PSYCHOSOCIAL PREDICTORS OF DRUG OVERDOSE AMONG PEOPLE WHO INJECT DRUGS

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Background: People who inject drugs (PWID) experience high rates of overdose death, numbers of which increased during the COVID-19 pandemic. Given that a history of previous overdose increases the risk of a subsequent fatal overdose, an understanding of factors associated with drug overdose may contribute to development of interventions to reduce overdose death.

Methods: Data from a survey administered to index PWID enrolled in a social network-based intervention, in which they were invited to recruit drug use network members for HCV testing and linkage to care, were analyzed. Linear regression with generalized estimating equations were used to determine factors associated with number of lifetime drug overdoses.

Results: Among 111 PWID enrolled between January 2018 and January 2019, 28 (25%) were female, 65.7% were black, 98% reported polysubstance use, and the mean age ± SD of the sample was 49.0±8.3 years. Seventy-five individuals (67.6%) had a lifetime overdose history and reported 3.4 ± 8.3 lifetime number of drug overdoses. Compared to individuals without overdose history, those with overdoses were younger, 22.3±7.7 years versus 25.9±10.5 years (P=0.03). In unadjusted regression analyses of substance use behaviors, self-reported use of barbiturates and inhalants were significantly associated with number of drug overdose events, β=3.88 (SE=1.64, P=0.018) and β=4.26 (SE=1.73, P=0.014), respectively. The composite Center for Epidemiologic Studies Depression Scale 10 (CES-D 10) score was not associated with number of overdoses. However, reports of feeling fearful or feeling lonely most or all of the time on the CES-D 10 were independently associated with number of drug overdoses, β=9.74 (SE=2.93, P=0.001) and β=5.62 (SE=2.64, P =0.033), respectively, adjusting for sociodemographic variables.

Conclusions: In this study of inner-city dwelling PWIDs with high rates of drug overdose, loneliness and fearfulness were significantly related to number of reported overdose events. These factors could be targeted in future interventions.