

HIV Prevention Services for Adults with Serious Mental Illness in Public Mental Health Care Programs

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SUMMARY. Despite well-documented need, little is known about the HIV prevention services provided to adults with serious mental illness in the public mental health system. This study examined the types, frequency, and client-level correlates of HIV prevention services provided to a representative sample of clients in five public mental health care programs. Although results indicate that HIV prevention care is infrequent, clients identified as being at higher risk for HIV infection reported receiving prevention interventions more frequently. However, both the clients' gender and the service setting influenced the types and frequency of services that clients received. doi:10.1300/J005v33n01_06 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com>

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Concern about the spread of HIV/AIDS among people with severe mental illness (SMI) has led many researchers and policy makers to ask what, if anything, mental health professionals are doing to respond to the expanding epidemic (Cournos, McKinnon, & Rosner, 2001; McKinnon et al., 1999; Sullivan et al., 1999). Consumers and client advocates often claim that treatment providers are reticent about discussing sexuality-related issues, including HIV transmission (Deegan, 1999). At the same time, surveys of mental health administrators suggest that public mental health agencies face significant barriers to providing HIV prevention services to their clients with SMI (Herman, Kaplan, Satriano, Cournos, & McKinnon, 1994; Knox, 1998; McKinnon et al., 1999). There is, however, little empirical data on what HIV prevention services clients with SMI are receiving in the public mental health system. Using data gathered from a representative sample of clients enrolled in five public mental health treatment programs for adults with SMI, this paper examines clients' reports of the HIV prevention services they received from their mental health care providers in order to better understand what mental health professionals are doing to respond to the HIV epidemic among adults with SMI.

Background

Despite a growing concern about the spread of HIV/AIDS among people with SMI (Cournos et al., 2001; Sullivan et al., 1999), research indicates that most clients with SMI are unlikely to receive HIV prevention services from their mental health clinicians (Coverdale & Aruffo, 1992; McKinnon et al., 1999; Walkup, Satriano, Hansell, & Olfson, 1998). Anecdotal reports indicate that mental health professionals often do not address sexuality and HIV-related issues with their clients with SMI. Advocates and consumers, for example, have complained for many years that clinicians neglect their clients' sexual needs (Deegan, 1999; Lukoff, Gioia-Hasik, Sullivan, Golden, & Nuechterlein, 1986), including their hopes and desires for developing romantic partnerships (Davidson &

Stayner, 1997; Ginsberg, 1977; Wasow, 1980) and their concerns about the sexual side-effects of psychotropic medication (Buffum, 1982; Holbrook, 1989; Kockott & Pfeiffer, 1996). Indeed, several client advocates have argued that sexuality is an “unmentionable” topic in most mental health programs (Coverdale & Aruffo, 1992; Herman et al., 1994; Rowe & Savage, 1987; Ryan, 1990; Schell, 1994).

More formal research echoes clients’ concerns and provides further evidence that mental health professionals are not consistently assessing or intervening with clients’ HIV-related needs (Coverdale & Aruffo, 1992; Hellerstein & Prager, 1992; Herman et al., 1994; Mitchell, Grindel, & Laurenzano, 1996; Ryan, 1990; Walkup et al., 1998). Several studies have found that general hospital psychiatric staff often fail to identify clients with significant HIV risk or histories of serious sexual abuse and dysfunction (Hellerstein & Prager, 1992; Mitchell et al., 1996; Walkup et al., 1998). Coverdale and Aruffo (1992) surveyed community mental health professionals and found that “nearly all” reported that clients should be counseled about HIV/AIDS and family planning but that only 20-25% of their patients actually received such information. While these studies infer that many mental health professionals may be uncomfortable talking about sexuality and HIV with their clients, there is some indication that this is changing. In a recent survey, Walkup and colleagues (1998) found that of 53 psychiatric units in New York State, only 9 percent reported that they did nothing to educate or counsel clients about HIV. Nevertheless, McKinnon et al. (1999), based on data gathered from a large sample of mental health administrators, reported that treatment agencies face significant barriers to providing effective HIV prevention services to their clients, including lack of funds to pay for condoms and inadequately trained staff.

