BRIEF COMMUNICATION

Tales from the frontlines: An alarming rise in hospitalizations related to opioid use disorder in the era of COVID-19

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ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic has had harmful effects on the opioid epidemic. While a negative effect was predicted, we report on this reality in the hospital setting. We have seen a sharp rise in hospitalized patients with opioid use disorder (OUD). Our data should encourage ongoing efforts to reduce barriers in accessing medications for treatment, harm reduction interventions and additional education for trainees, primary care providers, and hospitalists alike. In the current climate, these interventions are critical to save the lives of patients with OUD.

The opioid epidemic in the United States has entered a tumultuous period thanks to the coronavirus disease 2019 (COVID-19) pandemic. Disruptions in outpatient care, increased isolation due to social distancing, and rising cases of nonfatal overdoses in patients with opioid use disorder (OUD) have been described in the outpatient and emergency department settings,[1,2] and recognition of these "converging crises" is growing.[3] In an effort to address the challenges facing patients with OUD in the current climate, federal agencies have relaxed some of the restrictions surrounding prescribing and dispensing medications, allowing for telemedicine visits and for more flexibility with take-home methadone.[4] Despite these important interventions, however, we have seen hospitalizations for patients with OUD increase substantially. The worrisome reality that has been predicted is already here.

In July 2019, we launched a hospitalist-run service to improve care for inpatients with OUD. Our team offers initiation of medications for OUD and links patients with community clinics for continuation of treatment after discharge. Since the spring of 2020, we have also been at the frontlines of caring for those with COVID-19. At the beginning of the COVID-19 pandemic, our hospital saw a noticeable drop-off in inpatient volumes across the board. Indeed, our hospital census decreased by 30 percent and nadired in mid-April 2020. Hospital leaders and medical experts provided public service announcements urging patients not to delay medical assessments for emergencies, concerned that serious illnesses would go untreated.

The lull in volumes was transient. In a matter of a few weeks, the hospital census was back to normal, but our OUD consult service was much busier than in previous months. As the COVID-19 crisis raged on, we saw a sharp rise in admissions related to OUD. Moreover, patients with OUD seemed to be staying in the hospital longer. Our partnerships with community skilled nursing facilities were on pause as the nursing facilities dealt with COVID-19 response plans and outbreaks of their own. Homelessness and financial strain continued to make discharges home difficult. With fewer options for discharge, more patients were completing prolonged courses of intravenous antibiotics in the hospital. Delayed discharges held up bed space for other patients, as we anticipated ongoing increases in volumes related to COVID-19. Furthermore, the length of time between hospital discharge and outpatient follow-up for medication-assisted treatment (MAT) was longer, offering additional opportunities for relapse once discharge was achieved. These distressing trends have continued.

What felt, anecdotally, like high volumes of inpatients with OUD has been borne out in our data. Joblessness, homelessness, financial uncertainties,

social isolation, and an unpredictable drug trade as a result of the COVID-19 pandemic have converged on a vulnerable population, leading to the highest consult numbers we have seen since our service launched. Compared with the previous 4 months (January-April 2020), our consult volume has increased by an incredible 77 percent in the subsequent 4 months (May-August 2020). And we know this is not just at our hospital; our surrounding county of Durham saw a similar increase in overdose-related 911 calls. (Amy O'Regan, MPH, email communication, September 9, 2020).[5] Additionally, Richmond, VA, saw a rise in patients with nonfatal opioid overdoses presenting to the emergency department.[2] Harm reduction organizations across the state of North Carolina were seeing more participants than they did before the COVID-19 pandemic and at times were unable to meet the full demand.

Why is this happening? There is no simple explanation, but the individual stories of our patients hospitalized with OUD offer insight into the impact of the COVID-19 pandemic on the opioid epidemic. One patient, hospitalized after being found unresponsive, explained that his employer continued to pay him, but his job site was temporarily closed. He stated he relapsed in the face of boredom and isolation. Another patient reported she and her boyfriend had spent their government-issued stimulus money on heroin. One patient said that the pandemic made heroin harder to come by; fentanyl was much more readily available, and her substance use pivoted toward the use of a dangerous synthetic opioid. Another patient stated that he worried about losing access to his dealer, explaining that he began purchasing larger and larger amounts of heroin at each encounter. Multiple patients mentioned the higher costs of heroin and the declining quality of heroin as the drug trade faced increasing barriers. These are complex issues, but these individual stories exemplify some general problems.

There is a clear concern that reductions in access to MAT, isolation, stress, unstable drug supply, financial uncertainties, and reduced interactions with peer support specialists and counselors may be negatively impacting patients and contributing to an increase in opioid misuse and overdoses. More frequent use of intravenous drugs increases the risk of infectious disease transmission and associated complications. Additionally, concerns over a more volatile drug supply may further contribute to complications and the subsequent rise in hospitalizations we have seen.

Despite some of the deregulations for buprenorphine and methadone instituted by federal agencies early in the pandemic, we clearly have more work to do. We know that surveyed general internists, including hospitalists, have stated they feel ill-prepared in caring for patients with substance use disorders (SUDs).[6] Yet, support for inpatient treatment of SUD has existed for some time. Prior studies have shown that initiation of medication for OUD in the hospital can lead to less illicit drug use post-discharge, but continuation of care following hospital discharge remains problematic.[7]

While the COVID-19 pandemic and the opioid epidemic continue, we are called upon to think about how best to support those in our community with OUD who are at risk of overdose, serious infectious complications, and death. Suggestions for management of hospitalized patients with SUD have been outlined recently.[3] These recommendations were based on the possibility that the COVID-19 pandemic would have substantial negative effects on those with SUD. Our experiences and data demonstrate that this feared scenario has already happened; the number of hospitalized patients with complications from OUD massively increased during this time. Because we have experienced the brutal reality of this situation, we are in a position to further elucidate the necessary interventions. While recommendations like initiating medications for OUD in the hospital and promoting harm reduction strategies are critical, other crucial components are needed as well. We must develop systems that improve access to low-barrier MAT for all patients with OUD, both in the hospital and in the community. We must evaluate more hospitalized patients with OUD for outpatient parenteral antimicrobial therapy. We must increase funding for harm reduction organizations. Moreover, we should place a larger emphasis on education. We must continue to encourage training for hospitalists and primary care physicians to prescribe medications for OUD. We must teach our resident trainees about judicious opioid prescribing as well as how to recognize and treat opioid withdrawal and OUD. Much has been accomplished in the past year, but we must continue to work harder to save the lives of our patients struggling with OUD, as their challenges have surely been made tougher by the other ubiquitous pandemic.

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