HIV Risk Activity Among Persons With Severe Mental Illness: Preliminary Findings

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HIV seroprevalence rates between 5.5 percent and 8.9 percent have been reported among hospitalized psychiatric patients in New York City (1,2). The prevalence of two key HIV-risk activities in this population, unsafe sex and drug injection, has not been adequately investigated.

At two public psychiatric hospitals, charted histories of homosexual activity were found for 18 of 237 men (7.6 percent), and drug injection was documented for 39 of 451 men and women (8.6 percent) (1). Using written questionnaires, one study found that nearly half of 113 acutely hospitalized psychiatric patients reported a history of HIV-related risk behaviors during the previous five years (3). In another study at an inner-city outpatient psychiatric clinic, more than half of 60 patients had engaged in risk behaviors in the past year (4). Most risk behaviors were related to unsafe sexual activities. Rates of injection-drug use during the period under investigation were 5 percent in both studies (3,4).

Psychiatric diagnoses may affect risk behavior. Patients with bipolar disorder have been observed to experience periodic hypersexuality (2). Chronic psychopathology among patients with schizophrenia may decrease the frequency of sexual activity (5) and use of narcotics (6).

The objective of the study reported here was to assess risk behaviors associated with HIV infection among severely mentally ill persons using carefully established research diagnoses and lengthy face-to-face interviews about risk behaviors.

Methods

All patients between the ages of 18 and 59 who were judged by the treating clinician to be capable of consenting to research were approached at three sites that provide services to severely and persistently mentally ill persons. Of the 264 patients approached, 200 agreed to participate, an acceptance rate of 76 percent. This paper reports findings for the first 95 patients who completed interviews.

Study sites were a day treatment program, an acute inpatient unit, and a state hospital unit that prepares patients for community living. At all sites it was the policy to exclude from treatment persons with primary diagnoses of substance use disorders. Participants had recent opportunities for sexual activity and drug use off hospital grounds.

Each consenting patient underwent a structured set of face-to-face interviews. Each assessment consisted of the Structured Clinical Interview for DSM-III-R (7); an adaptation of the Parenteral Drug Use High-Risk Questionnaire (8), which is an interview about use of injection drugs, and the Sexual Risk Behavior Assessment Schedule, which elicits detailed information about behaviors in the preceding six months and some information about lifetime sexual history (9). The sexual interview was designed to put patients at ease when talking about sex and con-

References


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Table 1
HIV risk behaviors among 95 patients with severe mental illness, by diagnostic group

<table>
<thead>
<tr>
<th>Risk behavior</th>
<th>Schizophrenia (N=47)</th>
<th>Bipolar disorder (N=17)</th>
<th>Other1 (N=31)</th>
<th>Total (N=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homosexual activity</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Past six months</td>
<td>2 4.3</td>
<td>0 —</td>
<td>0 —</td>
<td>2 2.1</td>
</tr>
<tr>
<td>Lifetime</td>
<td>10 21.3</td>
<td>2 11.8</td>
<td>5 16.1</td>
<td>17 17.9</td>
</tr>
<tr>
<td>Drug injection</td>
<td>0 —</td>
<td>0 —</td>
<td>1 3.2</td>
<td>1 1.1</td>
</tr>
<tr>
<td>Past six months</td>
<td>9 19.1</td>
<td>4 23.5</td>
<td>6 19.4</td>
<td>19 20.0</td>
</tr>
<tr>
<td>Since 1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual activity, past six months</td>
<td>22 46.8</td>
<td>6 35.3</td>
<td>12 38.7</td>
<td>40 42.1</td>
</tr>
<tr>
<td>Abstinent</td>
<td>10 21.3</td>
<td>5 29.4</td>
<td>11 35.5</td>
<td>26 27.4</td>
</tr>
<tr>
<td>One partner</td>
<td>15 31.6</td>
<td>6 35.3</td>
<td>8 25.8</td>
<td>29 30.5</td>
</tr>
<tr>
<td>Condom use, past six months2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Among subjects reporting one sexual partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No condom use</td>
<td>5 62.5</td>
<td>3 60.0</td>
<td>9 90.0</td>
<td>17 74.0</td>
</tr>
<tr>
<td>Inconsistent use</td>
<td>1 12.5</td>
<td>1 20.0</td>
<td>1 10.0</td>
<td>3 13.5</td>
</tr>
<tr>
<td>Consistent use</td>
<td>2 25.0</td>
<td>1 20.0</td>
<td>0 —</td>
<td>3 13.5</td>
</tr>
<tr>
<td>Among subjects reporting multiple sexual partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No condom use</td>
<td>6 40.0</td>
<td>2 40.0</td>
<td>3 37.5</td>
<td>11 39.3</td>
</tr>
<tr>
<td>Inconsistent use</td>
<td>8 53.3</td>
<td>2 40.0</td>
<td>5 62.5</td>
<td>15 53.6</td>
</tr>
<tr>
<td>Consistent use</td>
<td>1 6.7</td>
<td>1 20.0</td>
<td>0 —</td>
<td>2 7.1</td>
</tr>
</tbody>
</table>

1 Diagnoses include schizoaffective disorder, major depressive disorder, psychotic disorder not otherwise specified, and atypical psychosis.
2 Condom use data were missing for some patients.

