteristics were found to reduce unprotected sex significantly:

- o guided by behavioural theory
- o specifically focused on HIV transmission behaviours (more than two-thirds of sessions)
- o provided skills building, such as demonstrating correct condom use, practicing coping or problem-solving skills, or role-playing safer sex communication with partners
- o delivered to individuals on a one-to-one basis
- o delivered by health-care providers or professional counsellors
- o delivered in settings where people living with HIV receive services
- o delivered in an intensive manner (> 10 intervention sessions, > 20 h)
- o delivered over a longer duration (≥ 3 months)
- o addressed a myriad of issues related to coping with one’s serostatus, medication adherence, and HIV risk behaviours. (p. 152)

Crepaz and colleagues recommend that the “[e]fficacious strategies identified in this review ... be incorporated into community HIV prevention efforts and further evaluated for effectiveness” (p. 143).

Reference

Crepaz, N., Lyles, C.M., Wolitski, R.J., Passin, W.F., Rama, S.M., Herbst, J.H., Purcell, D.W., Malow, R.M., & Stall, R. (2006). Do prevention interventions reduce HIV risk behaviours among people living with HIV? A meta-analytic review of controlled trials. *AIDS*, 20(2), 143–157.

for hepatitis C were associated with sustained virologic suppression” (p. 792) in this urban clinic sample.

On the subject of **cigarette smoking**, Purkayastha and colleagues emphasize that “[p]atients who were

current cigarette smokers were less likely, on univariate analysis, to have complete virologic suppression than those who had never smoked or who had quit smoking. ... The findings of the present study serve to further emphasize the importance of smok-

ing cessation in the comprehensive health care of persons infected with HIV” (p. 791). This topic will be revisited under the subsection of “HIV Treatment News” entitled “Coping, Social Support, & Quality of Life” (see page 11).

ness is essential to avoid HIV. ... [T]his group also presented increases in condom use when attitudinal arguments were presented. ... [B]ehavioral skills arguments had similar effects when conditions included this group and when they did not” (pp. 885-886).

o With regard to **heterosexuals with multiple partners**, “[i]n addition to increasing condom use with condom availability, this group manifested behavior change when attitudinal arguments and condom use skills training were provided” (p. 886)

o “... [B]ehavioral skills arguments and self-management skills training were associated with most beneficial effects among higher condom users, even when these effects were also present among **low condom users**. In addition, ... information, attitudinal arguments, and HIV counseling and testing were associated with favorable effects across the board. Thus, continued efforts to increase testing appear justified, not only for HIV treatment purposes but also for its influence on behavior change” (p. 886).

Designing Population-Specific Interventions

Taken together, these findings can assist clinicians in designing interventions for specific populations.

For example, ... this synthesis supports peer-oriented approaches for adolescents and children but discourages the application of normative arguments for all other groups. As another example, practitioners may strive to make condoms available to groups that reap high benefits from the mere provision of condoms. Thus, funding for HIV prevention among [MSM], ... [IDUs], female partners of ... [IDUs], and multiple-partner heterosexuals must go beyond dispersing two or three condoms

at a time to ensuring a continued supply of condoms when individuals leave the intervention setting.

Similarly, the selection of active strategies should be contingent on the characteristics of the target audience Possibly because most men are still in charge of buying, keeping, and applying condoms, men tend to benefit from the condom use skills training to a greater extent than women. Given this fact, practitioners may wish to implement strategies to increase women’s responsibility over condom use (e.g., popularization of the female condom) before expanding programs to teach condom use skills to women. Further, although men and women both benefit from receiving condoms, not all age and ethnic groups do. Specifically, condom provision is influential only for recipients under 21 and for people from European backgrounds. Thus, even when research has yet to uncover the mediating mechanisms driving these differences, this meta-analysis supports consistent decisions whenever possible. (pp. 886-887)

Albarracín and colleagues expect that these recommendations “will be updated as the HIV intervention literature grows in size and allows researchers to understand higher order interactions among different demographic and behavioral risk variables. However, the present results may increase the flexibility of practitioners who want to effectively target specific populations and previously had only general recommendations about how to structure a preventive program” (p. 887; see also sidebar on “Prevention Interventions Targeting People Living With HIV”).

The Role of Setting & Modality

Finally, the influence of intervention setting and modality was also considered within this meta-analysis.

Perhaps the most important contribution with respect to methods is the finding that the intervention setup moderates the effectiveness of particular intervention strategies. ... First, when interventions are delivered in clinical settings, information, behavioral skills arguments, condom provision, self-management strategies, and HIV counseling and testing seem optimal. Second, when interventions are introduced in schools ... normative arguments and condom use skills training work particularly well, whereas behavioral skills arguments are substandard relative to nonschool settings. Third, the only effective community interventions in ... [this] meta-analysis were the ones implementing HIV counseling and testing, even when this strategy was still less effective in community than in noncommunity settings.

