



CENTER FOR OPIOID EPIDEMIOLOGY AND POLICY

Epidemiology and Policy Updates

Opioid Epidemiology Updates

An Adaptation of the Social Ecological Model for the Effects of COVID-19 on People with Opioid Use Disorder (OUD)

In this article, authors propose an adaptation of the social ecological model that will address the impact of the COVID-19 pandemic on individuals with opioid use disorder (OUD). This new model would hopefully serve as a theoretical framework for future work on this topic. Authors describe how the different layers of the social ecological model: the individual, network, community, structural, and pandemic layers interact to influence the health of people with OUD during the COVID-19 pandemic. In terms of individual factors, people with OUD may face elevated risk of exposure to COVID due to higher risk of being in crowded areas and shared spaces, in comparison to the general population. Individuals with OUD may also be at higher physiologic risk for infection due to opioid and other substance use-related immunosuppression and comorbidities. Network factors that influence people with OUD include disrupted social networks and social isolation as a result of stay at home orders. Community factors that could increase risk of COVID include barriers to adequate service provision for individuals with OUD such as lack of adequate PPE for clinic staff, inadequate COVID-testing services, limited internet service, lack of a phone and a private place for phone usage. There is also the *economic collapse* associated with the COVID-19 pandemic that adversely affect people with OUD. Structural factors discussed were *drug policy changes* such as loosened restrictions for medications for opioid use disorder, de-carceration, social distancing, and policies geared toward general economic recovery and housing stability. Authors argue that this model could support COVID-19 prevention and treatment research studies among individuals with OUD even after vaccine availability.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Cowan, E., Khan, M.R., Shastry, S. et al. "Conceptualizing the effects of the COVID-19 pandemic on people with opioid use disorder: an application of the social ecological model." *Addiction Science & Clinical Practice*. 7 Jan. 2021. Available online at <https://ascjournal.biomedcentral.com/articles/10.1186/s13722-020-00210-w>

The Independent and Joint Effects of Experiencing Childhood Abuse and Homelessness on Substance Use During Adulthood

Although the association between experiencing childhood abuse or homelessness and future substance use are well documented, little is known about their synergistic effects. The aim of this recent study is to evaluate both the independent and joint effects of experiencing childhood abuse

and homelessness on substance use during emerging adulthood and adulthood. A sample of 12,288 participants from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative study of US adolescents during the 1994–1995 school year were included. Participants have been followed-up in three in-home interviews; Wave I (adolescence, grades 7–12), Wave III (emerging adulthood, ages 18–26 years), and Wave IV (adulthood, ages 24–32 years). Outcome measures included respondents' social, economic, psychological and physical well-being at each Wave. Results indicates that in adjusted analyses, exposure to childhood abuse alone, homelessness alone, and both childhood abuse and homelessness were significant correlates of most substance use indicators in emerging adulthood. Participants with combined exposure to childhood abuse and homelessness had disproportionate risk of substance use, especially the use of cocaine and methamphetamine. The independent and combined effects of child abuse and homelessness usually endured into adulthood though associations tended to weaken. Authors argue that addressing abuse and homelessness should be a component of preventing drug risk through screening, treatment, and prevention efforts.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Ararso Y., Beharie N.N., Scheidell J.D., Schatz D., Quinn K., Doran K.M. and Khan M.R. "The Joint Effect of Childhood Abuse and Homelessness on Substance Use in Adulthood." *Substance Use & Misuse*. 7 Mar. 2021. Available online at <https://www.tandfonline.com/doi/abs/10.1080/10826084.2021.1887249?journalCode=isum20>

Using Reddit to Examine the Impact of COVID-19 on the Social Networks and Social Processes of People Who Use Opioids.

This research evaluates the impact of the COVID-19 pandemic on the social networks and social processes of people who use opioids. This was done through the use of data from Reddit, a social media platform used by many people who use drugs (PWUD) to engage in specific drug related discussions. Data was collected from the two most popular opioid subreddits, "r/Opiates" and "r/OpiatesRecovery" and included the main post and subsequent comments. Analysts reviewed 2,000 posts from these subreddits for relevance to opioid use and COVID-19. A final sample of 300 posts and comments were then coded for content related to the effect of COVID-19 on social networks. Prevalence of themes in the final sample of Reddit posts were as follow: changes in social networks (8.3%), changes in daily life (24%), offering advice and/or support (57.7%), and asking for advice and/or support (33%). A thematic analysis of coded content was then performed in which three themes were identified: changes in social networks, changes in daily lives, and social norms and mutual aid. Authors shared and discussed illustrative quotes of the key themes to further demonstrate the influence of the pandemic each other and on PWUD. Results imply that the COVID-19 pandemic created changes in the social networks and daily lives among persons who use opioids. Authors suggest that future agencies and researchers working with PWUD should consider utilizing peer-based social media delivered interventions.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Bunting, A. M., Frank, D., Arshonsky, J., Bragg, M. A., Friedman, S. R., & Krawczyk, N. "Socially-supportive norms and mutual aid of people who use opioids: An analysis of Reddit during the initial COVID-19 pandemic." *Drug and Alcohol Dependence*. 18 Mar. 2021. Available online at <https://www.sciencedirect.com/science/article/abs/pii/S0376871621001678>

