Coronavirus Disease 2019 and Opioid Use—A Pandemic Within an Epidemic

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In 2018, drug overdose was a top cause of overall mortality in the United States, killing more than 300 Americans, with 46,802 of these deaths involving opioids. In the midst of this opioid epidemic, the health care system is restructuring in major ways to prevent and treat coronavirus disease 2019 (COVID-19), which has already caused more than 80,000 deaths in the United States. Early popular press reports suggest the pandemic may be associated with increased opioid overdose rates in certain communities. Although the opioid-associated effects of the pandemic have not yet been formally measured, this necessary restructuring may directly increase the risk of poor outcomes for patients who have opioid use disorder (OUD) with and without COVID-19 infection. Proactive policy and public health efforts are necessary to ensure equitable treatment of those who become infected and mitigate opioid-associated risk for those who do not.

Direct Risks for Patients With OUD and COVID-19 Infection

Patients who use opioids are uniquely vulnerable to the virus from a physiological standpoint. Early data from the COVID-19 outbreak suggest comorbidity with respiratory or pulmonary vulnerabilities may put individuals using opioids at elevated risk for serious complications. Coronavirus disease 2019 is often associated with serious lung complications, such as acute respiratory distress syndrome. Because opioids directly affect the brainstem to slow breathing, individuals using opioids may be at increased risk for worsened hypoxemia with the infection.

When accessing medical care for these complications, triage bias associated with substance use disorder also poses a substantive threat to this population. As scarcity intensifies around resources such as ventilators, so will high-pressure decision-making about which patients would benefit most from COVID-19 treatment. This could leave a door open for discrimination against individuals with OUD if latent clinician stigma is activated in this setting. These decisions could produce lethal outcomes for a population already at elevated risk.

If treated for COVID-19, this patient population, which has higher rates of homelessness, may not have a safe place to self-isolate after hospitalization. Community partners that routinely receive these hospital discharges are also experiencing disruptions because of the pandemic. Some residential rehabilitation and recovery programs have completely shut their doors to new patients to prevent spread among inpatient populations. Where will these vulnerable patients recover after hospitalization without bringing risk of infection to homeless shelters or recovery houses?

Indirect Risks for Opioid-Associated Harm

Even without personally contracting COVID-19, indirect effects of the crisis response may put individuals at increased risk for negative outcomes, such as opioid-associated injury. As resources are reallocated to fight the pandemic, efforts to combat opioid-associated harms may suffer. In recent years, the field of public health has succeeded in expanding community access to naloxone. This overdose reversal medication has been put in the hands of airplane personnel, pharmacists, friends and families, and perhaps most importantly, first responders. However, as this pandemic isolates

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community members and first responders are overwhelmingly responding to urgent COVID-19 complications, the opportunity for life-saving intervention may be dramatically decreased. The COVID-19 pandemic may also affect the future long-term prevalence of mental health and substance use disorders in the general public. Most Americans who contract COVID-19 will recover. However, for many, recovery will follow lengthy intensive care unit stays and inpatient hospitalizations. Such experiences are potentially traumatic and may increase mental health comorbidities that carry risk for problematic substance use behaviors. As employment collapses under the weight of the COVID-19 crisis, millions more may be at increased risk for developing a substance use disorder.4

A Model for Proactive Public Health Response

Still, the early response to the pandemic demonstrates the possibility for more accessible and flexible treatment practices. Community support programs, such as Alcoholics Anonymous, have moved meetings online to adapt. On March 31, 2020, the Drug Enforcement Administration issued COVID-19 prescribing guidance, which temporarily expanded access to opioid-associated services through telehealth, including initial prescribing by a new clinician. Other adherence monitoring practices in opioid-associated treatment, such as routine urine screenings for drugs, have been suspended in some settings because of infection prevention concerns.5 These new policy guidelines could be an exemplary step forward in expanding treatment access for populations that are harder to reach, such as rural patients. Under similarly expanded guidelines for opioid treatment programs, many patients previously making daily visits to a methadone clinic are now allowed to take up to 28 days of medication home. This flexibility may support patient autonomy, self-management, and enhanced treatment engagement.6 It may also create more accessible care and reduce the burden on acute hospital services during this crisis.

These harm reduction approaches to health policy may be particularly helpful for patients, not just to mitigate COVID-19 infection risk, but also to provide more patient-centered care. However, these changes are yet to be evaluated. With the rise of unemployment and other stressors, it will be imperative to clarify how a potential rise in opioid-associated harm may be attributable to rapid economic and community-level changes, as opposed to policy changes around treatment administration. In addition, it will be particularly important to clearly define the populations being evaluated. Individuals who use opioids are a heterogenous group, ranging from those who use prescribed opioids for acute and chronic pain to those with an OUD. As previously seen in the response to the opioid epidemic, policies aimed at benefiting or protecting one population may lead to unintended consequences in another.7 Researchers and policymakers must be thoughtful about these distinctions when designing a research and policy agenda.

In this pandemic’s aftermath, the public health field will face a new set of challenges in the unrelenting opioid epidemic. The health care system and community have already worked together to enact positive changes to reduce the risk of exposure to COVID-19 for vulnerable populations. These proactive and patient-centered approaches may be key demonstrations of how health care professionals can efficiently expand treatment access for hard-to-reach populations. However, it remains unclear if these changes will outweigh potential harms to the general population and those with OUD who may be directly affected by this reallocation of resources.


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