Moving Upstream: A Social Emergency Medicine Approach to Opioid Use Disorder

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The overdose crisis is accelerating. In 2020, over 92,000 people died because of drug overdose, nearly 30% more than those who died in 2019.[1] Emergency department (ED) visits for nonfatal opioid overdoses have risen alongside ED visits for fatal overdoses. In their article "Emergency Department Visits for Nonfatal Opioid Overdose During the COVID-19 Pandemic Across 6 US Healthcare Systems," Soares et al[2] examined changes in ED visits for nonfatal opioid overdose from January 2018 to December 2020 at 25 EDs in 6 health systems in Alabama, Colorado, Connecticut, North Carolina, Massachusetts, and Rhode Island. They found that despite declining all-cause ED visits, visits for overdose increased by 10.5% in 2020 compared with those during 2018 and 2019. This finding was consistent with national trends demonstrating an increase in ED visits for mental health conditions, suicide attempts, drug overdoses, intimate partner violence, and child abuse and neglect from mid-March to October 2020.[3]

These findings support what many feared would happen during the coronavirus disease 2019 (COVID-19) pandemic—that increased socioeconomic and personal strain would result in worsened behavioral health outcomes, including overdose.[4,5] Importantly, Soares et al's[2] findings underscore the essential public health role of EDs in detecting changes in population health. Leveraging a network of geographically diverse health systems, Soares et al[2] used an epidemiologic outbreak model to define the threshold at which a considerable change in overdose incidence indicates a spike in or an outbreak of overdoses. Although the true incidence of overdose is not known, Soares et al[2] clearly demonstrated that ED visits for overdose can be a sensitive indicator of changing incidence of opioid-related morbidity and mortality, which can be used to mobilize resources for overdose prevention initiatives in and outside of EDs. This is important because the people we care for in EDs who have opioid use disorder are at considerably increased risk of overdose and death: in the year after an ED visit for nonfatal opioid overdose, up to 1 quarter of our patients with opioid use disorder had repeat overdose, and more than 1 in 20 died.[6,7]

Informed by what is seen in EDs, emergency physicians are at the forefront of developing innovative and low-barrier models to connect patients with opioid use disorder care and reduce their overdose, meeting patients where they are at the time of the ED encounter.[8-11] Supported by growing research, policy, and quality improvement efforts, there has been expansion of ED buprenorphine, naloxone distribution, and peer recovery navigation programs to aid in patient engagement and linkage to outpatient treatment.[12,13,14] Although the evidence-based treatment, harm reduction, and recovery support services that we deliver at the bedside is essential, to truly alter the course of the overdose crisis, we must also be vocal advocates for upstream policy changes to address the underlying conditions and causes of overdose.

While the pandemic has fueled rising overdose incidence, the most recent increase in overdose deaths began before COVID-19 reached the United States.[1] Increasing prevalence of fentanyl in the opioid and stimulant drug supplies and overall rising stimulant use have contributed to escalating overdose deaths.[15] However, the presence of fentanyl alone is not solely responsible for this rise. The combined potency of the drug supply in combination with weakening of the social safety net and economic opportunities, including poorer job prospects and rising rates of homelessness, have proven deadly. In California, overdoses among people experiencing homelessness skyrocketed when fentanyl was introduced into the drug supply.[16,17] Overdose is now the single leading cause of death among people experiencing homelessness in every locality within the United States where it has been studied. In San Francisco, 27% of all people who died because of overdose in 2020 were homeless at the time of death.[17-20] Furthermore, in Los

Angeles and Massachusetts, the fatal overdose rates are 36 and 30 times higher, respectively, among people experiencing homelessness than in the general population.[21-23] During the COVID-19 pandemic, increasing social stressors and disruptions in daily life; increased social isolation; loss of employment and housing; and limited access to addiction treatment, harm reduction, and recovery services contributed to resumed substance use and increased overdose risk.[24,25] Policies that might increase housing instability and homelessness, such as the potential dissolution of the COVID-19 eviction moratorium, threaten to further fuel this fire.

