

Correlates of mental health disorders in people who inject drugs (PWID)

Kelsey A. Simpson, Jesse Goldshear, Lynn Wenger, Alex H. Kral, Ricky N. Bluthenthal

Department of Preventive Medicine, University of Southern California
Behavioral Health Research Division, RTI International

Research supported by NIDA grant#038965: Program Official:
Rich Jenkins, Ph.D.

Background

- The opioid epidemic has contributed to increased numbers of people who inject drugs (PWID) in the U.S.
- Consequences of drug injection include HIV, viral hepatitis, soft tissue infections, sexually transmitted diseases, and drug overdose among others.

Background

- Comorbid mental illness is common among PWID.
- PWID suffering from psychiatric comorbidities are more likely to engage in high-risk injection practices such as sharing injection-related equipment, increasing the number of people one injects with, inconsistent condom use, and poorer adherence to HIV-related treatment regimens.

Background

- Previous studies looking at mental health disorders and risk behaviors among PWID have drawn samples primarily from drug treatment (e.g. methadone maintenance) and criminal justice settings.
- Limited scientific knowledge regarding whether or not risk behavior profiles vary in community-based samples of PWID.

Background

PWID who do not have access to treatment are likely to face elevated health disparities and disease risks.

❖ Study objectives:

- ❖ Determine prevalence of persons diagnosed with recent major mental health disorders in an out-of-treatment sample of PWID.
- ❖ Identify significant demographic characteristics, drug use patterns, and sexual risk behaviors associated with psychiatric diagnoses.

Methods

- **Design:** Secondary data analysis drawn from a larger RCT on the 'Change the Cycle' intervention.
- **Parent study:** Los Angeles and San Francisco PWID were recruited using targeted sampling methods and interviewed from 2016-2018.
- **Current study:** Restricted to PWID diagnosed with recent major mental health disorders (N=105).



Participant eligibility:

- ages 18 and older;
- reported to have injected drugs within the past 30 days;
- ability to provide informed consent

Methods (cont.)

- Data was collected using computer-based quantitative surveys administered face-to-face.
- Interview domains included: socio-demographics, drug use history, sexual risk behaviors, and psychiatric history.
- **Statistical approach:** independent logistic regression models were used to determine factors significantly associated with individual psychiatric categories.



