

Behavioral Health and HIV/HCV Risk Behavior Among Young African American IDUs

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Objective

To examine the relationship between behavioral health factors and HIV/HCV- related risk behaviors in a cohort of young incarcerated African American IDUs

Background

- Findings from large scale surveys indicate that between 7-10 million adults in the United States have a co-occurring substance use and mental health disorder (SAMHSA, 2002)
- Among African American male IDU in Baltimore, psychological distress predicted injection equipment sharing (Latkin et al., 2005)
- Among IDUs, depressive symptoms were associated with multiple sex partners and with increases in sex with other IDUs (Williams and Latkin 2005)

Background

- In a study of over 5,000 Black Americans, 4.1% reported a lifetime suicide attempt. (Joe et al., 2006)
- In the same study, participants who had ever been diagnosed with drug dependence were 6.34 times as likely as others to have attempted suicide. (Joe et al., 2006)

Methods

- NIDA-funded study conducted in Orleans Parish Prison from 2001-2005
- Eligibility criteria
 - African American
 - IDU during 6 months prior to incarceration
 - Age 18-30
 - Incarcerated <6months; release date < 6 months
 - HIV negative
- Standardized questionnaire using ACASI
 - Demographics
 - Substance use history
 - HIV/HCV Sexual and drug use risk behaviors
 - Mental health history
- HIV, HBV and HCV laboratory testing

Mental Health Measures

- In the six months prior to incarceration, how frequently did you feel depressed? (never, sometimes, always)
- In the six months prior to incarceration, how frequently did you feel nervous? (never, sometimes, always)
- Were you ever diagnosed with a mental health problem?
- Have you ever taken medication for a mental health problem?
- Have you ever received inpatient mental health treatment?
- Have you ever received outpatient mental health treatment?
- Are you currently receiving mental health treatment?
- In the six months prior to incarceration:
 - Did you ever have suicidal thoughts?
 - Did you make a plan to commit suicide?
 - Did you attempt suicide?

Demographics

(N=228)

Mean Age	24.85 years
Male	223 (97.8%)
Single, never married	174 (76.3%)
< High School	185 (81.1%)
Homeless*	48 (21.1%)
Mean mo. income*	\$1171.64
Mean # incarcerations	9.21

* 6 months prior to incarceration

Laboratory Data

(N=228)

HCV Positive 155 (69.9%)

HBV Positive 10 (4.4%)

HBV and HCV Positive 9 (4.0%)

Substance Use History (N=228)

Mean drinks/week*	20.6
Mean age 1 st injection	20.47 yrs
Mean times in drug tx	1.54
Mean drug incarcerations	3.49
Injected every day*	140 (61.4%)
Injected > once a day*	197 (86.4%)

* 6 months prior to incarceration

Sexual Risk Behavior

■ Mean lifetime sex partners	37.65
■ Mean female partners*	5.70
■ Mean male partners*	.23
■ Never/rarely used condoms*	116 (50.9%)
■ No condom last sex	164 (71.9%)
■ Gave \$/drugs for sex*	60 (26.3%)
■ Received \$/drugs for sex*	33 (14.5%)
■ Ever treated for STI	110 (48.2%)

* 6 months prior to incarceration

Drug Injection Risk Behavior

- Ever used syringe after someone 133 (58.3%)
- Shared Syringe* 104 (45.5%)
- Shared Cotton* 106 (46.5%)
- Shared Cooker* 119 (52.2%)
- Shared Rinse Water* 105 (46.1%)
- Backloaded* 72 (31.6%)
- Risk scale last 5 items (range 0-5) alpha .86

* 6 months prior to incarceration

Mental Health History

■ Sometimes/always depressed*	138 (61.0%)
■ Sometimes/always nervous*	117 (51.3%)
■ Ever dx with MH problem	45 (19.7%)
■ Ever taken meds for MH	30 (13.2%)
■ Ever received inpatient MH tx	30 (13.2%)
■ Ever received outpatient MH tx	18 (7.9%)
■ Currently receiving MH tx	8 (3.5%)
■ Suicidal thoughts*	69 (30.3%)
■ Plan to commit suicide*	32 (14.0%)
■ Attempted suicide*	31 (13.6%)

