Substance Use During Sex and Unsafe Sexual Behaviors Among Acute Psychiatric Inpatients

A. Srikumar Menon, M.D., Ph.D
Sherry Pomerantz, Ph.D.

A total of 239 acute psychiatric inpatients were interviewed about whether they used substances just before or during sex and whether they engaged in unsafe sexual behaviors while using substances. Nearly 40 percent of male patients and 36 percent of female patients reported using alcohol at least once during sex in the previous six months. Among male patients a statistically significant association was observed between using crack during sex and two high-risk behaviors—inconsistent condom use and sex with a high-risk partner. Among female patients the use of alcohol before or during sex was significantly associated with the practice of receptive anal sex. (*Psychiatric Services* 48:1070–1072, 1997)

Several recent studies have reported the high prevalence of high-risk sexual behaviors (1–4) and HIV infection (5–8) among patients with psychiatric disorders. In a previous study of a sample of 239 psychiatric inpatients (4), we found that 43 percent of men and 13 percent of women reported a history of multiple sex partners in the past six months.

In that study we also found that a very high proportion of patients (86 percent of men and 41 percent of women) reported ever using drugs or alcohol just before or during foreplay leading to sexual intercourse. The use of drugs and alcohol just before or during sex can increase arousal, reduce inhibitions, and also impair judgment and reasoning. Therefore we hypothesized that psychiatric patients who drink alcohol or use drugs during sex are at risk of neglecting safe sex practices such as using a condom. We explored this hypothesis using data from a study we conducted on the prevalence of unsafe sexual behaviors among 239 acute psychiatric inpatients admitted to two Philadelphia hospitals during a 12-month period.

The authors are affiliated with the psychiatry service at Perry Point Veterans Affairs Medical Center (25B), Perry Point, Maryland 21902, and the Albert Einstein Medical Center in Philadelphia.

Methods

Details of the methods have been previously described (4). All acute patients admitted to three inpatient psychiatric units in two Philadelphia hospitals were eligible for enrollment in the study. None of these units admitted patients solely for drug and alcohol detoxification and rehabilitation. All consecutive admissions to the three units during a 12-month period (September 1, 1989, to August 30, 1990) were eligible for participation in the study.

Patients were interviewed one week after hospital admission by a graduate student in psychology. The interviewer first contacted the nursing staff and attending psychiatrist on the unit to determine whether the patient was sufficiently stable to give informed consent. If the patient was not stable, the consent process was postponed to a later date. The interviewer used clinical judgment to decide to terminate the interviews if the subjects were disorganized in their thinking during the course of the interview. Some measures were instituted to reduce interviewer and respondent bias. The interviewer was blind to the HIV status of subjects, and during the interview patients were reminded that they could refuse to answer any questions they perceived to be sensitive.

The interview included detailed questions about substance abuse and sexual practices for the six months before the interview. Subjects were asked how often they used alcohol and various street drugs just before having sex or during sex. For the study, the term "sex" referred to the period of foreplay through intercourse. High-risk partners were defined as prostitutes, injection-drug users, and those with whom sex was exchanged for drugs or money. Participants, as well as nonparticipants, were given AIDS educational materials.

Results

Of 381 eligible admissions, 239 patients (63 percent) gave written informed consent to participate in the study. No statistically significant differences between participants and nonparticipants were found in age, sex, race, diagnosis, and insurance status. Subjects were predominantly male (61 percent) and African American (57 percent). Sixty-four subjects (27 percent) met *DSM-III-R* criteria for schizophrenia, and 62 (26 percent) had a depressive disorder (bipolar disorder, depressed; major depressive disorder; or depressive disorder not otherwise specified). Twenty-three subjects (10 percent) had a diagnosis of bipolar disorder, manic. The remaining subjects had a diagnosis of adjustment disorder or personality disorder.

Of the 239 patients, 225 (133 men

Table 1

Responses to questions about engaging in high-risk sexual behaviors by 133 male and 92 female acute psychiatric inpatients who reported using drugs or alcohol before or during sexual activity

Substance and group	High-risk partner[1]						Inconsistent condom use[2]						Receptive anal sex[3]					
	Yes		No				Yes		No				Yes		No			
	N	%	N	%	χ^2	p<	N	%	N	%	χ^2	p<	N	%	N	%	χ^2	p<
Cocaine[4]																		
Men	9	75	3	25	16.9	.001	8	66	4	33	.7	ns	—	—	—	—	—	—
Women	1	20	4	80	.8	ns	3	60	2	40	.1	ns	1	20	4	80	1.5	ns
Crack																		
Men	8	57	6	42	8.2	.001	11	78	3	21	3.5	.05	—	—	—	—	—	—
Marijuana																		
Men	6	30	14	70	.2	ns	13	65	7	35	.9	ns	—	—	—	—	—	—
Women	0	—	6	100	.6	ns	4	66	2	33	.04	ns	1	16	5	83	1.0	ns
Alcohol																		
Men	21	40	31	59	9.8	.001	38	73	14	26	11.4	.001	—	—	—	—	—	—
Women	4	16	21	84	2.3	ns	16	64	9	36	1.2	ns	4	16	21	84	5.1	.05

[1] A prostitute, injection-drug user, or someone with whom sex was exchanged for drugs or money

[2] Not using a condom during all episodes of sex

[3] Due to the small number of men reporting receptive anal sex (N=3), men were not included in the analysis.