At the same time, there are a number of published reports of mental health professionals’ efforts to respond to the HIV-related needs of clients with serious mental illness (Carmen & Brady, 1990; Cournos, Empfield, Horwath, & Kramer, 1989; Knox, 1989). A review of this literature reveals four general groups of HIV prevention interventions used by mental health professionals with adult clients with SMI. First, many institutions and some community-based programs have used *restrictions* to manage clients’ disruptive sexual behavior. Typically, this has involved the use of seclusion rooms, physical restraints, and/or one-on-one staff supervision to limit clients’ abilities to put themselves or others at risk (Ginsberg, 1977; Holbrook, 1989; Wasow, 1980). However, they also may include less tangible forms of restrictiveness, such as restricting clients’ sexual and risk-taking autonomy (Bachrach, 1980; Carpenter, 1978;

Garrison, 1987; Munertz & Geller, 1993). Second, mental health professionals have offered clients basic *HIV prevention education*. Because of the special cognitive difficulties associated with SMI, mental health professionals have relied on specialized curricula (Cates, Bond, & Graham, 1994; Goisman, Kent, Montgomery, Cheevers, & Goldfinger, 1991; Lauer-Listhaus & Watterson, 1988; Lewis & Scott, 1997; Lukoff, Sullivan, & Goisman, 1992; Schindler & Ferguson, 1995; Sladyk, 1990). These programs typically involve providing clients with brochures about the “facts” of HIV or safer sex (usually when clients ask about HIV or AIDS) or inviting clients to participate in voluntary sexuality or HIV discussion or education groups. Third, mental health providers have tried to *integrate HIV-related issues into standard psychotherapy and case management* for mental illness clients. Several therapeutic assessment and intervention models targeting various risk behaviors have been proposed for clinicians who do psychotherapy and/or case management with clients with SMI (Friedrich & Grannan, 1998; Knox, 1989; Knox, 1998). Counseling has been shown to be a particularly effective forum for dealing with clients’ sexual dysfunction, the sexual side-effects of medications, working through difficulties in maintaining sexual and/or romantic relationships, and addressing “co-factors” or issues which often reinforce high risk behavior, including substance use and self-esteem problems (Buffum, 1982; Kockott & Pfeiffer, 1996; Savin-Williams & Lenhart, 1990; Vincke, Bolton, Mak, & Blank, 1993). Fourth, and most recently, several clinical research groups have proposed and tested *HIV prevention skills training and support* programs (Carey et al., 2004; Kalichman, Sikkema, Kelly, & Bulto, 1995; Kaplan & Herman, 1996; Otto-Salaj, Kelly, Stevenson, Hoffman, & Kalichman, 2001; Otto-Salaj, Stevenson, & Kelly, 1996; Susser et al., 1998). In these models, small groups of people with SMI are provided basic information about HIV, its transmission, and various risk behaviors over a series of group and/or individual sessions, while also being given the opportunity to develop specific skills to implement risk reduction strategies.

While these general models offer some clinical guidance for addressing clients’ HIV-related needs, the research on these intervention strategies is limited to small exploratory or efficacy studies of particular approaches conducted under well-controlled conditions. More important, because the emphasis has been on developing intervention protocols, we know very little about what HIV prevention services mental health professionals are actually providing in their daily practice. The purpose of this study was to describe and examine the client-level corre-

lates of the HIV-related prevention services provided to adults with SMI in public mental health care programs.

METHOD

The data for this study come from the Indiana Mental Health Services and HIV Risk Study. As part of this study, face-to-face interviews were conducted with clients in treatment programs for individuals with SMI at three community mental health centers (CMHCs) and two state psychiatric hospitals. Clients who met the following criteria were invited to participate: (1) a diagnosis of a SMI (e.g., schizophrenia or schizophrenia-spectrum disorders, bipolar disorder, major depression, or other major mental disorder, involving psychosis or imposing major limitations on daily functioning); (2) a psychiatric treatment history of two years or longer; (3) enrolled for treatment at the field site for at least three months; (4) not currently subject to criminal charges or residing in jail; and, (5) between the ages of 18 and 55. The final sample included 401 clients across the five facilities. The overall client participation rate was 74%. A number of clients were unable to complete the entire interview for a variety of reasons, including the section of the interview related to the HIV-related prevention services. These 32 clients were not included in this study, resulting in a final analysis sample of 369 clients.