With respect to the use of audiovisual media and group sessions, using media was linked to an increased impact of attitudinal and behavioral skills arguments but to decreased effects of information and self-management skills training, which seem more effective when more time is spent in a personal interaction with the intervention facilitator. Moreover, even though behavioral skills arguments and condom use skills training were more effective when the intervention entailed individual sessions with the recipients, the inclusion of group sessions improved effectiveness when interventions included attitudinal arguments, information, self-management skills training, and HIV counseling and testing. (pp. 887-888)

Limitations to These Findings

In closing, the investigators acknowledge several limitations to their meta-
(Tool Box is continued on Page 10)

Psychiatric/Psychological/ Psychosocial/Spiritual Care Psychopharmacology

Himmelhoch and Medoff (2005) “performed a systematic review and meta-analysis of double-blinded, randomized controlled trials to exam-

ine efficacy of antidepressant treatment among HIV-positive depressed individuals and evaluate whether the results are generalizable to women and minorities” (p. 813). The investigators identified seven studies with a total of 494 participants published

between 1994 and 2004 and report that this “meta-analysis ... found that antidepressant medication is efficacious ... [and] that heterogeneity across studies was strongly related to placebo response” (pp. 817-818). Because “[w]omen were nearly ab-

sent from and minorities were underrepresented in the studies investigated” (p. 813), Himelhoch and Medoff conclude that “antidepressant medication is efficacious in treating depression among depressed outpa-

tient HIV-positive men. However, the underrepresentation of women and minorities limits the generalizability of these findings and suggests that future studies should be directed to remedy this disparity” (p. 819).

Rabkin, McElhiney, Rabkin, McGrath, and Ferrando (2006) conducted an 8-week, double-blind, placebo-controlled trial of dehydroepiandrosterone (**DHEA**) for the treatment of nonmajor depression (i.e.,

(Tool Box -- continued from Page 9)

analysis (see also [sidebar on “The Last Word?”](#)). “These limitations concern the correlational nature of the results, the validity of condom use reports, the impossibility of analyzing more complex interactions, the selection of behavioral measures, and the generalizability of the current conclusions to the sample of studies and to the population of potential studies on the topic” (p. 888). With regard to the last of these limitations, couched in “discrepancies between ... fixed- and

random-effects findings” (p. 889) encountered when the data were analyzed using each of these models, Albarracín and colleagues cite the breadth of their analysis (“the most comprehensive to date” [p. 857]) in reasoning that “[t]he current findings from the present meta-analysis are probably the most generalizable to date” (p. 889).

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– Compiled by
Abraham Feingold, Psy.D.

The Last Word?

Even the casual reader of medical and social science literature will note the increasingly common use of meta-analysis to synthesize research studies in an attempt to provide “definitive answers” to important research questions.

What Is Meta-Analysis?

In simple terms, “meta-analysis is a statistical technique that enables the results from a number of studies to be combined to determine the average effect of a given technique. ... Study outcomes are translated to a common metric, called an effect size, to allow results to be compared” (Boston, 2002, pp. 1-2).

While amassing and comparing research evidence across multiple studies makes intuitive sense, Streiner (2005) observes that “[m]etaanalysis is predicated on the assumption (or it may be more a belief and hope) that objectivity regarding the criteria used for conducting literature searches, selecting the articles to include or exclude, and abstracting and summarizing the findings would result in unbiased and unequivocal answers. In some hierarchies of evidence, metaanalyses are at the top, trumping even very large randomized controlled trials ... “ (p. 829). Nevertheless, investigators conducting meta-analyses *on the same topic* sometimes arrive at *different* conclusions!

As Streiner puts it, “[t]he reality is that, despite the claims of true believers, metaanalysis is neither a purely objective, mechanical process nor a panacea for answering all questions. There are 2 major reasons why metaanalyses may differ with regard to the conclusions they draw: methodological considerations and interpretation” (p. 829).

Methodological Considerations

With respect to the first reason, metaanalysis is a complicated process comprising many different phases ... , and each step requires some degree of judgment. Judgment, in turn, implies that equally competent reviewers can make decisions that affect the conclusions that are drawn. Starting at the beginning, the first steps in a metaanalysis consist of posing the questions to be addressed and setting the inclusion criteria. While this may appear at first glance to be simple and straightforward, even subtle differences can lead to a search for and retrieval of different articles. ... During the data abstraction phase, a decision has to be made whether to focus on one outcome measure or to pool the results if several were used in a study. At the point of analysis, the researchers must decide whether to use a fixed-effects model (which assumes that there is one population effect size that each study approximates) or a random-effects model (which allows a range of effect sizes that vary among studies because of sampling, ... research design features, and the like).

