



CENTER FOR OPIOID EPIDEMIOLOGY AND POLICY

Epidemiology and Policy Updates

Opioid Epidemiology Updates

Factors that Influence Overdose Prevention Interventions for Justice-Involved Populations

This scoping review attempts to better understand knowledge gaps regarding information on overdose prevention for justice involved populations. The review included 43 studies that address factors that affects the development, implementation, and outcomes of overdose prevention interventions in both correctional and community settings from 2010 to February 2020. The articles were coded into 5 core domains for thematic analysis: acceptability, accessibility, effectiveness, feasibility, and participant overdose risk. Common themes discovered were that the acceptability of naloxone is associated with injection drug use, overdose history, and perceived risk within the situational context, and the accessibility of naloxone is a function of the interface between corrections and community. Also, the evaluations of overdose prevention interventions are few, but usually show increases in knowledge or reductions in opioid overdose. Moreover, coordinated efforts are needed to implement prevention interventions, address logistical challenges, and develop linkages between corrections and community providers. Also, overdose is highest immediately following release from prison or jail, often preceded by service-system interactions, and associated with drug-use severity, injection use, and mental health disorders, as well as risks in the post-release environment.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Grella, Christine E. et al. "A Scoping review of factors that influence opioid overdose prevention for justice-involved populations." *Substance Abuse Treatment, Prevention, and Policy*. 22 Feb. 2021. Available online at <https://substanceabusepolicy.biomedcentral.com/articles/10.1186/s13011-021-00346-1>

Associations between Initial Prescription Characteristics of People Treated with Opioids for Non-Cancer Pain and treated OUD

A retrospective cohort study aimed to examine the association between initial opioid prescription characteristics and risk of treated opioid use disorder (OUD) among all individuals in Ontario, Canada, who were dispensed an opioid for non-cancer pain. Authors examined treated OUD as the outcome of interest due to its specificity in identifying diagnosed OUD requiring treatment. Exposure and outcome data were obtained from the Narcotic Monitoring System (NMS) and individuals included in the study were previously opioid naïve individuals aged 15 years and

older who initiated prescription opioid therapy for non-cancer pain between July 1, 2013 and March 31, 2016. The study defined opioid naïve individuals as individuals who did not receive an opioid prescription, did not have previous treatment for OUD, and did not have an opioid-related hospitalization within one-year. The cohort included 1,607,659 opioid-naïve individuals and the incidence of treated OUD within the study period was 86 cases per 100,000 person-years. Results also indicated that compared to an average daily dose of <20 morphine milligrams equivalent (MME), higher average daily doses at initiation were associated with greater hazard of treated OUD. Also, long-acting formulations and days' supply ≥ 11 days were also associated with greater hazard of treated OUD.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Papadomanolakis-Pakis, Nicholas et al. "Prescription opioid characteristics at initiation for non-cancer pain and risk of treated opioid use disorder: A population-based study." *Drug and Alcohol Dependence*. 13 Feb. 2021. Available online at <https://www.sciencedirect.com/science/article/abs/pii/S037687162100096X>

Simulation Model to Investigate Community-Level Interventions and Overdose Rates

This paper aims to identify the specific combinations of 3 interventions: initiating more people to medications for opioid use disorder (MOUD), increasing 6-month retention with MOUD, and increasing naloxone distribution, and their association with at least a 40% reduction in opioid overdose in simulated populations. The Researching Effective Strategies to Prevent Opioid Death (RESPOND) model, a dynamic population state-transition model of OUD and OUD treatment, was used to simulate the population with OUD living in Massachusetts from 2015 to 2022. Outcomes measured were reduction in overdose mortality, medication treatment capacity needs, and naloxone needs. Authors discovered that no single intervention was associated with a 40% reduction in overdose mortality in the simulated communities. Being able to attain a 40% reduction required that 10% to 15% of the estimated OUD population not already receiving MOUD would initiate MOUD every month, with 45% to 60% retention for at least 6 months, and increased naloxone distribution. In all settings and scenarios, obtaining a 40% reduction in overdose mortality required that each month, at least 10% of the population with OUD who were not currently receiving treatment would have to initiate an MOUD.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Linas, Benjamin P. et al. "Projected Estimates of Opioid Mortality After Community-Level Intervention." *JAMA Network* 15 Feb. 2021. Available online at <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2776442>

Opioid Policy Updates

Impact of Marijuana Laws on Opioid Prescribing

This paper evaluates how state medical marijuana laws (MMLs) and recreational marijuana laws (RMLs) influence opioid prescribing in the working age population with employer-sponsored health insurance while also exploring the heterogeneous effects of the marijuana laws in different age groups. Authors utilized the Truven Health MarketScan Commercial Claims and Encounters Database between 2009 and 2015 to capture medical claims of active employees and their dependents. The key independent variables are the implementation of an MML and the implementation of an RML in a given state during a given month and the main outcome

evaluated is monthly morphine milligram equivalents (MME) per enrollee. Results indicated that the implementation of medical marijuana laws (MMLs) and recreational marijuana laws (RMLs) reduced morphine milligram equivalents per enrollee by 7% and 13%, respectively. Reduction associated with MMLs was predominately in people aged 55–64, while the reduction associated with RMLs was mainly with people aged 35–44 and aged 45–54. These findings suggest that both MMLs and RMLs have the potential to reduce opioid prescribing in the privately insured population, especially for the middle-aged population.

Adapted by Emmanuella Kobara for the NYU Center for Opioid Epidemiology and Policy, from Wen Jiebing et al. "The impact of medical and recreational marijuana laws on opioid prescribing in employer-sponsored health insurance." *Health Economics*. 23 Feb. 2021. Available online at <https://onlinelibrary.wiley.com/doi/abs/10.1002/hec.4237>