A SOCIAL EMERGENCY MEDICINE APPROACH

A social emergency medicine approach to the overdose crisis includes "downstream," "midstream," and "upstream" interventions.[26] Downstream interventions include clinical interventions that focus on individual health outcomes—this is the care we provide at the bedside: take-home naloxone, behavioral counseling, and buprenorphine. Midstream interventions are organizational interventions such as those focused on addressing individuals' social needs. Examples include ED community health worker programs and/or ED community partnerships that focus on linking patients to resources that can help with health-related social needs, such as housing, transportation, legal aid, employment, and exposure to violence.[27-29] Upstream interventions focus on laws and policies that shape the social conditions in which we live, including social and institutional determinants of health (eg, racism, housing policy, and employment opportunities), drug policy, and policies shaping addiction treatment access. Successful upstream interventions will have the largest public benefit. Although downstream interventions are performed for 1 individual at a time, upstream interventions can impact thousands or even millions of people.[30]

For the last 50 years, the United States has primarily taken a criminal justice approach to substance use and substance use disorders. Since the announcement of the "War on Drugs" in 1971, the rate of drug-related incarceration has dramatically increased, particularly among people who are Black, Latinx, and Native American.[31] This strategy has not resulted in decreased harm associated with opioid use. Rather, the arrest and incarceration of people who use drugs and people with opioid use disorder often cause harm to them and their family members. The war on drugs has likely contributed to the increase in fentanyl in the illicit drug supply.[32] Of all those incarcerated, 1 in 5 are imprisoned for a drug-related offense, the majority of which are for simple drug possession. Despite similar rates of drug consumption and sales, Black people are 6.5 times more likely than White people to be incarcerated for drug-related crimes.[33-36] They are also less likely to be engaged and maintained in addiction treatment.[37–39] One study in a commercially insured population showed that Black patients were half as likely to receive follow-up addiction treatment after an ED visit for opioid overdose compared with White non-Latinx patients.[38] This inequity is deadly because successful engagement in addiction treatment in the year after an ED visit for opioid overdose significantly reduces both all-cause and opioid-related mortality.[40]

Although White non-Latinx people comprise the largest proportion of overdose deaths nationwide, the sharpest rates of increase in overdose deaths and emergency medical service calls for opioid overdose have been among Black and Latinx people and in low-income communities.[1,41-46] Because these inequities can be primarily attributed to structural racism and socioeconomic policies and practices, which systematically harm the poor and people of color, addressing them requires policy solutions explicitly designed to address past harm and prevention of future harms. In the last decade, there have been some important shifts toward the use of public health, harm reduction, and medical approaches to understand and care for people who use drugs. However, the United States continues to maintain a primarily criminal justice-oriented approach to substance use and has largely ignored the larger social and structural factors contributing to overdose. Despite some recent gains in treatment access, including changes to the X-waiver training requirement advocated for by the American College of Emergency Physicians and increasing access to buprenorphine through telehealth, expansion has been unevenly distributed and evidence-based treatments for opioid use disorder remain highly restricted, with treatment access more constrained in rural areas and in communities of color.[47-52] Medicaid expansion has helped improve treatment access and reduce overdose deaths in expansion states, but 12 states are yet to expand Medicaid and underinsurance and insurance gaps persist nationwide.[53,54] Because we have failed to fundamentally change our approach to this complex, multifaceted problem, we should not be surprised that the overdose crisis intensified during the COVID-19 pandemic.

As Soares et al[2] demonstrated, EDs can be efficient barometers for opioid morbidity and mortality and provide important windows into changing health and social conditions. EDs can also be effective, strategic intervention points to reduce opioid morbidity and mortality and address health inequities. However, these opportunities are

often missed. Most EDs need additional resources and training to provide take-home naloxone, behavioral interventions, and buprenorphine initiation, among other evidence-based, patient-centered interventions. State, regional, and national efforts to improve our capacity and capability to provide these life-saving services are ongoing.[11,55] However, our ED-based interventions will likely fail to reach their optimal effectiveness until we address our patients' immediate needs—including housing, food, employment, and income—as well as the structural racial and economic inequities that produce and sustain them.[56] It is not the task of emergency physicians alone to solve these daunting and complex problems; however, with deaths continuing on an upward trajectory, we must advocate for change if we are to alter the course of this ongoing public health emergency. Ultimately, our long-term success lies further upstream, for not only our patients' well-being but also our own. At times, we have all felt defeated and powerless by repeatedly patching up injuries and illnesses caused by social inequities. To create a real and lasting change, we must look and act further upstream.

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