... Each question demands an answer, but there are no correct ones; different people can make different decisions and likely provide equally convincing reasons. (Streiner, 2005, pp. 829-830)

Interpretation

“The second reason why conclusions of metaanalyses may differ regards the interpretation they place on the results The unfortunate result of the necessity to make decisions at each stage of the process and when interpreting the findings is that there are, and will always be, differences among metaanalyses of the same topic. ... The good news is that metaanalysts will never be out of a job. The bad news is that readers cannot assume that any metaanalysis provides the last word regarding the effectiveness of an intervention, and their own judgments will always play a role” (Streiner, 2005, p. 830).

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persistent subsyndromal major depressive disorder² or dysthymia) in 145 men and women living with HIV/AIDS. Among the 133 who completed the trial, in which DHEA dosing was flexible (100-400 mg/day) and side effects were few, the response to DHEA was superior to the response to placebo. This was also the case in the intent-to-treat analysis, involving all of the original 145 study participants. Rabkin and colleagues observe that "[n]onmajor but persistent depression is common in patients with HIV/AIDS, and DHEA appears to be a useful treatment that is superior to placebo in reducing depressive symptoms." The low attrition rate in this group of physically ill patients, together with requests for extended open-label treatment, reflect[s] high acceptance of this readily available intervention" (p. 59)³. They conclude that, "[f]or patients who are unwilling to take antidepressants, who express a strong preference for an 'alternative' treatment, and who have nonmajor depression, DHEA may be a reasonable choice. ... [The investigators] suggest documenting informed consent for an 'unapproved' treatment and monitoring response and potential adverse events at regular intervals" (pp. 65-66).

Adherence to Treatment

In a small study involving 24 **teens and young adults** between the ages of 16 and 24 who were living with HIV, Naar-King et al. (2006) found that, "consistent with the adult literature, self-efficacy and psychological distress were associated with medication adherence, and together accounted for almost half the variance in adherence. Social support was not associated with adherence, but so-

² Patients with this diagnosis "met three or four of the nine criteria for major depressive disorder, including depressed mood and/or loss of interest" (p. 61).

³ The U.S. Food and Drug Administration classifies DHEA, a weakly active adrenal androgen, as a nutritional supplement; as such, it is available over the counter.

cial support specific to taking medications was correlated with self-efficacy" (p. 47). Although these findings require replication with a larger and more diverse sample of youth living with HIV, the "results suggest that interventions that boost self-efficacy (e.g., motivational interventions) and reduce emotional distress (e.g., cognitive behavioral therapy) may be beneficial for improving adherence" (p. 47).

Stress Management

Antoni et al. (2006) randomly assigned 130 MSM living with HIV and receiving HAART to one of two conditions: either a 10-week, **cognitive behavioral stress management (CBSM) group intervention offered in conjunction with individualized antiretroviral medication adherence training (MAT)** from a clinical pharmacist (CBSM + MAT; $n = 76$) or a MAT-Only condition ($n = 54$). Data were collected at four time points (baseline, 3 months following randomization, 9 months following randomization, and 15 months following randomization). The investigators "found no differences in HIV viral load among the 130 men randomized. However, in the 101 men with detectable viral load at baseline, those randomized to CBSM + MAT ($n = 61$) displayed reductions of 0.56 \log_{10} units in HIV viral load over a 15-month period after controlling for medication adherence. Men in the MAT-Only condition ($n = 40$) showed no change. Decreases in depressed mood during the intervention period explained the effect of CBSM + MAT on HIV viral load reduction over the 15 months" (p. 143). Despite the relatively low proportion (60%) of study participants returning for follow-up at 9 or 15 months after randomization, Antoni and colleagues suggest that "[a] time-limited CBSM + MAT intervention that modulates depressed mood may enhance the effects of HAART on suppression of HIV viral load in HIV+ men with detectable plasma levels" (p. 143).

Serostatus Disclosure

Serovich, Oliver, Smith, and Mason (2005) interviewed 57 adult MSM living with HIV in a large city in the American Midwest for the purpose of ascertaining **serostatus disclosure methods used with casual sex partners**. The investigators placed these disclosure strategies into five categories: point-blank disclosure, stage setting (i.e., using hints and symbols to prime the disclosure), indirect disclosure (i.e., offering clues that one is HIV-positive without overtly stating so), buffering (i.e., disclosing through a third party), and seeking similars (i.e., surrounding oneself with potential sex partners who are more likely to be accepting). Serovich and colleagues urge clinicians

to share these strategies with the HIV-positive men with whom they work ... [and to] assist men [to] move from indirect disclosing to more point-blank strategies as comfort permits. ... Theoretically, men who are aware of the robust variety of disclosure strategies available will be able to find strategies that are comfortable for them and match their environmental and relational circumstances. Thus, a combination of knowledge, creativity, and the ability to minimize risks and costs may be the key to successful HIV disclosure. (p. 831)

