Prevalence of Depressive Disorders Among HIV-Positive Women and Associations with Antiretroviral Therapy Adherence and HIV Risk Behaviors

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Background

Prior research has confirmed the severity of depressive symptoms in HIV-positive women, and their association with rapid disease progression and higher AIDS-related mortality. However, few studies have examined the prevalence of depressive disorders meeting *DSM* criteria and their associations with important HIV outcomes. We investigated the prevalence of major depressive disorder (MDD) and dysthymia in a cohort of HIV-1 seropositive women and associations with HIV outcomes.

Methods

HIV-positive women (N=1027) in six cities were assessed for psychiatric and substance use disorders using the World Mental Health Composite International Diagnostic Interview (CIDI). Outcomes were: 1) self-reported adherence to HAART, 2) engaging in risky sexual behavior (multiple male partners, exchanging sex for money/drugs/shelter, no condom use), or 3) risky alcohol/drug use behaviors (any drug use, at-risk alcohol use). Multi-variable logistic regression analysis explored associations between depression and these outcomes, controlling for demographic and clinical factors.

Results

Lifetime prevalence was 32% for MDD and 10% for dysthymia. Prevalence of 12-month disorders was 20% for MDD and 10% for dysthymia. In logistic regression analysis controlling for time, age, race, education, study site and (in the HAART adherence model) CD4, women with depression and/or dysthymia were significantly less likely to be adherent to HAART regimens (OR=0.69, p<.05), and were over twice as likely to engage in risky sexual behavior (OR=2.3, p<.01) or risky drug/alcohol use (OR=2.1, p<.01).

Table 1: 12-month Prevalence (%) of Mood Disorders: General U.S. Female Population Compared to HIV+ Women

Source for minor depression: Klier et al., 2000;
Source for other diagnoses: Kessler et al., 2005

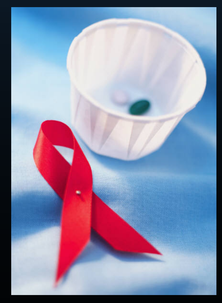
Table 2: Relationship of 12-month Diagnoses to Sexual Risk & Drug Use Behaviors over 3 years following CIDI Administration* (N=1,033 women, N=4,488 study visits)

12-Month Diagnosis	Risky Sexual Behavior[a]	Risky Alcohol/Drug Use[b]
	OR, p-value	OR, p-value
Depression	2.29, p<.001	2.13, p=.006
Depression + SA	2.01, p<.001	4.17, p=.008
Bipolar Disorder	3.93, p<.001	1.34, p=.481
Bipolar + SA	4.52, p=.005	3.67, p=.073
Mood Disorder	1.66, p=.009	2.27, p<.001
Mood + SA	4.16, p<.001	5.47, p<.001
Substance Abuse (SA)	2.75, p<.001	8.74, p<.001

* Random regression models adjusting for time, age, race, education, & site
[a] Risky sexual behavior defined as exchanging sex for money/drugs/shelter and/or having multiple male sex partners
[b] Risky alcohol/drug use defined as >7 drinks per week or any illicit drug use

Conclusions

Women with depressive disorders may benefit from interventions designed to enhance their use of and adherence to HIV antiretroviral therapies. Since depression is associated with risky sex and drug/alcohol use, they may also benefit from substance abuse treatment as well as training in safer sex practices. Also needed is case management assistance with meeting basic needs for food and shelter. Future analyses of these data will examine whether women whose depression is treated have better HIV and behavioral health outcomes.



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