

Mental Health Consequences of HIV/AIDS in Substance Users: The Mediating Effects of Physical Health Status, Social Support and Substance Use

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Learning Objectives

Participants will learn about the prevalence of mental health problems in a sample of HIV positive individuals with substance abuse problems.

Participants will understand the impact of social support and other coping mechanisms on mental health status.

Participants will understand the relationship between mental health problems and physical health, substance abuse, and social support over time.

Participants will understand the role substances play as a coping mechanism for HIV positive individuals with substance use problems.

Substance Use

- Both cause and consequence of HIV disease
- Can exacerbate emotional distress
- Source of non-adherence
- Alcohol dependence may also accelerate HIV replication

Living with HIV Disease

- Higher risk for depression
- Higher risk for suicide
- Significant source of on-going stress, which can exacerbate normal feelings of depression and anxiety
- Highly stigmatizing, resulting in loss of social support networks and increased depression, anxiety

Social Support

Results in lower levels of emotional and psychological distress

- a. Social support (SS) networks can help individuals deal with stress (buffering effect of SS)
- b. SS networks may in fact reduce vulnerability to stress (stress deterring models)
- c. SS can both deter and buffer effects of stress

Objective

To examine the prevalence of mental health problems and to explore the relationship between mental health and physical health status, social support, and substance use among a sample of HIV positive substance users over time

Data

- Five year study of the effectiveness of enhanced substance abuse services for individuals with HIV and co-occurring substance abuse problems
- Clients are interviewed at intake, 6 month, and 12 month follow up by a clinician trained to administer a SAMHSA instrument
- As of this analysis, intake data has been collected from 302 clients, 6 month follow up on 197 clients, and 12 month follow up on 163 clients. Follow up response is 77% for six month; 63% for 12 month.

Sample Characteristics

- Majority are African-American (81.4% at intake)
- Over half are male (60% at intake)
- Majority are disabled (56.7%) and indigent
- 46% have less than a high school education
- Health status is relatively low, only 14 percent report health as good or excellent
- Majority are stably housed

Comparison of Behavioral Data at Intake, 6 month, and 12 month follow up

- **Reduced use of alcohol and illegal drugs**
(80 % at intake, 52 % at 6m, and 42 % at 12m)
- **Decreased non-adherence**
(54 % at intake, 36 % at 6m, 30 % at 12m)
- **Improved health status**
(25% reported poor health at intake, 19% at 6m, and 16% at 12m)
- **Decreased mental health problems**

Mental Health Problems

Clients asked if they experienced any of the following (not due to SA) in the past 30 days:

	intake	6m	12m
Serious Depression	72 %	56 %	47 %
Serious Anxiety	62 %	52 %	43 %
Trouble Understanding, Concentrating or Remembering	44 %	35 %	25 %

Summary Measure of MH Problems

Total number of days respondents (R) experienced serious depression, serious anxiety, or had trouble understanding, concentrating or remembering (additive scale).

	N	Mean (s.d.)
Intake:	301	34.7 (2.1)
6 month:	195	29.2 (2.9)
12 month:	161	17.4 (1.9)

Mental Health Problems Are Endemic

- At intake, 88 % had experienced some type of mental health problem in the past 30 days
- At 6 month follow up, 75.6 % had experienced some type of mental health problem in the past 30 days
- Whites and women had significantly more mental health problems.

Mental Health Treatment

- Very few were prescribed medication for their emotional or mental health problems (32% at intake, 28 % at 6m)
- Very few received formal treatment (inpatient, outpatient, or emergency) for mental health problems (6.6% at 6m)

Social Support

- Only 38.1 % had main partner at intake; 77 % reported this person helped them to cope
- Most felt close to, received help, and could talk to either family and/or friends.
- Summary measure of family/friend SS: range 0-6, mean of 4.27 at intake, 4.77 at 6m and 5.08 at 12m
- Most respondents reported family and/or friends knew of their HIV status
- Most reported that family and/or friends have SA problems

Research Hypotheses

1. Greater social support will be related to diminished mental health problems at intake
2. Increases in social support will be related to decreases in mental health problems over time

Data Analysis

1. OLS regression analysis of sources of mental health problems at intake
2. Fixed effects model used to examine within person differences in mental health problems and social support over time

Social Support and Mental and Physical Health at Intake

Hypothesis 1: Bivariate analyses

- Social support is negatively related to days R experienced mental health problems at intake ($p=.005$); i.e. those with more social support report fewer days with mental health problems.
- Social support is positively related to better physical health ($p=.045$)

Mental Health Problems at Intake

Hypothesis 1: OLS Regression

- Examined effects of race, gender, living situation (i.e. stably housed), years education, currently employed, physical health status, and social support on days experienced mental health problem at intake (n=232)
- Greater social support was the only significant predictor of fewer days of MH problems ($p=.010$); physical health status next best predictor ($p=.178$)

Mental Health Over Time

Hypothesis 2: Bivariate analyses

- Increase in friends and family social support was associated with a decrease in days of mental health problems ($p=.014$)
- Increase in alcohol use was associated with a increase in days of mental health problems ($p=.000$)
- Increase in drug use was associated with an increase in days of mental health problems ($p=.000$)
- Housing, employment, general health, and interaction terms between gender and social support were not significant

Mental Health Over Time

Hypothesis 2: Fixed effects model

- $n=219$; intake, 6m, 12m included
- An increase of one in the friends/family SS measure was associated with a 2.29 decrease in days of MH problems ($p=.039$)
- A one day increase in alcohol use was associated with a 0.63 increase in days of MH problems ($p=.009$)
- A one day increase in drug use was associated with a 0.77 increase in days of MH problems ($p=.004$)

Critical Findings

- In this sample of HIV+ individuals with substance abuse problems, MH problems are common and few respondents are receiving MH treatment
- SS is predictive of days of MH problems at intake and increases in family/friend SS are related to fewer days of MH problems over time
- Greater SS is related to better physical health
- Increases in days of drug and alcohol use are related to increases in days of MH problems over time
- Substance use does not seem to help HIV+ substance abusers cope with mental distress

Implications

- HIV+ substance abusers should be screened for mental health problems
- Interventions designed to improve social support may help reduce mental health problems among HIV+ substance abusers
- Reducing days of drug and alcohol use through substance abuse treatment may also reduce mental health problems

Limitations

- Results are preliminary as data collection is ongoing
- Sample is small
- Sample is not representative of HIV treatment population as it is limited to clients who have substance abuse problems and the sample is overwhelming Black and poor
- Data are self-reported

In Conclusion

There is still much work to do! Thank you for your attention and any suggestions.