Coping, Social Support, & Quality of Life

Crothers et al. (2005) assessed the impact of **cigarette smoking** on health and quality of life in a cohort of 867 U.S. veterans living with HIV and receiving care in the HAART era. Crothers and colleagues found that "HIV-positive patients who currently smoke have increased mortality and decreased quality of life, as well as increased respiratory symptoms, COPD [chronic obstructive pulmonary disease], and bacterial pneumonia. These findings suggest that

smoking cessation should be emphasized for HIV-infected patients" (p. 1142).

On this point, Vidrine, Arduino, Lazev, and Gritz (2006) randomized a low-income, inner-city, multiethnic sample of 95 cigarette smokers receiving HIV primary care services to one of two conditions. The first condition was the recommended standard of care (i.e., brief advice from a physician to quit smoking, targeted self-help reading material, and a 10-week supply of nicotine replacement therapy [the nicotine patch]). The second condition was the recommended standard of care plus an innovative eight-session **smoking cessation intervention delivered by cellular telephone**. At the 3-month follow-up assessment, among the 77 (81%) study participants who were evaluated at that time, "[a]nalyse indicated biochemically verified point prevalence smoking abstinence rates of 10.3% for the usual care group and 36.8% for the cellular telephone group" (p. 253). In other words, "participants who received the cellular telephone intervention were 3.6 times ... more likely to quit smoking compared with participants who received usual care (p. 253). Drawing on these findings, Vidrine and colleagues conclude that "individuals living with HIV/AIDS are receptive to, and can be helped by, smoking cessation treatment. In addition, smoking cessation treatment tailored to the special needs of individuals living with HIV/AIDS, such as counseling delivered by cellular telephone, can significantly increase smoking abstinence rates over that achieved by usual care" (p. 253).

French investigators (Préau et al., 2005) assessed beliefs regarding control over health outcomes (i.e., health locus of control), as well as health-related quality of life (HRQL) among 302 individuals living with HIV at the time they initiated HAART and again 44 months later. Préau and

colleagues found that "[p]atients with **the belief that their health depends on chance** have a lower mental HRQL in the long term. To understand this result, ... several studies have already shown a significant impact of chance locus on depressive symptomatology in the context of chronic illness It appears necessary to modify this belief at [the] initiation of treatment to optimise long-term mental HRQL and to try to avoid or limit the negative effect of lower mental HRQL and depressive symptomatology on clinical progression" (p. 411).

Early intervention is a theme picked up by May, Lester, Ilardi, and Rotheram-Borus (2006), who examined predictors of **first childbearing among 181 adolescent daughters who had a parent living with HIV**. Some of these adolescents had been randomized (along with their parents) to a family-based coping skills intervention and monitored for up to 7 years. The investigators found that, "[o]verall, daughters of [parents living with HIV] ... had a high rate of early childbearing compared to national and local rates. First childbearing tended to be delayed by (a) being in a coping intervention, (b) being less emotionally distressed, (c) receiving academic counseling, and (d) having a positive perception of their family's finances" (p. 72).

Both the family-based coping skills intervention and academic counseling were protective factors for early childbearing. In a model controlling for interactions among these predictors, daughters in the intervention condition benefited the most: they were far less likely to parent children during adolescence. The combination of the coping intervention condition and academic counseling appeared to have a synergistic effect and dramatically reduced the relative risk of early parenthood (96% reduction).

However, the intervention was not protective for a very small subgroup of youth with high levels of emotional distress who perceived their families as poor. (pp. 81-82)

May and colleagues conclude that "[c]linicians working with HIV-affected families should provide psychoeducational and referral information to parents regarding the risks of early childbearing, as well as the benefits of both mental health and academic referrals for affected adolescents" (p. 83).