The study interview protocol contained a standardized self-report tool (Wright & Wright, 2004) for measuring how often clients believed they received specific HIV-related prevention mental health services, and how often they believed they had talked about sexuality or HIV-related issues with the most important members of their treatment team. The items measuring HIV-related prevention services were developed by the first author for this study based on interventions reported in the published literature. Individual items asked clients to indicate how frequently they had received various services or therapeutic recommendations from the four major theoretical groups of HIV-related prevention mental health services: therapeutic restrictions, HIV prevention education, HIV-focused psychotherapy and case management, and HIV prevention skills training and support. Clients replied using a 4-point scale (0 = "never"; 1 = "once or twice"; 2 = "several times"; 3 = "frequently") to indicate the frequency at which they received each of the interventions.

Several demographic (i.e., gender, age, race, sexual identity, marital status, education, recent sexual activity) and clinical variables (i.e., diagnosis, global assessment of functioning [GAF] score, number of prior

hospitalizations, HIV sero-status) were included in this study to both describe the sample and for use as controls in the multivariate analyses. HIV sero-status, psychiatric diagnosis, and GAF scores were collected from enrolled clients' clinical records and medical charts. In the multivariate analyses, we used dummy variables to indicate the three most common primary diagnoses (i.e., schizophrenia/schizophrenia-spectrum disorders, bipolar disorder, and major depression with and without psychotic features), so all "other diagnoses" served as the reference category. To identify those clients who were currently sexually active, we used a dummy variable to indicate those clients who reported having had one or more sexual partners during the preceding three months.

RESULTS

Description of Services Provided

Table 1 displays descriptive statistics and psychometrics for the total sample for each service category subscale, as well as a comparison of the hospital and CMHC samples. The most frequently provided category of service was HIV prevention education ($M = 0.50$, $SD = 0.65$). The least frequent category of services received were HIV prevention skills ($M = 0.34$, $SD = 0.50$) and therapeutic restrictions ($M = 0.37$, $SD = 0.57$). Each subscale was factor analyzed to assess the unidimensionality of the subscale. As shown in Table 1, a one-factor model of each subscale explained at least 41% of the variance. Additionally, each subscale displayed good internal validity, with alpha coefficients ranging from .76 to .88.

Service Setting Analyses

In order to describe the differences in HIV-related service provision between state hospitals and CMHCs, a series of one-way ANOVAs were computed to test for differences between service sites. Clients in state hospitals ($M = 0.53$, $SD = 0.64$) reported receiving therapeutic restrictions significantly more frequently than clients in CMHCs ($M = 0.24$, $SD = 0.47$, $F(1, 367) = 25.06$, $p < .001$). Additionally, service provision between each state hospital and each CMHC was compared. State hospital 2 was significantly more likely to have provided HIV-related education services ($M = 0.66$, $SD = 0.67$) than state hospital 1 ($M = 0.41$, $SD = 0.55$, $F(2, 167) = 7.00$, $p < .01$). Likewise, a significant difference was observed be-

TABLE 1. Frequency of HIV-Prevention Services by Service Site

	Therapeutic Restrictions <i>M (SD)</i>	HIV Prevention Education <i>M (SD)</i>	HIV-Focused Counseling & Case Management <i>M (SD)</i>	HIV Prevention Skills Training & Support <i>M (SD)</i>
State Hospitals (<i>N</i> = 169)	0.53 (0.64)	0.54 (0.63)	0.46 (0.60)	0.33 (0.48)
1 (<i>N</i> = 81)	0.49 (0.57)	0.41 (0.55)	0.37 (0.49)	0.24 (0.39)
2 (<i>N</i> = 88)	0.56 (0.70)	0.66 (0.67)	0.54 (0.68)	0.41 (0.55)
$F(1, 167)$	0.49	7.00**	3.51	5.01*
CMHCs (<i>N</i> = 200)	0.24 (0.47)	0.47 (0.67)	0.49 (0.62)	0.34 (0.51)
1 (<i>N</i> = 70)	0.24 (0.42)	0.57 (0.76)	0.59 (0.68)	0.36 (0.48)
2 (<i>N</i> = 72)	0.11 (0.29)	0.33 (0.55)	0.37 (0.48)	0.25 (0.41)
3 (<i>N</i> = 58)	0.41 (0.62)	0.53 (0.66)	0.51 (0.70)	0.44 (0.63)
$F(2, 197)$	7.12***	2.68	2.26	2.31
TOTAL (<i>N</i> = 369)	0.37 (0.57)	0.50 (0.65)	0.47 (0.61)	0.34 (0.50)
$F(1, 367)$	25.06***	0.99	0.16	.011
Eigenvalue	2.80	4.82	3.44	2.89
% of Variance Explained	46.73	53.51	49.12	41.29
Alpha	0.77	0.88	0.82	0.76