HCV Experiences Among People Who Inject Drugs (PWID) at an Urban Syringe Service Program (SSP)

A recent study aimed to identify and characterize the different experiences and perceptions of people who inject drugs (PWID) in regard to the acceptability and effectiveness of hepatitis C (HCV) testing and treatment at a local syringe service program (SSP) in New York City. Authors

conducted semi-structured qualitative interviews with PWID from August 2019 through February 2020. Participants were eligible if they were at least 18 years or older and have injected drugs within the last year. A total of 36 participants were interviewed and audio recordings of interviews were professionally transcribed. Emerged themes were identified and then recorded in a codebook that was modified when new themes or subthemes became evident. Interviews with PWID revealed three themes related to the impact of SSPs on HCV care: The first related to non-stigmatizing SSP environments: participants discussed the stigma they experienced in healthcare systems and how those experiences led to a reluctance to seek out and continue care for HCV. The second theme related to the role of SSPs in improving HCV knowledge: 25 out of the 36 participants had prior awareness about HCV risk, transmission, and treatment, due to the education received at the study SSP and other local harm reduction sites. The final theme related to the acceptability of SSPs as sites for HCV care among PWID: 21 participants had received HCV testing at the study SSP. The availability of HCV care at the SSP increased participant's willingness to remain engaged in prevention and treatment. Findings provide insight into perceptions PWIDs perceptions of SSPs and suggests that SSPs could be used more broadly to expand HCV services to PWID.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Muncan, B., Jordan, A. E., Perlman, D. C., Frank, D., Ompad, D. C., & Walters, S. M. "Acceptability and Effectiveness of Hepatitis C Care at Syringe Service Programs for People Who Inject Drugs in New York City." *Substance Use & Misuse*. 7 Mar. 2021. Available online at <https://www.tandfonline.com/doi/abs/10.1080/10826084.2021.1892142?journalCode=isum20>

Opioid Policy Updates

US State Drug Policies and their Associations with Variation in Opioid Misuse, Opioid Use Disorder, and Drug Overdose Mortality

This cross-sectional study aims to evaluate whether six US state-level drug policies are associated with a reduction in indicators of prescription opioid misuse, the prevalence of opioid use disorder and overdose, the prescription of medication-assisted treatment (MAT), and drug overdose deaths. The state drug policies included are prescription drug monitoring program (PDMP) access laws, mandatory PDMPs, prescription limit laws, pain clinic laws, Good Samaritan laws, and naloxone access laws. Authors utilized medical and pharmacy claims data from the Optum Clinformatics Data Mart Database (2007-2018) and mortality data from the National Center for Health Statistics (NCHS). Authors used a random-effects meta-analysis model to summarize associations over time for each policy and outcome pair. Outcome measures included quarterly state-level mortality from drug overdoses, known indicators for prescription opioid misuse and doctor shopping, MAT use, and prevalence of drug overdose and opioid use disorder. Results indicated that mandatory PDMPs were associated with decreases in the proportion of patients taking opioids. The proportion of patients receiving MAT increased after the enactment of mandatory PDMPs, pain clinic laws, and prescription limit laws. Mandatory PDMPs were associated with a decrease in the number of overdose deaths due to natural opioids and methadone. PDMP access policies showed similar results, however, these policies were also associated with increases in overdose deaths due to synthetic opioids and cocaine. These findings highlight the complex U.S. opioid policy environment and its multi-directional influence on outcomes of the opioid epidemic.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Lee, B., Zhao, W., Yang, K. C., Ahn, Y. Y., & Perry, B. L. "Systematic Evaluation of State Policy Interventions Targeting the US Opioid Epidemic, 2007-2018." *JAMA network open*. 12 Feb. 2021. Available online a <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2776301?result>