Lastly, as regular readers of *mental health AIDS* are no doubt aware, "[m]ost ... longitudinal studies demonstrating relationships between psychosocial variables and ... HIV ... disease progression utilized samples of gay men accrued before the era of ... HAART ..., without including viral load ... as an indicator of disease progression or assessing the impact of medication adherence" (p. 1013). To contemporize this field of inquiry, Ironson et al. (2005) conducted a 2-year investigation involving a multiethnic sample of 177 men and women in the "midrange" of HIV disease progression (i.e., CD4 cell counts between 150 and 500 cells/mm³; no AIDS-defining symptoms) who were receiving HAART. Controlling for sociodemographic variables (i.e., age, gender, ethnicity, education) and a host of medical variables (i.e., baseline CD4 count and viral load, antiretroviral medications prescribed and adherence to same), Ironson and colleagues found that

even in the era of powerful HAART medications, psychosocial variables still account for significant variation in CD4 cell number and do so for [viral load] as well. The results provide valuable confirmation of earlier studies ... that established these relationships for depression, negative life events, and coping before the availability of HAART. In addition to depres-

sion, ... [these] results establish that hopelessness and denial/avoidant coping have significant relationships with both CD4 and [viral load] changes over time and extend findings to both men and women with access to HAART throughout the entire period of the study. This ... study ... establishes **a prospective relationship between hopelessness, denial/avoidant coping, life event stress, and accelerated rate of increase in [viral load]**. (A prospective relationship between depression and [viral load] has previously been noted for women) In fact, plasma [viral load]s may be more sensitive to psychological influences than CD4, as indicated by higher increase and decline ratios. (pp. 1018-1019)

With this evidence that “feelings of hopelessness, depressed mood, and avoidant coping predict an accelerated decline in CD4 cells and an increase in HIV [viral load]” (p. 1020), Ironson and colleagues echo the conclusions of Cruess et al. (2005) noted in the [Winter 2006](#) issue of *mental health AIDS* by pointing out that

[p]harmacologic ... and behavioral treatments ... have been shown to decrease depression in HIV patients. To the extent that these treatments may also attenuate both depressed affect and disease progression, large scale clinical intervention trials are needed to determine whether reducing distress and hopelessness, and improving adaptive coping skills in HIV infected individuals can decrease disease progression. Recent findings from a study of stress management in gay men with HIV ... suggest ... that this may be the case, as least for [viral load]. (p. 1020)

Treating depressive symptoms

may also have the added benefit of increasing the likelihood that women living with HIV will utilize a HAART regimen *at all* to forestall HIV disease progression. At 6-month intervals over a 6-year period (1996-2001), Cook et al. (2006) monitored a multi-site cohort of 1,371 women living with HIV who screened positive for depressive symptoms. The analysis conducted by these investigators

identified an association between prior treatment for depressive

of HAART.⁴ This relationship between type of treatment for depressive symptoms and HAART use remained significant, even controlling for the women’s self-reported crack, cocaine, or heroin use, their ethnicity, their income, and their clinical indicators of CD4 and viral load. (p. 96)

Additionally, Cook and colleagues found that African American women, as well as women who reported that they were using crack, cocaine, or

<p>From the Block Community Health Center</p>
<p>Founded in Middletown, Connecticut, in 1972, Community Health Center, Inc. (CHC), is one of the nation’s oldest and largest Federally Qualified Health Centers. Today, CHC operates primary care facilities in seven towns and cities in central and southeastern Connecticut that target uninsured, low-income, minority, and working poor families. A range of programs supports medical, dental, and mental health service provision – the core clinical services at CHC.</p> <p>HIV-related services, including prevention education, outreach, counseling and testing, and HIV primary care, are offered at all service sites. The <i>Oasis Center</i>, a drop-in wellness program in Middletown, also offers support and services for persons living with HIV.</p> <p>With funding from CMHS/SAMHSA, CHC has expanded its clinic-based and community/home-based mental health services program for persons living with HIV/AIDS. The agency’s services include psychotherapy, psychiatric evaluation and treatment, medication consultation/management, and intensive case management. The program targets African American and Hispanic/Latino(a) clients residing in the Middletown, Meriden, and New Britain communities.</p> <p>The Principal Investigator is Margaret Flinter, MSN, APRN; the Project Director is Kasey Harding, MPH; and the Clinical Director is Richard Feuer, MD. For more information, please call 203/237-2229 or go to http://www.chc1.com/.</p> <p style="text-align: right;">– Compiled by the MHHSC Program Coordinating Center</p>

symptoms and the probability of later HAART use Compared to [those] receiving no depression treatment, women with high levels of depressive symptoms were significantly more likely to be taking HAART regimens if they had been taking antidepressants while also receiving mental health therapy, or receiving mental health therapy alone. Interestingly, women who were taking antidepressants without mental health therapy did not differ significantly from those receiving no depression treatment in their likelihood

heroin, were also less likely to adopt HAART regimens. Drawing attention to the unaddressed mental health needs of women living with HIV in general, and of women who are African American and women who use substances in particular,

⁴ “It is interesting to note that greater HAART utilization among women who received both antidepressants plus mental health therapy conforms to the currently accepted best-practice standard of care for treating depression. Evidence-based practice research indicates that combining psychopharmacotherapy and psychotherapy can be more effective than either modality alone ...” (p. 97).