[4] Due to the small number of women using crack or cocaine, these categories were combined for women.

and 92 women) reported having sex at least once during the six months before admission. The 14 patients who reported no sexual activity were excluded from the analysis.

Alcohol was the most frequently used substance during sex, and its use before or during sex was reported by 52 men (39 percent) and 25 women (27 percent). Crack use during sex was reported by 14 men (11 percent) and five women (5 percent). Marijuana use during sex was reported by 20 men (15 percent) and six women (7 percent).

As shown in Table 1, two unsafe behaviors among male patients—inconsistent condom use and having sex with a high-risk sex partner—were significantly associated with use of crack during sex but not with marijuana use during sex. For example, of the 14 men who reported crack use before or during sex, eight (57 percent) stated that they had sex with a high-risk partner while doing so. Among female patients, the only significant association was between alcohol use during sex and receptive anal sex.

These associations remained the same after adjusting for the confounding effects of race and education. For instance, among men the adjusted (race and education) odds ratio for cocaine use and having a high-risk partner was 16 (95% confidence interval=8 to 32). Of the 62 patients with depressive disorders, 32 (60 percent) reported alcohol use before or during sex, compared with 14 of the 64 patients with schizophrenia (22 percent). Alcohol use before or during sex was also reported by four of the 12 patients with bipolar disorder, manic (33 percent) and 60 of the 113 patients with other diagnoses (53 percent) (χ^2=12.9, df=8, p<.01, for difference in alcohol use before or during sex across all diagnostic groups).

Discussion and conclusions

In this study of predominantly poor, inner-city patients admitted to Philadelphia hospitals for acute psychiatric treatment, a significant number reported using drugs or alcohol just before or during sexual activity in the previous six months. The relationship between substance use during sexual activity and selected unsafe sex practices was examined. Among men a statistically significant relationship was found between the use of crack and two unsafe sex practices—having a high-risk sex partner and inconsistent condom use. Among women, a significant relationship was found between alcohol use and receptive anal intercourse. These relationships remained significant even after adjusting for race and education.

This study is unique in examining the relationship of substance use and HIV high-risk behaviors among psychiatric patients. Similar associations between drug or alcohol use just before or during sex and unsafe sexual behaviors have been reported among homosexual populations (9) and in the general population (10).

Several hypotheses have been suggested to explain why individuals use alcohol and drugs during sex (9). According to one hypothesis, drug or alcohol use may reduce sexual inhibitions, which also results in the neglect of safe sex practices. The use of crack carried the most risk for unsafe behaviors, which may be because crack is often used in the context of the immediate exchange of drugs for sex and little opportunity exists for safe sex practices such as condom use. Psychiatric patients are particularly at risk for neglect of safe sex practices due to the increased likelihood of impulsive behavior and poor judgment and reasoning, which may be magnified by the use of drugs and alcohol.

Several limitations of this study should be noted. The small sample limited the analysis, particularly in the area of specific diagnosis. In addition, results cannot be generalized to the psychiatric population as a whole because the sample consisted mostly of patients from an inner-city population. The cross-sectional nature of the study does not permit causal infer-

ences to be drawn between drug and alcohol use and unsafe sexual behaviors. An important limitation was the inability to validate self-reported high-risk sexual behaviors and drug use during sex, including histories of sexually transmitted diseases.

In conclusion, the demonstrated relationship between drug and alcohol use and unsafe sex practices among acute psychiatric patients suggests that AIDS prevention education efforts about safer sex targeted at this population should include information about risks of combining sexual activity with alcohol and drug use. However, future research is necessary on larger and more representative samples of acute psychiatric inpatients, with methods of validating self-reported information. Such studies may provide additional details about the circumstances that create the greatest risk for unsafe sexual practices. ♦

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Educational Needs of Families of Mentally Ill Adults

Haya Ascher-Svanum, Ph.D.
Joan E. Lafuze, Ph.D.
Paula J. Barrickman, B.S.
Carol Van Dusen
Joan Fompa-Loy, D.N.S.

A total of 197 family members of mentally ill adults in Indiana responded to a survey about their preferences for family psychoeducation programs, including type of information, format, presenter, frequency and length of educational programs, setting, and cost. The findings of the survey, which was sent only to persons who were not members of the National Alliance for the Mentally Ill, indicated that family members throughout the state have consistent and persistent needs and clear preferences about educational programs. Of 11 educational topics listed, family members expressed the least interest in learning about their relative's substance abuse. They were ambivalent about whether to include patients in family education programs, but they clearly supported patient education. (*Psychiatric Services* 48:1072–1074, 1997)

Although the current treatment service model stresses the importance of need-led, goal-defined interventions for psychiatric patients and their relatives (1), only a few treatment programs are based on objective data collected from consumers. Some family education programs, such as the Journey of Hope and a few others (2–4), were developed with input from families and consumers; however, numerous exceptions exist. As a result,