



Gender Differences in HIV Risk Behaviors Among Adolescents in Substance Abuse Treatment

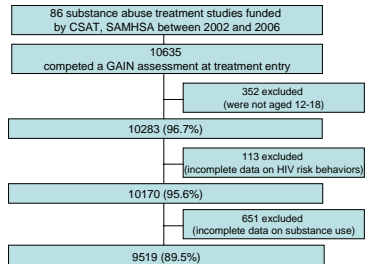
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Background and Objective

- Adolescents with substance use problems are at elevated risk for HIV infection, because many engage in high risk behaviors (Devieux et al., 2002; Hou & Basen-Engquist, 1997; Kingree et al., 2000).
- Risky sexual activity and injection drug use are the two most common modes of HIV transmission in youth.
- Prior studies have found that males were more likely than females to have sex with multiple partners and to use alcohol or drugs before engaging in sex (CDC, 2006; Murphy, Rotheram-Borus, & Reid, 1998).
- The objective of this poster is to estimate gender differences in HIV risk behaviors across a spectrum of risky sexual and injection drug use behaviors among adolescents admitted to substance abuse treatment.

Sampling Frame



Measures

- Data were self-reported and obtained at admission using the Global Appraisal of Individual Needs (GAIN; Dennis, 1999).
- Substance Problem Scale: 16 items for assessing substance abuse, substance dependence, and problems related to substance use.
- Internal Mental Disorders Scale: 43 items for assessing general psychological distress that includes depressive symptoms, somatic symptoms, anxiety/fear symptoms, traumatic distress and homicidal/suicidal thoughts.
- Behavioral Complexity Scale: 33 symptom items for assessing ADHD symptoms and conduct problems.

HIV Risk Behavior: Sexual risk

- Youth were asked if they engaged in the following 10 sexual behaviors during the past 12 months:
- sex while they or their partner was high on alcohol or drugs
 - sex with injection drug users
 - sex involving anal intercourse
 - sex with a male who might have had sex with other males
 - male to male sex
 - trading sex for drugs, money or gifts
 - using drugs, gifts, or money to purchase sex
 - sex with multiple partners
 - sex without protection
 - using alcohol or drugs to make sex last longer or hurt less

HIV Risk Behavior: Injection drug use

- Youth were asked if they had done any of the following in the past 12 months:
- using a needle to shoot up drugs
 - re-using a needle
 - not cleaning a needle (including re-using a needle without cleaning it)
 - sharing a needle with someone
 - sharing rinse water, cooker or cotton
 - allowing someone else to inject them with drugs (youths were instructed not to count shots given by a doctor or nurse).

Characteristics of Study Sample (%)

| | Male (n=6821) | Female (n=2698) |
|--------------------------------------|---------------|-----------------|
| Mean age (SD) | 15.7 (1.33) | 15.5 (1.37) |
| Race-ethnicity | | |
| African American | 18.8 | 10.8 |
| Caucasian | 38.9 | 48.3 |
| Hispanic | 21.3 | 15.6 |
| Other | 21.0 | 25.3 |
| Substance use disorder | | |
| Dependence | 46.2 | 53.7 |
| Abuse | 34.5 | 24.5 |
| Other | 20.3 | 21.8 |
| Internalizing problems | 33.5 | 61.7 |
| Externalizing problems | 56.9 | 68.1 |
| Current criminal justice involvement | 72.6 | 58.2 |

Results: Sexual Risk Behaviors by Gender

| | Male n=6821 | Female n=2698 |
|--|-------------|---------------|
| * p<0.05, ** p<0.001 | | |
| Had sex while high on alcohol or drugs | 35.2 | 44.8** |
| Had sex with injection drug user | 0.9 | 5.2** |
| Had sex involving anal intercourse | 7.1 | 5.4* |
| Had sex with a man who might have had sex with another man | 0.5 | 1.6** |
| Traded sex for drugs, money or gifts | 0.7 | 3.4** |
| Used drugs, gifts, or money to purchase sex | 0.9 | 0.4* |
| Had multiple sexual partners | 41.0 | 34.9** |
| Had male to male sex | 0.8 | NA |
| Had sex without protection | 33.3 | 44.3** |
| Used alcohol or drugs to make sex last longer or hurt less | 7.0 | 6.5 |
| Any sexual risk behavior | 60.0 | 60.9 |

Results: Injection Drug Use Behaviors by Gender

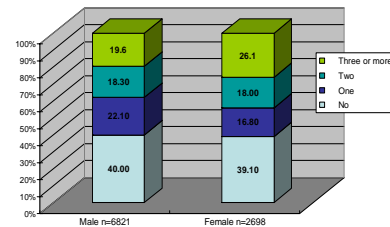
| | Male n=6821 | Female n=2698 |
|---|-------------|---------------|
| * p<0.05, ** p<0.001 | | |
| Used needle to shoot up drugs | 1.1 | 2.8** |
| Re-used needle | 0.5 | 1.3** |
| Ever skipped cleaning needle/re-used needle without cleaning it | 0.5 | 1.6** |
| Shared needle with someone | 0.4 | 1.5** |
| Shared rinse water, cooker or cotton | 0.3 | 1.2** |
| Allowed someone else to inject you with drugs | 0.6 | 2.2** |
| Any injection-drug related risk behavior | 1.3 | 3.0** |
| Number of injection drug use behaviors | | |
| No | 98.7 | 97.0** |
| One | 0.3 | 0.6 |
| Two | 0.4 | 0.6 |
| Three or more | 0.3 | 1.8 |

| | Male n=6821 | Female n=2698 |
|--|-------------|---------------|
| p<0.001 | | |
| Any HIV risk behavior (Sex or injection drug use behavior) | 59.8 | 60.4 |
| No | 40.2 | 39.6** |
| One sex-related risk behavior and no injection risk | 21.7 | 16.4 |
| Multiple sex-related risk behavior and no injection risk | 36.8 | 40.9 |
| One injection drug use risk behavior and no sexual risk | 0.1 | 0.1 |
| Multiple injection drug use risk and no sexual risk | 0.2 | 0.2 |
| Had both sex and injection drug use risks | 1.0 | 2.8 |

Conclusion, Implications, and Limits

- One out of every two adolescents admitted to substance abuse treatment has engaged in at least one HIV risk behavior in the past year.
- Adolescent girls had higher rates of engaging in sex while high on alcohol or drugs, having sex with an injection drug user, trading sex for money and having unprotected sex.
- In contrast, adolescent boys were more likely to have been involved in anal intercourse, used drugs, use of gifts or money to purchase sex and had multiple sexual partners.
- With respect to injection drug use, females reported higher rates of engaging in such risk behaviors as using a needle to shoot up drugs; sharing needles, rinse water, cookers, and cotton; and re-using a needle without cleaning it.
- Study findings suggested a need for 1) increased HIV risk screening as part of standard substance abuse treatment assessments and 2) targeting HIV screening and develop gender-specific interventions to tailor the differential manifestations of HIV risk behaviors among adolescent boys and girls.
- Strengths of the study include a large sample size, standardized assessment, and inclusion of a variety of sexual risk and injection drug use behaviors; Limitations include a cross-sectional design that precludes the temporal sequence, data based only on youth's self-report, and data were limited to treatment seeking population.

(References available on request from authors)



Number of Sexual Risk Behaviors by Gender