[t]hese findings suggest that efforts to enhance depressed women's access to depression therapy may increase their use of the latest HIV therapies. Given the demands of complex HAART regimens, their potential for troublesome side effects, and the need for perfect adherence, it is unlikely that women struggling to cope with high levels of depressive symptoms will successfully initiate and continue their use of HAART. (p. 97)

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Tool Box

Books & Articles

Basu, S., Chwastiak, L., & Bruce, R.D. (2005). Clinical management of depression and anxiety in HIV-infected adults [Editorial review]. *AIDS*, 19(18), 2057-2067.

Basu and colleagues "review diagnostic and treatment approaches designed to assist the treating HIV clinician in the management of depression and anxiety among HIV-infected adults" (p. 2057).

Buki, L.P., Kogan, L., Keen, B., & Uman, P. (2005). In the midst of a hurricane: A case study of a couple living with AIDS. *Journal of Counseling & Development*, 83(4), 470-479.

"This case study provides insight into 1 heterosexual couple's experience with AIDS. ... Recommendations are given for counselors working with persons with AIDS and their heterosexual partners" (p. 470).

Cysique, L.A.J., Maruff, P., Darby, D., & Brew, B.J. (2006). The assessment of cognitive function in advanced HIV-1 infection and AIDS dementia complex using a new computerised cognitive test battery. *Archives of Clinical Neuropsychology*, 21(2), 185-194.

Cysique and colleagues "demonstrated that the use of a computerised battery including traditional reaction time as well as broader cognitive domain (e.g., learning and memory) measures[, CogState,] appears to be beneficial in the detection of neuropsychological impairment on a single assessment in individuals with AIDS and [AIDS dementia complex]. The inclusion of both reaction time and brief measures of learning and memory appear[s] to be useful for a screening role in detection of HIV-associated neurocognitive impairment" (pp. 193-194).

Dorell, K., & Cohen, M.A. (2005). Preserving a sense of wonder: The integration of an ego-supportive psychodynamic approach to supervision in an AIDS psychiatry fellowship. *Journal of Interpersonal Violence*, 21(2), 193-208.

Himelhoch, S., & Medoff, D.R. (2005). Effi-

nal of the American Academy of Psychoanalysis & Dynamic Psychiatry, 33(3), 453-463.

Dorell and Cohen present "a psychodynamic, ego-supportive approach to the supervision of the psychiatric care of a severely medically and mentally ill and addicted person with HIV infection. The traumas, deprivations, and losses of our patients in the face of severe illness may place demands on the trainee that make caring and empathy difficult. The nurturing process of ego-supportive supervision is helpful in preserving a sense of wonder and providing both competent care and empathy for patients with complex medical illness" (p. 461).

Gerbert, B., Danley, D.W., Herzig, K., Clanon, K., Ciccarone, D., Gilbert, P., & Allerton, M. (2006). Reframing "prevention with positives": Incorporating counseling techniques that improve the health of HIV-positive patients. *AIDS Patient Care & STDs*, 20(1), 19-29.

Gerbert and colleagues "suggest [that] efforts to increase provider-delivered transmission-prevention counseling be reframed so that 'prevention with positives' includes the goal of protecting HIV-positive patients' health" (p. 19). This article "review[s] the specific consequences of ... risky behaviors on HIV-positive patients' health and review[s] brief counseling strategies appropriate for HIV care providers" (p. 19).

Miller, R.L. (2005). Look what God can do: African American gay men, AIDS and spirituality. *Journal of HIV/AIDS & Social Services*, 4(3), 25-46.

"This qualitative study describes how ten African American gay men understand and utilize spirituality while living with AIDS. ... The participants describe spirituality, a relationship with God, as interactive, integrative, and protective. They indicate that spirituality helps them live with AIDS and alleviates death anxiety. The participants also posit that their experience with AIDS has strengthened their spirituality. ... The data suggest ... [that clinical

cacy of antidepressant medication among HIV-positive individuals with depression: A systematic review and meta-analysis. *AIDS Patient Care & STDs*, 19(12), 813-822.

Ironson, G., O'Cleirigh, C., Fletcher, M.A.,

cians] who work with this population explore the salience of spirituality in the lives of their clients" (p. 25).

Parsons, J.T. (2005). Motivating the unmotivated: A treatment model for barebackers. *Journal of Gay & Lesbian Psychotherapy*, 9(3/4), 129-148. "Documented increases in sexual risk practices among gay and bisexual men and subsequent increases in HIV infection rates may be attributable, in part, to barebacking. ... Motivational Interviewing (MI), an intervention approach with demonstrated effectiveness across a wide variety of behaviors, may be useful for working with men who bareback. The general principles and strategies of MI are presented with examples of the application of this model to barebacking" (p. 129).

