Substance Use among Recently Incarcerated Black Men Who Have Sex with Men and Black Transgender Women in Six US Cities: The HPTN 061 Study

Background and Aims: While substance use can lead to incarceration, the disruptive effects of incarceration may lead to, or increase psychosocial vulnerability and substance use. Using a causal framework, we measured longitudinal associations between incarceration and post-release substance use among Black men who have sex with men/Black transgender persons (BMSM/BTP), populations facing disproportionate risk of incarceration and substance use.

Methods: Using data from the HIV Prevention Trials Network (HPTN 061) study (N=1,553) we estimated associations between past 6-month incarceration and post-release binge drinking, marijuana use, and stimulant use. Multivariable models used inverse probability weighting (IPW) to control for baseline (pre-incarceration) substance use and additional risk factors.

Results: There were 1,133 participants present at the twelve-month follow-up visit. Participants were predominately non-Hispanic Blacks and unemployed. At baseline, 60.1% reported a lifetime history of incarceration, 22.9% were HIV positive and 13.7% had a history of an STI infection. A total of 43% reported a history of depression In adjusted analyses with IPW, recent incarceration was associated with crack-cocaine (adjusted odds ratio (AOR): 1.53, 95% confidence interval (CI): 1.03, 2.23) and methamphetamine use (AOR: 1.52, 95% CI: 0.94-2.45). Controlling for pre-incarceration binge drinking, incarceration was associated with post-release binge drinking (AOR: 1.47, 95% CI: 1.05, 2.04); in fully adjusted models the AOR was 1.14 (95% CI: 0.81, 1.62). Incarceration was not associated with marijuana use.

Conclusion: Findings underscore the need to provide substance use treatment in custody and post-release, and to consider alternatives to incarceration for substance using populations