Post-hoc Scheffé analysis revealed a significant difference between CMHCs 2 & 3 on the Therapeutic Restrictions Index, $p < .001$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

tween CMHCs, with clients at CMHC 3 reporting that they received significantly more therapeutic restrictions ($M = 0.41$, $SD = 0.62$) than clients at CMHC 2 ($M = 0.11$, $SD = 0.29$, $F(2, 197) = 7.12$, $p < .001$) as confirmed by a post-hoc Scheffé analysis.

Regression Analyses—Predictors of Frequency of Service Provision

A series of OLS regressions was performed in order to describe a model of the frequency of service provision for each of the categories of HIV-related mental health services. Each of these models included a set

of demographic and clinical variables as well as dummy variables for each of the sites included in this study. OLS regressions using a “hospital v. CMHC” dummy variable were also performed, although those models did not account for as much of the variance as the models in which each site was included separately (details available upon request). Furthermore, the individual sites were frequently significant predictors in the model, implying that the effect of treatment environment is better captured when indicators for the individual sites were used. The dependent variable for each model was the average frequency at which clients reported having received the services in each service category.

Table 2 presents the results of the OLS regressions for each category of HIV-related mental health service. The model for therapeutic restrictions was significant ($F = 3.95, p < .001$) and explained 15% of the variance in how frequently clients reported receiving therapeutic restrictions. Clients who were HIV positive ($\beta = .11$) and sexually active in the preceding three months ($\beta = .18$) were significantly more likely to report staff recommending or applying therapeutic restrictions. Clients receiving services at CMHC 1 ($\beta = -.20$) and CMHC 2 ($\beta = -.28$) were significantly less likely to report the use of therapeutic restrictions.

The model for HIV prevention education was significant ($F = 2.94, p < .001$) and explained 12% of the variance in how frequently clients reported receiving HIV prevention education services. In this model, we found that women clients reported receiving significantly less HIV prevention education than men. Similar to the previous model, HIV positive status ($\beta = .11$) and being currently sexually active ($\beta = .15$) were associated with receiving HIV prevention education services significantly more frequently. Clients at Hospital 2 were also significantly more likely to report receiving more frequent HIV prevention services ($\beta = .20$) than clients in Hospital 1, indicating that HIV prevention at Hospital 2 was provided at levels similar to those found in the three CMHCs.

The model for HIV-focused counseling and case management was significant ($F = 2.19, p < .01$) and explained 9% of the variance in how frequently clients reported receiving HIV-focused counseling and case management services. The clients most likely to receive this type of service were those who were currently sexually active ($\beta = .18$) and those receiving services at Hospital 2 ($\beta = .14$).

Finally, the model for HIV prevention skills training and support was also significant ($F = 1.88, p < .05$), explaining 8% of the variance in how frequently clients reported receiving HIV prevention skills training ser-

TABLE 2. Regression Analyses of HIV-Prevention Services (N = 369)