Shernoff, M. (2005). Condomless sex: Considerations for psychotherapy with individual gay men and male couples having unsafe sex. *Journal of Gay & Lesbian Psychotherapy*, 9(3/4), 149-169.

"This article explores a variety of interpersonal, intrapsychic, and communal dynamics that have an impact on gay men's safer sex practices. Therapists working with gay men who have condomless sex can have a greater influence in helping them to facilitate change and to understand the meaning of their behavior. This can be done through a non-judgmental ... approach which eschews holding preconceived ideas about how gay men should conduct their sexual lives. Depression, loneliness, intimacy, HIV status, substance abuse, and love may influence gay men's choices about sex. Using clinical case examples, therapeutic strategies for working with individual gay men and couples are discussed" (pp. 149-150).

Shernoff, M. (2006). *Without condoms: Unprotected sex, gay men & barebacking*. New York: Routledge. "Using case studies and exhaustive survey research, this timely, groundbreaking book allows men who have

unprotected sex, a practice now known as 'barebacking,' to speak for themselves on their willingness to risk it all. *Without Condoms* takes a balanced look at the profound needs that are met by this seemingly reckless behavior, while at the same time exposing the role that both the Internet and club drugs like crystal methamphetamine play in facilitating high-risk sexual encounters."

Shidlo, A., Yi, H., & Dalit, B. (2005). Attitudes toward unprotected anal intercourse: Assessing HIV-negative gay or bisexual men. *Journal of Gay & Lesbian Psychotherapy*, 9(3/4), 107-128. "This study reports on the development of the Unprotected Anal Intercourse Attitudes Inventory (UAI-AI), a multi-factorial measure designed to assess gay and bisexual men who are HIV-negative or untested. This self-report measure may be useful in helping both counselors and clients discuss the complex psychosocial issues that can be associated with UAI and safer sex. ... Based on their work with hundreds of clients at TalkSafe, a NYC prevention program for HIV-negative gay and bisexual men, the authors suggest clinical guidelines for counseling these populations" (pp. 107-108).

Stempleman, L.M., Hann, G., Santos, M., & House, A.S. (2006). Reaching underserved HIV-positive individuals by using patient-centered psychological consultation. *Professional Psychology: Research & Practice*, 37(1), 75-82. "To more effectively address barriers to care, the authors propose and implement an innovative model of consultation that allows patients to request and receive a psychological consultation concurrent with their HIV medical care. ... [T]his model increases consult utilization and holds much promise for reaching underserved individuals in HIV clinics" (p. 75).

Sullivan, K.M. (2005). Male self-disclosure of HIV-positive serostatus to sex partners: A review of the literature. *Journal of the Association of Nurses in AIDS Care*, 16(6), 33-47.

"The purpose of this literature review (1996-2004) is to identify valid and reliable research results that identify factors influencing serostatus disclosure to sex partners by men who are HIV-positive. ... A compilation of research results for 17 articles is presented under the headings of background, contextual, and psychosocial factors influencing disclosure. An analysis of the data suggests that differences in disclosure rates vary based on sex partner factors including serostatus, relationship status, and number of sex partners. ... Recommendations for future research are presented, based on the results included in this review" (p. 33).

Tapia, M.I., Schwartz, S.J., Prado, G., Lopez, B., & Pantin, H. (2006). Parent-centered intervention: A practical approach for preventing drug abuse in Hispanic adolescents. *Research on Social Work Practice*, 16(2), 146-165. "Familias Unidas ... [is] an empirically supported, family-based, culturally specific drug abuse and HIV prevention intervention for Hispanic immigrant adolescents and their families. ... Recommendations for and challenges to implementing the intervention in practice-based settings are discussed" (p. 146).

Whyte, J., IV. (2005). The measurement of HIV risk level in African American women who dwell in the southeastern United States. *Journal of the Association of Nurses in AIDS Care*, 16(6), 48-55.

The HIV Risk Behavior Questionnaire is a 25-item screening instrument designed for and tested with low-income, primarily heterosexual African American women at high risk for acquiring HIV and living in the southeastern United States. "The instrument addresses factors of barrier [i.e., body fluid avoidance] modalities, sexual communication, survival sex, and high-risk behaviors in the context of HIV" (p. 53) and may be completed in about 5 minutes.

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Abraham Feingold, Psy.D.

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of highly active antiretroviral treatment. *Psychosomatic Medicine*, 67(6), 1013-1021.
Johnson, W.D., Holtgrave, D.R., McClellan, W.M., Flanders, W.D., Hill, A.N., & Good-

man, M. (2005). HIV intervention research for men who have sex with men: A 7-year update. *AIDS Education & Prevention*, 17(6), 568-589.
Kalichman, S.C., Cherry, C., Cain, D., Pope,

H., & Kalichman, M. (2005). Psychosocial and behavioral correlates of seeking sex partners on the Internet among HIV-positive men. *Annals of Behavioral Medicine*, 30(3), 243-250.