* 6 months prior to incarceration

Drug Use Risk Behaviors

	<u>Prior MH Hx</u> (n=45)	<u>No MH Hx</u> (n=183)	<u>X²</u>
Ever Share Syringes (%)			
Yes	23 (51.1)	110 (60.1)	
No	22 (48.9)	73 (39.9)	1.20
Share Syringes Prior 6mos (%)			
Yes	19 (42.2)	85 (46.4)	
No	26 (57.8)	98 (53.6)	1.55
Backload (%)			
Yes	16 (35.6)	58 (30.6)	
No	29 (64.4)	127 (69.4)	.41

Drug Use Risk Behaviors

	<u>Prior MH Hx</u> (n=45)	<u>No MH Hx</u> (n=183)	<u>χ^2</u>
Share Cotton (%)			
Yes	18 (40)	88 (48.1)	.95
No	27 (60)	95 (51.9)	
Share Rinse Water (%)			
Yes	17 (37.8)	88 (48.1)	1.55
No	28 (62.2)	95 (51.9)	
Share Cooker (%)			
Yes	19 (42.2)	100 (54.6)	2.23
No	26 (57.8)	83 (45.4)	

Sexual Risk Behaviors

	<u>Prior MH Hx</u> (n=45)	<u>No MH Hx</u> (n=183)	<u>X²</u>
Condom Use Freq(%)			
Always	6 (15.8)	14 (9)	
Sometimes	19 (50)	68 (33.5)	
Never	13 (34.2)	74 (47.4)	5.36*
Condom (last time) (%)			
Yes	23 (51.1)	44 (24.2)	
No	22 (48.9)	138 (75.8)	4.98*

*P<.05

Drug Use Risk Behaviors With Suicide Ideation

	<u>Suicide Ideation</u> (n=69)	<u>No Ideation</u> (n=159)	<u>X²</u>
Ever Share Syringes (%)			
Yes	43 (62.3)	90 (56.6)	
No	26 (37.7)	69 (43.4)	.65
Share Prior 6mos (%)			
Yes	39 (56.5)	65 (40.9)	
No	30 (43.5)	94 (59.1)	4.75 *
Backload (%)			
Yes	26 (37.7)	46 (28.9)	
No	43 (62.3)	113 (71.1)	1.71

Drug Use Risk Behaviors With Suicide Ideation

	<u>Suicide Ideation</u> (n=69)	<u>No Ideation</u> (n=159)	<u>x²</u>
Share Cotton (%)			
Yes	37 (53.6)	69 (43.4)	
No	32 (46.4)	90 (56.6)	2.02
Share Rinse Water (%)			
Yes	36 (52.2)	69 (43.4)	
No	33 (47.8)	90 (56.6)	1.49
Share Cooker (%)			
Yes	40 (58)	79 (49.7)	
No	29 (42)	80 (50.3)	1.32

Sexual Risk Behaviors With Suicide Ideation

	<u>Suicide Ideation</u> (n=69)	<u>No Ideation</u> (n=157)	<u>χ^2</u>
Condom Use Freq (%)			
Always	4 (6.9)	16 (11.8)	
Sometimes	32 (55.2)	55 (40.4)	
Never	22 (37.9)	65 (47.8)	5.85
Condom (last time) (%)			
Yes	22 (31.9)	40 (25.5)	
No	47 (68.1)	117 (74.5)	.988

Correlation of Depression and Nervousness with Sexual and Injecting Risk Behavior

- Frequency of feeling depressed was positively associated with increased injection risk $r = .15$; $p < .05$ and sexual risk $r = .17$; $p < .05$
- Frequency of feeling nervous was positively associated with increased injection risk— $r = .16$; $p < .05$ and sexual risk $r = .17$; $p < .05$

HCV Baseline Prevalence With Mental Health History

	<u>HCV +</u> (n=155)	<u>HCV-</u> (n=70)	<u>x²</u>
Mental Health Hx			
Yes	29 (18.7)	16 (22.9)	
No	126 (81.3)	54 (77.1)	.518
Suicidal Ideation			
Yes	45 (29)	24 (34.3)	
No	110 (71)	46 (65.7)	.626

Summary

- More than 30% of all IDUs surveyed indicated suicidal ideation and almost 20% had a significant mental health history
- Mental health history was significantly associated with engagement in sexual risk behavior
- Subjective feelings of depression and nervousness were significantly associated with sexual and injecting risk behavior
- Mental health history was not significantly associated with engagement in high risk injection practices however suicide ideation was significantly associated with syringe sharing prior to incarceration

Conclusions

- Co-occurring mental disorders need to be assessed when examining IDU risk behavior
- Any prevention or intervention programs targeting IDUs must also address mental health issues be included in HIV/HCV prevention and treatment efforts