Variable	Therapeutic Restrictions			HIV Prevention Education			HIV-Focused Counseling & Case Management			HIV Prevention Skills Training & Support		
	B	SEB	β	B	SEB	β	B	SEB	β	B	SEB	β
Constant	.28	.18		.15	.21		.10	.20		.13	.16	
Age	.00	.00	.02	.00	.00	-.04	.00	.00	-.01	.00	.00	-.02
Race (Non-white)	.01	.06	.01	.12	.07	.09	.11	.07	.09	.06	.06	.06
Gender (Female)	-.11	.06	-.10	-.22	.07	-.17***	-.11	.07	-.09	-.12	.0	-.12*
Marital Status (Married or Cohabiting)	-.09	.10	-.05	.02	.12	-.01	-.12	.11	-.06	-.10	.09	-.06
Sexual Orientation (Homosexuality)	.14	.09	.07	.07	.11	.03	.10	.11	.05	-.05	.09	-.03
Schizophrenia	.04	.08	.03	.07	.10	.05	.00	.09	.00	.04	.07	.04
Depression	-.05	.12	-.02	.05	.14	.02	.04	.13	.02	-.01	.11	-.01
Bipolar Disorder	.17	.20	.05	.12	.23	.03	.19	.22	.05	-.01	.18	.00
# of Hospitalizations	.01	.01	.05	.02	.01	.07	.01	.01	.07	.02	.01	.10
GAF Score	.00	.00	.05	.01	.00	.10	.00	.00	.09	.00	.00	.02
HIV Positive	.42	.20	.11*	.50	.23	.11*	.37	.22	.09	.30	.18	.09
Sexually Active in past 3 months	.22	.07	.18***	.20	.08	.15**	.24	.07	.18***	.14	.06	.13*
Hospital 2 ^a	.07	.09	.05	.31	.10	.20**	.21	.10	.14*	.19	.08	.16*
CMHC 1 ^a	-.29	.11	-.20**	.16	.13	.10	.18	.12	.11	.16	.10	.12
CMHC 2 ^a	-.40	.10	-.28***	-.11	.12	-.06	-.04	.11	-.03	.03	.09	.02
CMHC 3 ^a	-.06	.10	-.04	.19	.11	.11	.17	.11	.10	.25	.09	.18**
F	3.95***			2.94***			2.19**			1.88*		
S.E.E.	.54			.63			.60			.49		
R Square	.15			.12			.09			.08		

^a Hospital 1 is reference category.

* $p < .05$. ** $p < .01$. *** $p < .001$.

vices. In this model, we found that being a woman client significantly decreased the likelihood of receiving HIV prevention skills training and support. Being currently sexually active ($\beta = .13$) and in treatment at Hospital 2 ($\beta = .16$) and CMHC 3 ($\beta = .18$), however, were associated with a significant increase in the frequency of reporting HIV prevention skills training and support.

DISCUSSION

The purpose of this study was to empirically examine the HIV prevention-related mental health services clients in hospital and community-based care are receiving. We found that clients reported receiving very few HIV prevention-related mental health services. Indeed, in most cases, less than one third of the clients we surveyed said that they had received any of the prevention services included in our list of interventions. This finding is similar to other published reports that found low rates of HIV prevention-related mental health services based on surveys of mental health administrators and clinical staff (McKinnon et al., 1999; Walkup et al., 1998; Wright & Martin, 2003). In this regard, our findings validate mental health administrators' and clinicians' impressions at the client-level.

Our findings further indicate that HIV prevention skills training—the most intensive class of services—was the type of care least likely to be provided to the clients we surveyed. The use of therapeutic restrictions to manage high-risk behavior also was infrequent, possibly reflecting more open attitudes about client sexuality in the mental health system. In general, the clients we surveyed reported receiving HIV prevention education and HIV-related therapy or counseling most frequently. While clinical decision-making is a complex process influenced by many factors, our study suggests that when professionals in public mental health try to provide HIV preventive care, they tend to emphasize services that require less training and skill, as well as interventions that are more easily integrated into traditional psychiatric treatment models. The relatively low frequency of HIV-related skills training is particularly important, however, because these methods reflect the only class of interventions for which there is some demonstrated efficacy in reducing clients' HIV risk behavior (Carey et al., 2004; Kalichman et al., 1995; Otto-Salaj et al., 2001; Susser et al., 1998).

The results of our multiple regression analyses further highlight that HIV prevention-related services were provided most frequently to a small sub-set of clients. Specifically, those clients who were known to be HIV positive, currently sexually active, and more acutely mentally ill (i.e., hospitalized) were the clients most likely to report receiving more of all four types of care. It appears that staff may be intentionally targeting the highest risk clients for HIV prevention-related interventions. Unfortunately, the cross-sectional nature of our data makes it impossible to know exactly why this pattern exists. It may be that these individual-level characteristics are influencing staff perceptions of need and/or clinical

decision-making. However, it also may be that clients who fit this profile are simply more likely to raise these issues with staff and request support and services from their care providers.