Kloos, B., Gross, S.M., Meese, K.J., Meade, C.S., Doughty, J.D., Hawkins, D.D., Zimmerman, S.O., Snow, D.L., & Sikkema, K.J. (2005). Negotiating risk: Knowledge and use of HIV prevention by persons with serious mental illness living in supportive housing. *American Journal of Community Psychology*, 36(3-4), 357-372.

Lundgren, L.M., Amodeo, M., & Chassler, D. (2005). Mental health status, drug treatment use, and needle sharing among injection drug users. *AIDS Education & Prevention*, 17(6), 525-539.

May, S., Lester, P., Ilardi, M., & Rotheram-Borus, M.J. (2006). Childbearing among daughters of parents with HIV. *American Journal of Health Behavior*, 30(1), 72-84.

Meade, C.S., & Sikkema, K.J. (2005). Voluntary HIV testing among adults with severe mental illness: Frequency and associated factors. *AIDS & Behavior*, 9(4), 465-473.

Naar-King, S., Templin, T., Wright, K., Frey, M., Parsons, J.T., & Lam, P. (2006). Psychosocial factors and medication adherence in HIV-positive youth. *AIDS Patient Care & STDs*, 20(1), 44-47.

National Institute of Allergy and Infectious Diseases (NIAID). (2006, January 18). *International HIV/AIDS trial finds continuous antiretroviral therapy superior to episodic therapy* [News release]. Bethesda, MD: Author. Retrieved January 29, 2006, from the World Wide Web: <http://www3.niaid.nih.gov/news/newsreleases/2006/smart06.htm>

Pence, B.W., Gaynes, B.N., Whetten, K., Eron, J.J., Jr., Ryder, R.W., & Miller, W.C. (2005). Validation of a brief screening instrument for substance abuse and mental illness in HIV-positive patients. *Journal of Acquired Immune Deficiency Syndromes*, 40(4), 434-444.

Préau, M., Vincent, E., Spire, B., Reliquet, V., Fournier, I., Michelet, C., Lepout, C., Morin, M., & the APROCO Study Group. (2005). Health-related quality of life and

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/hiv/aids/>); and information e-mailed by Florida International University researcher Robert M. Malow, Ph.D., ABPP. Other sources are identified when appropriate.

health locus of control beliefs among HIV-infected treated patients. *Journal of Psychosomatic Research*, 59(6), 407-413.

Purkayastha, T., Wasi, F., & Shuter, J. (2005). Factors associated with sustained virologic suppression in patients receiving antiretroviral therapy in an urban HIV care clinic. *AIDS Patient Care & STDs*, 19(12), 785-793.

Rabkin, J.G., McElhiney, M.C., Rabkin, R., McGrath, P.J., & Ferrando, S.J. (2006). Placebo-controlled trial of dehydroepiandrosterone (DHEA) for treatment of nonmajor depression in patients with HIV/AIDS. *American Journal of Psychiatry*, 163(1), 59-66.

Ryan, E.L., Baird, R., Mindt, M.R., Byrd, D., Monzones, J., & Morgello, S. (2005). Neuropsychological impairment in racial/ethnic minorities with HIV infection and low literacy levels: Effects of education and reading level in participant characterization. *Journal of the International Neuropsychological Society*, 11(7), 889-898.

Ryder, K., Haubrich, D.J., Call, D., Myers, T., Burchell, A.N., & Calzavara, L. (2005). Psy-

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.

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

chosocial impact of repeat HIV-negative testing: A follow-up study. *AIDS & Behavior*, 9(4), 459-464.

Serovich, J.M., Oliver, D.G., Smith, S.A., & Mason, T.L. (2005). Methods of HIV disclosure by men who have sex with men to casual sexual partners. *AIDS Patient Care & STDs*, 19(12), 823-832.

Sterk, C.E., Theall, K.P., & Elifson, K.W. (2006). The impact of emotional distress on HIV risk reduction among women. *Substance Use & Misuse*, 41(2), 157-173.

Testa, M., VanZile-Tamsen, C., & Livingston, J.A. (2005). Childhood sexual abuse, relationship satisfaction, and sexual risk taking in a community sample of women. *Journal of Consulting & Clinical Psychology*, 73(6), 1116-1124.

Vidrine, D.J., Arduino, R.C., Lazev, A.B., & Gritz, E.R. (2006). A randomized trial of a proactive cellular telephone intervention for smokers living with HIV/AIDS. *AIDS*, 20(2), 253-260.

– 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/>



mentalhealthAIDS is available online!
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