Table 1 includes data on the number of patients with schizophrenia, bipolar disorder, or other diagnoses, as well as the total number of patients. The data is divided into risk behaviors, with separate subcategories for abstinence, inconsistent use, and consistent use of condoms. The table also includes data on the number of participants reporting multiple sexual partners.

A significant finding is that 26 patients (27.4%) were Hispanic, and 26 were either white or from other ethnic groups. No significant differences in sexual activity were found between patients at the three sites, including being abstinent, having more than one partner in the previous six months, or using condoms. No significant differences were found in the rate of abstinence, number of sexual partners, condom use, homosexual behavior, or drug injection. The mean ± SD age of patients was 35.4 ± 8.4 years. The mean number of previous psychiatric hospitalizations was 5.1 ± 5.2. Fifty-nine of the patients (62%) were men. A total of 43 patients (45.3%) were black, 26 (27.4%) were Hispanic, and 26 were either white or from other ethnic groups.

Risk factors. No significant differences in sexual activity were found between patients at the three sites, including being abstinent, having more than one partner in the previous six months, or using condoms. No significant differences were found in the rate of abstinence, number of sexual partners, condom use, homosexual behavior, or drug injection. The mean ± SD age of patients was 35.4 ± 8.4 years. The mean number of previous psychiatric hospitalizations was 5.1 ± 5.2. Fifty-nine of the patients (62%) were men. A total of 43 patients (45.3%) were black, 26 (27.4%) were Hispanic, and 26 were either white or from other ethnic groups.

Heterosexual anal intercourse was reported by seven of 31 men (22.6%) and five of 23 women (21.7%) of the men and two of the women used condoms.

Homosexual history. Only two (3.6%) of the 55 sexually active patients (one man and one woman) reported current homosexual activity. These two patients also reported heterosexual activity during the past six months. No patient reported ho-
mososexual activity exclusively or homosexual anal intercourse.

Seventeen (18.5 percent) of the 92 patients for whom complete information was available reported homosexual behavior at some time in the past; 11 of 58 men (19 percent) and six of 34 women (17.6 percent) reported such past behavior. Ten of the patients were currently sexually active, but only one reported current homosexual behavior.

**Drug injection.** Of the 95 patients, only one reported drug injection in the previous six months, sharing injection equipment once during that time. Drug injection at least once since 1978 was reported by 19 patients (20 percent)—13 men (22 percent) and six women (16.7 percent). No significant association was found between drug injection and age, gender, ethnicity, or psychiatric diagnosis.

**Discussion and conclusions**

This study of HIV risk behaviors among severely mentally ill patients yielded some surprising findings. First, rates of sexual activity and drug injection were not related to diagnosis. Despite previous reports suggesting that differences might be found, bipolar disorder was not associated with a greater likelihood of sexual activity, nor schizophrenia with abstinence or lower rates of drug injection.

Second, unsafe heterosexual activity was by far the most common current risk behavior, rather than the classical risk factors of male homosexual activity and drug injection. However, past participation in both homosexual activity and drug injection were more impressive than current participation in these activities might suggest, and, despite the treatment sites’ exclusion of individuals with a primary diagnosis of a substance use disorder, a surprising 20 percent of all patients had injected drugs at least once since 1978.

A third unexpected finding was that younger age did not predict sexual activity, although younger patients were more likely to have multiple partners. Only 9.8 percent of sexually active patients consistently used condoms.

The patients in our study had an average of five previous psychiatric hospitalizations. These findings may not be applicable to patients who are more acutely ill or who have milder illnesses. Nor may they be applicable to patients outside of urban settings.

An additional limitation is the lack of information about patients not referred to this research project because they were deemed unable to give consent. Although our patients appeared to be comfortable answering very explicit sexual questions, we cannot exclude the possibility that the low rates of current homosexual activity represented underreporting.

In conclusion, unprotected heterosexual intercourse was the most frequent current HIV risk activity in this group of patients with chronic mental illness. However, past use of injection drugs and homosexual activity were important factors in the sample. Although these behaviors were less frequent, they may represent more serious risk factors because HIV may be more easily transmitted by these routes. In our experience, patients are willing and able to discuss HIV risk behaviors, which should permit the development and implementation of appropriately targeted risk reduction interventions.

**Acknowledgments**

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**References**


Letters

Letters from readers are welcomed. They will be published at the discretion of the editor as space permits and will be subject to editing. They should be a maximum of 500 words with no more than five references and should be submitted in duplicate. Letters should be addressed to John A. Talbott, M.D., Editor, H&CP, APA, 1400 K Street, N.W., Washington, D.C. 20005.

Helping Mentally Ill Mothers

To the Editor: In the May issue Nicholson and associates (1) reported the findings of a survey of state mental health departments aimed at identifying state policies and programs focused on the needs of mentally ill mothers with preschool-age children. In Illinois, the task of funding and delivering programming for at-risk children has fallen by default to the Illinois Department of Children and Family Services. The Illinois Department of Mental Health refused to assume responsibility in

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