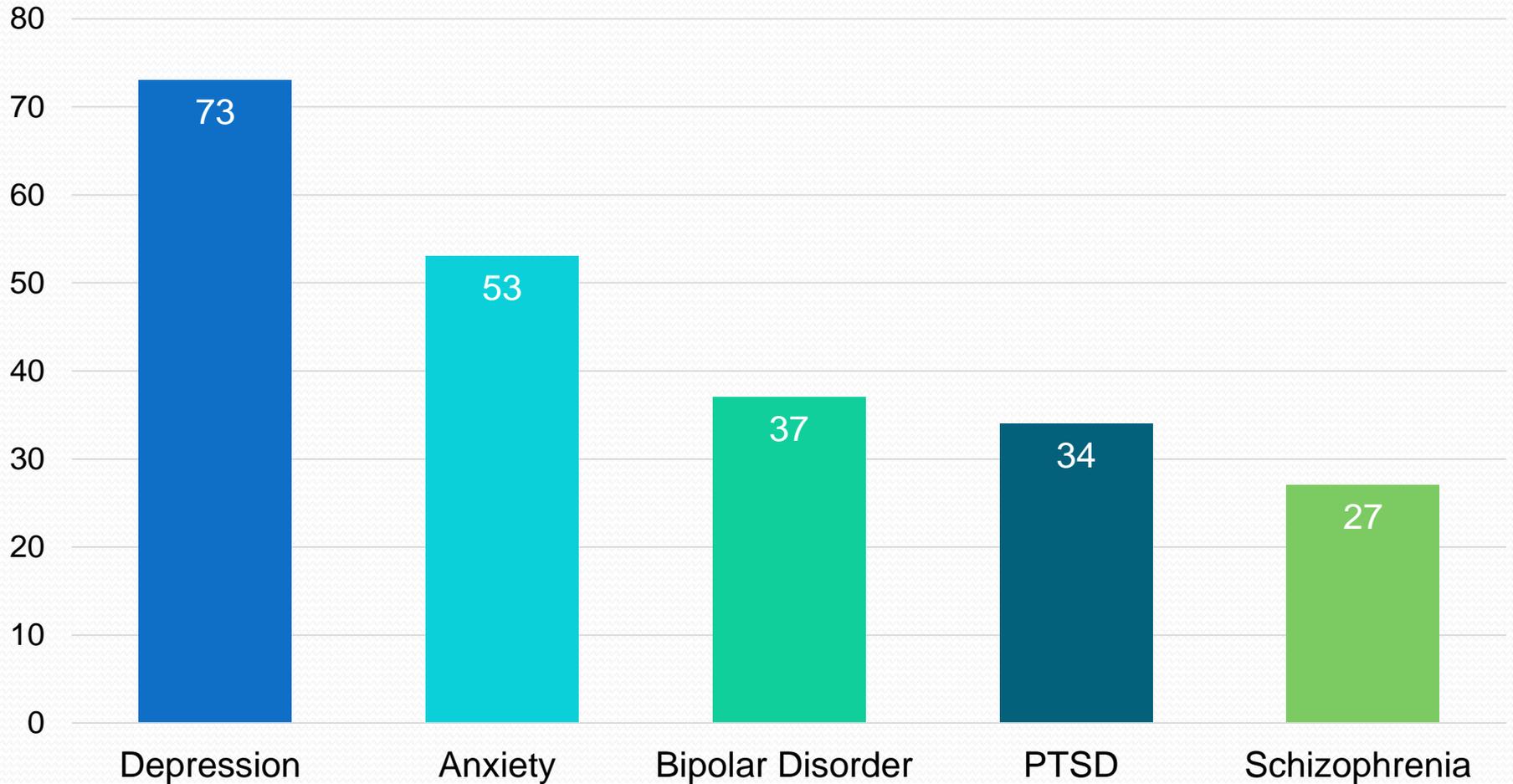
Results

Characteristics of PWID with recent major mental health disorder (June 2017-Sept 2018; N=105)

Characteristic	N (%)
Age (mean)	48.7 (10.5)
Male	65 (62%)
Graduated high school	69 (66%)
Recent homelessness	67 (64%)
HIV positive	9 (8.6%)
HCV positive	68 (65%)
Gay, lesbian, or bisexual	24 (23%)
Race	
White	26 (25%)
Hispanic/Latino	29 (28%)
Black	30 (29%)

Results

Mental health disorders past 12 months (N=105)



Results from logistic regression models examining factors significantly associated with mental health categories (N=105)

Variable	Depression AOR, (95% CI)+	Anxiety AOR, (95% CI)+	Bipolar AOR, (95% CI)+	PTSD AOR, (95% CI)+	Schizophrenia AOR, (95% CI)+
Heroin use^a	2.7 (1.1, 6.3)	2.3 (1.0, 4.9)	--	--	--
Casual sex partner^b	--	--	2.5 (1.1, 5.9)	--	--
>50 years old	--	--	--	2.3 (1.1, 4.5)	--
Paying sex partner^b	--	--	--	6.8 (1.4, 33.6)	--
Crack use^a	--	--	--	6.9 (2.6, 18.2)	--
Tranquilizer use^a	--	--	--	6.1 (2.3, 16.5)	--
Male	--	--	--	--	3.9 (1.0, 14.8)
Opiate use^a	--	--	--	--	3.8 (1.1, 13.3)

AOR; adjusted odds ratio, 95% CI; 95% Confidence Interval;

a In the past 30 days

b In the past 6 months

Discussion

- PWID with different comorbid psychiatric disorders have unique and significant drug use patterns, demographic characteristics, and risk reduction needs.
- Self-reported mental health history may be an effective tool for identifying particularly high risk people within injection drug using populations.

Discussion

Offering more integrated services where injection drug-users physically live, with mental health providers who treat both substance use and mental health background may aid in reducing HIV risk behaviors.

Future Directions

- Longitudinal studies using frequent assessments of psychiatric symptoms, substance use, and health risk behaviors.
- Qualitative studies addressing access and barriers to mental health services among community-based samples of PWID.

Limitations

- Self-report data only.
- Cross-sectional study design prevents conclusions about causality.
- Relatively small sample size.
- Results not generalizable to PWID outside of LA and SF.

References

- Conner, K. R., Piquart, M., & Duberstein, P. R. (2008). Meta-analysis of depression and substance use and impairment among intravenous drug users (IDUs). *Addiction*, 103(4), 524-534.
- Mackesy-Amiti, M. E., Donenberg, G. R., & Ouellet, L. J. (2012). Prevalence of psychiatric disorders among young injection drug users. *Drug and Alcohol Dependence*, 124(1-2), 70-78.
- Mackesy-Amiti, M. E., Donenberg, G. R., & Ouellet, L. J. (2014). Psychiatric correlates of injection risk behavior among young people who inject drugs. *Psychology of Addictive Behaviors*, 28(4), 1089.
- Reddon, H., Pettes, T., Wood, E., Nosova, E., Milloy, M. J., Kerr, T., & Hayashi, K. (2018). Incidence and predictors of mental health disorder diagnoses among people who inject drugs in a Canadian setting. *Drug and alcohol review*, 37, S285-S293.
- Strike, C., Rotondi, M., Kolla, G., Roy, E., Rotondi, N. K., Rudzinski, K., ... & Millson, M. (2014). Interrupting the social processes linked with initiation of injection drug use: results from a pilot study. *Drug & Alcohol Dependence*, 137, 48-54.
- Williams, S. C., Davey-Rothwell, M. A., Tobin, K. E., & Latkin, C. (2017). People Who Inject Drugs and Have Mood Disorders-A Brief Assessment of Health Risk Behaviors. *Substance use & misuse*, 52(9), 1181-1190.