At the same time, the concentration of services within this sub-group of consumers also means that, because of the low-prevalence of these characteristics in client populations, most clients who are not currently at risk are significantly less likely to receive HIV prevention-related mental health services. While this pattern may not have immediate consequences for the spread of HIV, it may reflect a general reactive bias among mental health professionals when it comes to providing this type of care. That is, rather than addressing these issues proactively with clients who have the potential for engaging in high risk behavior, clinicians may assume that clients are generally not at risk and/or rely on clients to bring up these special concerns before considering or assessing clients' needs for HIV prevention services.

Overall, few demographic predictors of HIV-related service provision were found, suggesting that the provision of these services is evenly distributed to a broad range of clients. One notable exception to this pattern was with regard to gender, where women reported receiving significantly fewer instances of HIV-related prevention education or HIV-related skills training than men, even after controlling for current sexual activity. We believe this pattern may reflect broader societal beliefs and assumptions regarding women's sexuality, such that mental health professionals may be more prone to overlook or ignore the HIV prevention needs of women in their care.

Finally, we also found variation in the patterns of HIV prevention-related mental health services provision to clients across the five sites we studied, primarily in the use of therapeutic restrictions. Overall, hospitals were more likely to emphasize therapeutic restrictions than CMHCs. However, even among the CMHCs there was significant variability in the use of therapeutic restrictions. The two sites where this type of care was less frequent were somewhat different from the third CMHC because they had a stronger organizational commitment to providing services within a psychosocial rehabilitation framework and because they provided more integrated residential care (e.g., semi-independent living program, cluster apartments) rather than traditional group home care. Conversely, the CMHC that used therapeutic restrictions more frequently relied more extensively on group homes for providing residential care, including several "secure facilities."

Two other site-specific differences were observed. Clients at CMHC 3 were significantly more likely to report more frequent HIV prevention

skills training and support. Although it is difficult to know precisely why, informal ethnographic observations made during the implementation of the larger study revealed that this site had a particularly strong day treatment program that emphasized skills-training in a variety of areas, including interpersonal relationships and sexuality. The manager of this program, as well as many staff, also mentioned that they had had formal training in sex education. It is unclear, however, why the unique attitudes and beliefs of staff in this treatment setting did not also result in significantly higher rates of HIV prevention education and HIV-related therapy and case management.

In addition, receiving services at Hospital 2 was a significant predictor of receiving almost all HIV-related mental health services more frequently. As with CMHC 3, a number of organizationally-specific characteristics may explain this finding. Hospital 2 had a reputation among patients of being more supportive and tolerant of patient sexual expression than the other hospital where this study was conducted. In fact, several subjects in our study who had been admitted to both hospitals over the years commented on how much “easier” it was to have sex at Hospital 2 than Hospital 1, and several subjects even mentioned significant others they had “waiting” for them at Hospital 2. Similarly, the front-line staff at Hospital 2, primarily psychiatric attendants, assumed much of the responsibility for providing sexuality and HIV-related services to clients and passively-accepted patient-to-patient romantic relationships. Conversely, policy at Hospital 1 explicitly dictated that sex education and counseling was the exclusive responsibility of the professional staff (e.g., psychiatrists, nurses, etc.) and that patients were not allowed, under any circumstances, to have sexual contact with each other. Regardless of the unique qualities of the five sites, it is clear that these differences go beyond the type of care provided (e.g., hospital v. community care). Rather, we believe that these differences point to the importance of the organizational culture of facilities as an important determinant of the provision of HIV prevention services within mental health care programs (Wright, 2001).

CONCLUSION

In conclusion, our study found that HIV prevention-related mental health services are a relatively infrequent feature of treatment for adult clients with SMI in the public mental health system. This was especially true of the more intensive and effective evidence-based services involv-

ing prevention skills training. Nevertheless, we did find that clients who reported having the greatest current level of HIV-risk were significantly more likely to say they had received these services than other clients, although there also was evidence that women clients, regardless of their risk level, were less likely to receive even basic HIV prevention education and HIV-related therapy and case management. More important, we also found that there was significant variation in the frequency and type of HIV prevention services provided to this population across different mental health service settings. Taken together, our findings underline the need to examine more carefully the role of mental health professionals and psychiatric treatment in addressing the HIV prevention needs of adults with SMI.

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